



# NPS IN THE NEWS

## Weekly Media Report –Nov. 10-16, 2020

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### PROVOST:

1. [Monterey’s Naval Postgraduate School Names New Provost](#)

*(Monterey Herald 16 Nov 20) ... Dennis Taylor*

A highly respected scholar and author of five books ranging in topics from international affairs to military intelligence has been named the new provost of the Naval Postgraduate School in Monterey.

Scott Gartner will begin his new post on March 1 after wrapping up his position as director of Penn State University’s School of International Affairs. NPS announced the naming Monday morning following Gartner’s acceptance of the official offer from Secretary of the Navy Kenneth Braithwaite.

2. [Welcome Aboard! Dr. Scott Gartner Selected as the New Provost for NPS](#)

*(NPS.edu 16 Nov 20) ... Office of University Communications*

The Naval Postgraduate School (NPS) has selected lauded scholar Dr. Scott Gartner to become its 16<sup>th</sup> Provost and Academic Dean, the university announced Nov. 16. Following his acceptance of the official offer from Secretary of the Navy Kenneth Braithwaite, Gartner is set to join the NPS team on March 1st following several years at Penn State University where he is the Director of Penn State’s School of International Affairs and holds Affiliate Professorships in both the Department of Political Science and Penn State Law in University Park.

### COLLABORATION:

3. [Navy Subcontract Should Propel Ocean Power Technologies](#)

*(Investor Place 10 Nov 20) ... Louis Navellier*

Ocean-energy solutions provider Ocean Power Technologies strives to provide next-generation electric power and real-time data communications for remote offshore and sub-sea applications for a variety of clients. It’s a very niche market, and there aren’t many ways to take a position besides investing in OPTT stock... As evidence of this, Ocean Power Technologies recently announced that it’s been contracted by Adams Communications & Engineering Technology (ACET) to conduct a feasibility study in support of the U.S. Navy’s Naval Postgraduate School’s Sea, Land, Air, Military Research (SLAMR) Initiative.

### RESEARCH:

4. [The Strategic Stockpile Failed; Experts Propose New Approach to Emergency Preparedness](#)

*(NC State 11 Nov 20)*

*(Futurity.org 12 Nov 20)*

A new analysis of the United States government’s response to COVID-19 highlights myriad problems with an approach that relied, in large part, on international supply chains and the Strategic National Stockpile (SNS). A panel of academic and military experts is instead calling for a more dynamic, flexible approach to emergency preparedness at the national level... To that end, Handfield and collaborators from NC State, Arizona State University, the Naval Postgraduate School and the Air Force’s Contracting Career Field Management Team came



together to outline the components that are necessary to ensure that there is an adequate federal response to future health crises.

5. [Navy Advancing Ceramic Sphere Body Armor Concept into Replacement for SAPI Plates](#)  
(*Tech Link 12 Nov 20*) ... Troy Carter

Dr. Ray Gamache and his students at the Naval Postgraduate School are committed to making body armor lighter, more flexible, and stronger using hundreds of small ceramic marbles instead of the solid, monolithic plates coupled with Kevlar vests.

6. [Minorities Benefit Less from Regionalizing Heart Attack Care](#)  
(*Cath Lab Digest 16 Nov 20*) ... Harlan Krumholz & **Dr. Yu-Chu Shen, NPS Professor of Economics**

California's Black and Hispanic communities may be falling further behind whites in the quality of care they receive for heart attacks, despite recent medical efforts aimed at improving the standards of care for these populations, according to a new study led by researchers at UC San Francisco.

## FACULTY:

7. [Closing the CEMEX Plant: The Sands Will Be Shifting](#)  
(*Monterey Herald 14 Nov 20*) ... Nikk Ogasa

The sands are shifting on Marina and nearby beaches as the country's last coastal sand mine nears shut down in Marina... Ed Thornton, professor emeritus of oceanography at the Naval Postgraduate School, predicts that with the mine closing, the pond will disappear in one or two years as waves fill it with sand.

8. [Revamping Wargaming Education for the U.S. Department of Defense](#)  
(*CIMSEC 17 Nov 20*) ... **Jeff Appleget, NPS Operations Research Senior Lecturer; Jeff Kline, NPS Operations Research Professor of Practice; & Rob Burks, NPS Defense Analysis Associate Professor**

The U.S. Department of Defense has failed to educate generations of military officers on the skills of wargaming. Wargaming creates the environment in which uniformed leaders practice decision-making against an active, thinking adversary. Wargaming is also required by the Department of Defense's planning process to create sound and executable plans, is inherent to designing new doctrine and operational concepts, and is a vital element in the cycle of research.

## ALUMNI:

9. [Colts VP of Player Development Brian Decker Named Team's NFL Salute to Service Award Nominee](#)

(*StampedBlue.com 11 Nov 20*) ... Luke Schultheis

Indianapolis Colts Director of Player Development Brian Decker, a Naval Postgraduate School alumnus, has been named the team's 2020 NFL and USAA Salute to Service Award nominee.

10. [Former Astronaut Recounts How He Reached for the Stars at American Indian Heritage Month Event](#)

(*NAVAIR News 11 Nov 20*)

An 8-year-old boy built a rocket ship out of a cardboard box, dreaming he could fly to the moon.

That boy was Dr. John Herrington, a Naval Postgraduate School alumnus, who grew up to become the first American Indian (Chickasaw tribe) NASA astronaut, flying to space with STS-113 Endeavor in 2002. Herrington, a retired Navy commander and graduate of the Naval Test Pilot School (TPS) here, shared his story at NAVAIR's national virtual American Indian Alaskan Native Heritage Month event Nov. 5.

11. [NASA and SpaceX Set to Launch First Operational Crew Dragon Mission](#)

(*Space Flight Insider 15 Nov 20*) ... Matt Haskell

Following up on the successful launch and return of NASA Astronauts in May, SpaceX is on the cusp of flying the first certified operational mission of their Crew Dragon capsule. The launch of the Crew 1 mission atop a



SpaceX Falcon 9 from Kennedy Space Center's Launch Complex 39A is targeted for 7:27 p.m. EST this evening, Sunday November 15.

Piloting the mission is 2013 NASA Astronaut selectee and U.S. Navy Commander Victor Glover. Glover is making his first spaceflight as part of the mission, and will serve as Flight Engineer for Expedition 64/65. Glover has a vast education background, receiving a Bachelors in general engineering from California Polytechnic State University, as well as Masters degrees in Flight Test Engineering from the U.S. Air Force Test Pilot School, **Systems Engineering from Naval Postgraduate School**, and Military Operational Art & Science from the U.S. Air Force Air University. Glover has flown 24 combat missions, accumulated over 3,000 flight hours in over 40 aircraft, and performed over 400 aircraft carrier arrested landings.

## **NPS ANNUAL REPORT:**

The latest [NPS Annual Report](#) and summary has been posted to the NPS website. This edition emphasizes aspects of our mission that we want NPS stakeholders to understand better, and provides a baseline of updated messaging with supporting facts to reference in your communications.

## **UPCOMING NEWS & EVENTS:**

**November 17:** [V-SGL with Ambassador Harry Harris](#)

**November 26:** Thanksgiving

**December 18:** [Fall Quarter Graduation](#)



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# THE SECRETARY OF THE NAVY GUEST LECTURE SERIES

*In Collaboration With The Naval Education Enterprise*

## Ambassador Harry Harris

*“Critical Allies: The U.S. / Republic of Korea Alliance”*



# 17 NOVEMBER 1500 (PST)

U.S. Ambassador to the Republic of Korea **Harry Harris** is the first Asian-American to hold four-star rank in the U.S. Navy and the first to head U.S. Pacific Command (USPACOM), now known as the Indo-Pacific Command (INDOPACOM), from May, 2015 to May, 2018. He was nominated by President Trump on May 23, 2018 and confirmed by the United States Senate on June 28, 2018. Prior to USPACOM, he commanded the U.S. Pacific Fleet. From 2011 to 2013, Ambassador Harris served as the representative of the Chairman of the Joint Chiefs of Staff to the Secretary of State. In this role, he traveled to over 80 countries with the Secretary and participated in most of the Secretary's meetings with foreign leaders.

Born in Japan and reared in Tennessee and Florida, Ambassador Harris graduated from the U.S. Naval Academy in 1978. He holds master's degrees from Harvard's Kennedy School of Government and Georgetown's School of Foreign Service. His father served in the U.S. Navy, and was a veteran of both World War II and the Korean War. Ambassador Harris is married to Ms. Bruni Bradley, herself a career Naval officer.

V-SGL series page  
[www.nps.edu/spls](http://www.nps.edu/spls)

Viewing link  
[www.nps.edu/web/video](http://www.nps.edu/web/video)



## PROVOST:

### Monterey's Naval Postgraduate School Names New Provost

*(Monterey Herald 16 Nov 20) ... Dennis Taylor*

A highly respected scholar and author of five books ranging in topics from international affairs to military intelligence has been named the new provost of the Naval Postgraduate School in Monterey.

Scott Gartner will begin his new post on March 1 after wrapping up his position as director of Penn State University's School of International Affairs. NPS announced the naming Monday morning following Gartner's acceptance of the official offer from Secretary of the Navy Kenneth Braithwaite.

Gartner is a widely-published scholar and sought-after expert on empirical studies of war and conflict resolution, according to an NPS prepared statement. The influence of his scholarship ranges from national security and counter-terrorism policies to the intersection of foreign and domestic politics, U.S. national security, wartime assessment and third-party mediation.

"Scott's impeccable credentials and interdisciplinary scholarly work define him as a leader with a deep understanding of the security challenges facing our country," said NPS president and retired Vice Adm. Ann Rondeau. "He has a clear vision to strongly connect NPS' graduate education and applied research to solve complex naval and national security needs."

Gartner's books looked at strategic assessment, historical statistics, war and politics, conflict management, and Taiwan and China.

The selection process conducted by the NPS Provost Search Committee was thorough, analytical and diligent, Rondeau said, led by mechanical and aerospace engineering professor Claudia Luhrs, who described the selection process as "highly competitive."

"It was really a team-of-teams effort across the campus," Luhrs said. "To the extent we could, our activities were open and collaborative to give everyone a voice in the process. Dr. Gartner stood out not only for his academic standing but also for his strategic acumen, interdisciplinary work and leadership focus on student success."

With 2,700 graduate students, Gartner said he sees NPS as an applied research university that connects naval education with science and technology to meet strategic, policy and security needs. Technology is rapidly changing and one goal of NPS is to understand the strategic importance of emerging technology to increase national security.

"Research provides a hedge against uncertainty and education enables leaders to navigate that uncertainty," Gartner said. "NPS provides both, which affords the university a powerful competitive advantage that we can wield in this current era of 'great power competition.' I want to be a part of that advantage, of this great university, where our efforts not only develop solutions for tomorrow's warfighters but also advance the critical thinking of today's leaders."

Gartner's appointment is not his first experience with NPS. He was a visiting professor at NPS in 2014, initially attracted by the university's mission.

"It is, however, the people (at NPS) who have compelled me to return," he said.

The administration, faculty and students see the university as a somewhat unique opportunity that admits students who have had real-world experiences in the military and can provide the faculty and researchers with a window into the challenges they faced aboard a ship or other types of engagements. Those challenges will often lend themselves to areas of research NPS pursues.

Gartner's research has been funded by the National Science Foundation, the National Counterterrorism Center, the National Security Agency, the Folke Bernadotte Academy and the Alfred P. Sloan Foundation.

Gartner received his bachelor's degree and a master's degree in history and international relations, respectively, from the University of Chicago, and a second master's and his doctorate in political science from the University of Michigan.

<https://www.montereyherald.com/2020/11/16/montereys-naval-postgraduate-school-names-new-provost/>

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## Welcome Aboard! Dr. Scott Gartner Selected as the New Provost for NPS

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"I am thrilled and honored," said Gartner. "I was a visiting professor at NPS in 2014, and the mission of the university is what initially attracted me to this opportunity."

"It is, however, the people who have compelled me to return. The highly-respected and dedicated faculty, exceptional staff, and of course, the university's remarkable students make NPS truly one-of-a-kind, and a national treasure!"

Gartner is a widely-published scholar and sought-after thought leader on empirical studies of war and conflict resolution. The influence of his scholarship ranges from national security and counter-terrorism policies to the intersection of foreign and domestic politics, U.S. national security, wartime assessment, and third-party mediation. Interdisciplinary studies have been a hallmark of Gartner's career, with published articles in top journals in the fields of political science, sociology, international affairs, history, military intelligence, public policy, international negotiations and communication. He has published five books, including two with Cambridge University Press, on strategic assessment, historical statistics, war and politics, conflict management and Taiwan and China.

"On behalf of all faculty, staff, students I want to welcome Dr. Gartner to our NPS team and the Monterey community," said NPS President retired Vice Adm. Ann E. Rondeau. "Scott's impeccable credentials and interdisciplinary scholarly work define him as a leader with deep understanding of the security challenges facing our country. He has a clear vision to strongly connect NPS' graduate education and applied research to solve complex naval and national security needs."

After conducting a nation-wide search for candidates with both high-level academic qualifications and strong leadership experience, Dr. Gartner was selected from a very competitive group of finalists to help guide the university toward its full 21<sup>st</sup> Century potential.

The selection process conducted by the NPS Provost Search Committee was thorough, analytical and diligent, Rondeau said, led by Mechanical and Aerospace Engineering Professor Claudia Luhrs.

"It was really a team-of-teams effort across the campus," said Luhrs. "To the extent we could, our activities were open and collaborative to give everyone a voice in the process. Dr. Gartner stood out not only for his academic standing, but also for his strategic acumen, interdisciplinary work and leadership focus on student success."

For more than 2,700 military mid-career officers and security professionals, being an NPS graduate student is the chance to apply their operational experience and technical curricula to research solutions to real-world problems. Gartner said he sees great promise ahead to position NPS even more fully as an applied research university that connects naval education with science and technology to meet strategy, policy and security needs.

"Research provides a hedge against uncertainty and education enables leaders to navigate that uncertainty," said Gartner. "NPS provides both, which affords the university a powerful competitive advantage that we can wield in this current era of Great Power Competition. I want to be a part of that advantage, of this great university, where our efforts not only develop solutions for tomorrow's warfighters, but also advance the critical thinking of today's leaders."

Gartner replaces Dr. Steve Lerman, who served as Provost from August 2016 to March 2020 and remains engaged with the NPS community as an active member of the Board of Trustees for the NPS Foundation.



Dr. Robert Dell has served “masterfully” as Acting Provost since March, Rondeau noted, and will continue to serve the university in a leadership capacity returning to his position as Dean of the Graduate School of Operational and Information Sciences.

“Dr. Dell has been a steady, trusted advisor through his time as Acting Provost, especially with the extraordinary challenges posed by COVID 19,” said Rondeau. “We have been so fortunate to have Drs. Dell and Lerman, extraordinary visionary scholars and thought leaders, serve as senior academic officers here at NPS. I know Dr. Gartner will continue to uphold the standard these leaders have established.”

For Gartner, he says he is ready for the challenge, and eager to get to work.

“I am humbled to be contributing to this university, and to be following the exceptional efforts of Drs. Dell and Lerman,” he said. “Joining NPS to lead this distinguished faculty team of highly regarded scholars, as well as our world-class students, is truly the hallmark of my career.”

Gartner’s honors include the Jefferson award for the best government resource, the RUSA Outstanding Reference Award, Booklist Editor’s Choice Award and his doctoral dissertation was recognized by the American Political Science Association with its Best Policy Thesis award. Gartner’s research has been funded by the National Science Foundation, the National Counterterrorism Center, the National Security Agency, the Folke Bernadotte Academy, and the Sloan foundation.

Gartner received his Bachelor’s and a Master’s degrees in History and International Relations respectively, from the University of Chicago, and a second Master’s and Doctorate in Political Science from the University of Michigan. Dr. Gartner is married to Dr. Diane Felmlee, a Professor of Sociology at Penn State.

<https://nps.edu/-/welcome-aboard-dr.-scott-gartner-selected-as-the-new-provost-for-nps>

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## COLLABORATION:

### Navy Subcontract Should Propel Ocean Power Technologies

*(Investor Place 10 Nov 20) ... Louis Navellier*

Ocean-energy solutions provider Ocean Power Technologies strives to provide next-generation electric power and real-time data communications for remote offshore and sub-sea applications for a variety of clients. It’s a very niche market, and there aren’t many ways to take a position besides investing in OPTT stock.

One great thing about OPTT is that it’s easily affordable for most investors, even if they have a small account. And as we’ll soon discover, the share price has become more attractive in recent weeks.

Does this mean that Ocean Power Technologies is having problems? Not at all. If anything, the company’s flagship product, the PowerBuoy Surface Surveillance Solution, remains a mainstay for some agencies and other organizations seeking reliable offshore power and monitoring.

Indeed, Ocean Power Technologies has a business connection with a very important client in the defense-tech sector. And so, a recently announced arrangement should convince any skeptic of Ocean Power Technologies’ standing as a go-to provider of novel ocean energy solutions.

### OPTT Stock at a Glance

The onset of the novel coronavirus put a dent in OPTT stock during 2020’s first half. Without a doubt, the global pandemic played a role in pushing the stock down to its 52-week low of 34 cents in March.

After that, the bulls definitely took control of OPTT stock. In fact, they even managed to lift the share price to its peak of \$3.72 in October. Understandably, some onlookers might have expressed valuation-related concerns after that massive run-up.

Subsequently, the stock price retraced below the \$3 and \$2 levels in recent weeks. As of Nov. 10, OPTT is a relative bargain at \$1.61 per share.



Traders should keep this price action in perspective. Early October's parabolic move in OPTT stock was too much, too fast. Today, investors have a chance to turn back the clock and own the shares at a more favorable price point.

### **Long Work History**

There are few, if any, better clients to have than the U.S. government. As long as the government continues to tax the citizens and spend money, it can be a source of practically endless revenues.

OPTT stock holders might already know that the company has a governmental client. Last year, it garnered a contract award from the United States Navy to develop a tech-infused buoy mooring system.

This was an exciting development, no doubt. Yet, it certainly wasn't Ocean Power Technologies' first time serving the public defense sector. As CEO George Kirby remarked at the time, his company "has a long work history on Department of Defense projects."

Of course, this type of work is highly coveted and potentially quite lucrative. And as it turns out, Ocean Power Technologies would continue to serve the nation's public defense interests in 2020.

### **One Step Closer**

If you're looking for a company that's making its mark when it comes to ocean-energy research and innovation, Ocean Power Technologies absolutely fits the bill.

As evidence of this, Ocean Power Technologies recently announced that it's been contracted by Adams Communications & Engineering Technology (ACET) to conduct a feasibility study in support of the U.S. Navy's Naval Postgraduate School's Sea, Land, Air, Military Research (SLAMR) Initiative.

The study's purpose is to evaluate the PB3 PowerBuoy system in conjunction with an autonomous, offshore 5G communications system. If successful, these systems could provide support to SLAMR's development of unmanned and robotic systems.

ACET President and CEO Charles Adams clearly sees the potential for offshore-communications innovation with this collaboration. "ACET's subcontract with [Ocean Power Technologies] brings this potential technology solution one step closer to reality through the SLAMR research initiative," Adams stated.

### **The Takeaway**

Providing ocean-tech solutions for none other than the U.S. Navy is undoubtedly an honor for Ocean Power Technologies.

It can also be quite profitable, so OPTT stock holders are encouraged to stay the course as the share price could soon revisit its prior high.

<https://investorplace.com/2020/11/newly-secured-marine-defense-subcontract-should-propel-optt-stock/>

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## **RESEARCH:**

### **The Strategic Stockpile Failed; Experts Propose New Approach to Emergency Preparedness**

*(NC State 11 Nov 20)*

A new analysis of the United States government's response to COVID-19 highlights myriad problems with an approach that relied, in large part, on international supply chains and the Strategic National Stockpile (SNS). A panel of academic and military experts is instead calling for a more dynamic, flexible approach to emergency preparedness at the national level.



“When COVID-19 hit, the U.S. was unable to provide adequate testing supplies and equipment, unable to provide adequate personal protective equipment (PPE), and didn’t have a functioning plan,” says Rob Handfield, first author of the study and Bank of America University Distinguished Professor of Operations and Supply Chain Management at North Carolina State University.

“The SNS hadn’t replenished some of its supplies since the H1N1 pandemic in 2009-10. Many of its supplies were expired. And there was no clear leadership. Federal authorities punted problems to the states, leaving states to fight each other for limited resources. And the result was chaos.

“We need to be talking about this now, because the nation needs to be better prepared next time. And there is always a next time.”

To that end, Handfield and collaborators from NC State, Arizona State University, the **Naval Postgraduate School** and the Air Force’s Contracting Career Field Management Team came together to outline the components that are necessary to ensure that there is an adequate federal response to future health crises. They determined that an effective federal program needs to address five criteria:

1). **More Flexibility:** In order to respond to unanticipated threats, any government system needs to have sufficient market intelligence to insure that it has lots of options, relationships and suppliers across the private sector for securing basic needs.

“You can’t stockpile supplies for every possible contingency,” Handfield says.

2). **Inventory Visibility:** The government would need to know what supplies it has, where those supplies are, and when those supplies expire. Ideally, it would also know which supplies are available in what amounts in the private sector, as well as how quickly it could purchase those supplies.

“The same is true on the demand side,” Handfield says. “What do people need? Where? When?”

3). **Responsiveness:** The governmental institution overseeing emergency preparation needs to have leadership that can review information as it becomes available and work with experts to secure and distribute supplies efficiently. This would be an ongoing process, rather than a system that is put in place only in the event of crises.

4). **Global Independence:** The COVID-19 pandemic has highlighted the fact that the U.S. has outsourced manufacturing of critical biomedical materiel, because it was cheaper. Authorities need to consider investing in domestic manufacturing of PPE, testing supplies and equipment, pharmaceutical chemicals, syringes, and other biomedical supplies.

“The past year has really driven home the consequences of being dependent on other nations to meet basic needs during a pandemic,” Handfield says. “Relying largely on the least expensive suppliers for a given product has consequences.”

5). **Equitable:** The government needs to ensure that supplies get to where they are most needed in order to reduce the infighting and hoarding that we’ve seen in the COVID-19 pandemic.

“A first step here is to settle on a way of determining how to prioritize needs and how we would define an equitable allocation and distribution of supplies,” Handfield says.

The last ingredient is bureaucratic: Coordinating all five of these components should be done by a permanent team that is focused solely on national preparation and ensuring that the relevant federal agencies are all on the same page.

“This is a fundamental shift away from the static approach of the SNS,” Handfield says. “We need to begin exploring each of these components in more detail – and defining what a governing structure would look like. We don’t know how long we’ll have until we face another crisis.”

The paper, “A Commons for a Supply Chain in the Post-COVID-19 Era: The Case for a Reformed Strategic National Stockpile,” is published open access in *The Milbank Quarterly*. The paper was co-authored by Blanton Godfrey, the Joseph D. Moore Distinguished Professor in NC State’s Wilson College of Textiles; Major Daniel Finkenstadt of the Naval Postgraduate School; Eugene Schneller of Arizona State; and Peter Guinto of the Air Force’s Contracting Career Field Management Team.

<https://news.ncsu.edu/2020/11/new-approach-to-preparedness/>

<https://www.futurity.org/emergency-preparedness-covid-19-2471592/>

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## Navy Advancing Ceramic Sphere Body Armor Concept into Replacement for SAPI Plates

(Tech Link 12 Nov 20) ... Troy Carter

Dr. Ray Gamache and his students at the Naval Postgraduate School are committed to making body armor lighter, more flexible, and stronger using hundreds of small ceramic marbles instead of the solid, monolithic plates coupled with Kevlar vests.

On Thursday morning, a new patent application was made public that details a new manufacturing process, co-invented with Marine Corps Maj. Jarrod Robinson, on joining the ceramic marbles into an armored mesh using aluminum as the substrate binder.

“All armor is measured in its areal density, one thing to note here is that the encapsulated ceramic spheres is far less than a monolithic plate, it’s 2.83, where a monolithic silicon carbide plate is 4.14 ( $lb/ft^2$ ), so it’s a significantly lighter plate,” Robinson said during the related thesis presentation.

The mesh is baked in a furnace so that the aluminum binder fills in between the ceramic balls and then the encapsulated composite is tempered such that it’s strong but flexible, able to soften the blow of projectiles (shell fragments, shrapnel, bullets).

The goal is to create body armor that doesn’t leave gaps in coverage and outperforms the current SAPI plate vest systems used by the military, which the Navy says has “poor multi-hit capability and fracture damage.”

“The Outer Tactical Vest (OTV) used by the U.S. Army, and the Modular Tactical Vest (MTV) used by the U.S. Marine Corps... use an embedded spall liner and large pockets in which to insert SAPI plates in the front, back and sides of the MTV to protect key organs. Such a design is comparatively bulky and heavy, so as to limit flexibility and contribute to fatigue of the wearer. Additionally, exemplary SAPI plates cost between \$350 and \$600 each, so the vests can be expensive. Further; the conventional SAPI plates lack multi-impact protection,” according to the Navy’s new patent application.

### Tech Transfer Opportunity for Businesses

If the patent is granted to the Navy, it would become the twenty-first listing Gamache as inventor or co-inventor, according to the U.S. Patent and Trademark Office, including U.S. Patent 8,220,378, the first to include the ceramic sphere concept, which was issued to the Navy in 2012.

Through technology transfer, the Navy is making Gamache’s research and the accompanying intellectual property rights available to qualified companies for commercialization, which is to say that through a patent license agreement a private company may use the technology to manufacture new armor.

Brian Metzger, senior technology manager at TechLink, is working with Gamache and the Tech Transfer Program at NPS to solicit offers from companies that want to gain access to Gamache’s technical knowledge and leverage the Navy’s IP.

Metzger said the market for body armor had both civilian and military buyers, and that the technology may be easy to commercialize because new plates using the spheres could be inserted into current vests, though National Institute of Justice standards must be met.

“This technology is trying to essentially make lighter, more compliant armor that gives equivalent protection, and more comfortable for people to wear,” Metzger said on Thursday.

<https://techlinkcenter.org/news/navy-advancing-ceramic-sphere-body-armor-concept-into-replacement-for-sapi-plates>

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## Minorities Benefit Less from Regionalizing Heart Attack Care

(*Cath Lab Digest 16 Nov 20*) ... Harlan Krumholz & Dr. Yu-Chu Shen, NPS Professor of Economics

California's Black and Hispanic communities may be falling further behind whites in the quality of care they receive for heart attacks, despite recent medical efforts aimed at improving the standards of care for these populations, according to a new study led by researchers at UC San Francisco.

In response to ongoing health disparities, emergency management services nationwide have implemented protocols to better coordinate care and get patients directly to hospitals that are equipped and staffed to quickly unblock coronary arteries and restore blood circulation to the heart.

Under the new guidelines, which were encouraged by the American Heart Association, California now is organized to deliver treatment to severe heart attack patients through 33 regional emergency response systems for the state's 58 counties. However, the study has found that patients living in minority communities received less benefit from these protocols than patients in non-minority communities.

"Regionalization was an attempt to equalize access to the gold standard of care for severe heart attack patients, but our research shows that inequalities have been exacerbated, not alleviated," said Renee Hsia, MD, MSc, professor in the Department of Emergency Medicine at UCSF and lead author of the study, which was published November 16, 2020, in *JAMA Network Open*.

The standard of care for a heart attack with complete coronary artery blockage is angioplasty, or "percutaneous coronary intervention" (PCI). A long thin tube called a catheter is threaded through an artery leading from the groin toward the heart, guiding instrumentation used to re-open the artery.

Studies have shown that faster reopening of the artery, especially if it occurs within 90 minutes of seeking care for a heart attack, offers better survival odds, but not every hospital is equipped with a cardiac catheterization lab and staffed at all hours with interventional cardiologists and other trained personnel.

Aside from the established link between speed and survival, previous studies of the regionalized system have failed to detect a mortality benefit at the population level, Hsia said. By further breaking down their analysis by minority and non-minority zip codes and using California vital statistics data, Hsia and colleagues found that one group did have greater survival after regionalization -- whites living in non-minority communities. There were no mortality benefits for whites living in minority communities, or for Blacks or Hispanics in either non-minority or minority communities.

With regionalization, access to PCI-capable hospitals improved 6.3 percent for all patients in non-minority communities, but only 4.5 percent for patients in minority communities, the study found. Same-day PCI increased by 5.1 percent for patients in non-minority communities, but only by 1.7 percent for individuals in minority communities; receipt of PCI any time during hospitalization increased by 5.0 percent for patients in non-minority communities, but only by 0.7 percent for those in minority communities.

The *JAMA Network Open* study compared changes over time in outcomes during the study period beginning in 2006, when only eight California counties were regionalized for heart attack care, to 2015, when all counties were participating. The researchers analyzed data from 139,494 patients who suffered the most severe type of heart attack, as determined by a distinctive electrocardiogram signal. Minority communities were defined as the top third of ZIP codes with the highest percentages of Black and Hispanic residents.

Previous studies have shown that advances in heart attack care have improved care between white and minority patients receiving care within a single hospital, according to Hsia. However, the new study findings, focused on communities rather than on individual hospitals, raise the question as to whether Blacks and Hispanics, depending on their neighborhoods, are more likely to be directed to hospitals where patients do not receive optimal care, even with the new guidelines.

"Given that both emergency care in general and PCI specifically are less available in underserved communities, PCI hospitals in minority communities could already be burdened by a high volume of patients as the result of regionalization, and less able to provide guideline-directed care," according to the study.



In addition, other studies have shown that minority populations use ambulances less often due to concerns about costs and insurance, and individuals who are not taken to hospital by ambulance may not benefit from the newer guidelines as much, Hsia said. The study was not designed to measure ambulance use over time.

"Medical advances do not necessarily benefit all groups equally, and the structure of our health care system may affect how benefits accrue," Hsia said.

<https://www.cathlabdigest.com/content/minorities-benefit-less-regionalizing-heart-attack-care>

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## FACULTY:

### **Closing the CEMEX Plant: The Sands Will Be Shifting**

*(Monterey Herald 14 Nov 20) ... Nikk Ogasa*

The sands are shifting on Marina and nearby beaches as the country's last coastal sand mine nears shut down in Marina.

On Dec. 31, the CEMEX Lapis sand plant in Marina will permanently close, ending over 100 years of sand mining.

Many scientists believe the closure of the sand plant off of Lapis Road will widen the shoreline, as more sand will flow unhindered down the coast. For Marina residents, this may mean more beach to enjoy.

"You definitely would expect that the coast will build out," predicts Patrick Barnard, a coastal geologist with the United States Geological Survey.

Barnard explains that we are changing the shoreline system "in a very significant way, by quite rapidly adding a significant amount of sand. We expect to see a very large response."

Since September 2018 the United States Geological Survey has surveyed the shore near the CEMEX sand plant twice. The most recent survey found a greater volume of sand piled up down the coast from the CEMEX plant as the company has slowed its mining activities. CEMEX did not respond to requests for comment on this story.

It's difficult to tell whether these results are caused by the mine ramping down or some seasonal factor, says Barnard.

Rising sea levels, fluctuations in the amount of sand flowing out of the Salinas River and winter storm activity all make it difficult to predict exactly how the coast will change, says Gary Griggs, professor of earth sciences at UC Santa Cruz. But over the long term, Griggs adds, the coastline's response to the mine closure should be measurable.

Griggs predicts the mine's closure will impact only the coast between Del Monte Beach in Monterey and the Salinas River mouth.

"The Monterey Peninsula and Big Sur would be totally unaffected as their sand comes from different sources," says Griggs.

CEMEX extracts sand directly from a large dredge pond on the beach at the mine site. This pond is refilled by waves that carry sand from the ocean.

**Ed Thornton, professor emeritus of oceanography at the Naval Postgraduate School**, predicts that with the mine closing, the pond will disappear in one or two years as waves fill it with sand.

### **Future uses**

In 2017 CEMEX reached an agreement with the Coastal Commission to close and reclaim the mine site which has been in operation since 1906. As per the agreement, CEMEX must restore the site to natural conditions by Aug. 17, 2023.

Upon sale, a deed restriction will be placed on the property that provides for public access and conservation.



Marina Mayor Bruce Delgado says the plan is for a nonprofit organization to purchase the site from CEMEX after it reclaims the site. The sale would likely take place in 2023.

According to Delgado, interested buyers include the Big Sur Land Trust and the Monterey Peninsula Regional Park District.

After the sale, a public planning process will decide the layout and construction of a trail system to enable public beach access.

“We want to do what’s best for beach access and leisure and enjoyment while protecting natural resources,” says Delgado.

California American Water has introduced plans to drill slant wells at the site for its desalination project but Marina has denied the company a permit. Cal Am is appealing it with the Coastal Commission.

### **Coastal erosion**

The southern Monterey Bay has the highest coastal erosion rates in the state, averaging about 4 feet per year, and about 6 feet per year near the CEMEX Lapis sand plant, according to Griggs. Scientists and activists have blamed the severe coastal erosion on the mining of sand.

Breaking waves move sand up and down the beach and along the coast, says Griggs. When large amounts of sand are removed the waves reach further inland and erode more of the dunes and shoreline.

“The low bluffs and dunes of southern Monterey Bay are eroding from Del Monte Beach to the Salinas River,” says Griggs.

According to Thornton, the CEMEX Lapis plant was consistently extracting about 250,000 cubic tons of sand each year, or about 25,000 dump trucks of sand per year.

But as per the agreement with the Coastal Commission, CEMEX was ordered to reduce extraction to 134,520 metric tons per year during the three years leading up to closure.

Between 1906 and 1990 southern Monterey Bay was the most intensely mined shoreline in the country. At the peak of sand mining activity, six sand mines were operating in the Monterey Bay region.

Five of these mines were closed in 1989, when they were blamed for high coastal erosion rates, leaving the CEMEX Lapis plant the last mine standing.

One of the mines closed in 1989 was located in Sand City. According to Thornton, before 1989 the Sand City coast was eroding more than 6 feet per year, while at Marina the erosion rate was about a foot per year.

But after Sand City and the other mines closed in 1989, CEMEX began to ramp up production at Marina. As a result, the coast near Marina began eroding more than 6 feet per year, while erosion rates near Sand City dropped to about a foot per year.

All of the mines closed in 1989 extracted sand from the ocean using drag-lines, while the CEMEX Lapis sand plant dredges sand from a pond on the beach.

The sand mine’s closure comes after many years of campaigning by local residents and environmental groups to end sand mining in Monterey Bay.

Victory is especially sweet for Thornton, who first noticed the effects of sand mining on Monterey Bay’s coast in the 70s. For decades he has been a leading voice in the fight to end sand mining in Monterey Bay.

“It’s over, we won,” says Thornton, adding “the ‘we’ means all the people that enjoy our incredible beaches.”

<https://www.montereyherald.com/2020/11/14/closing-the-cemex-plant-the-sands-will-be-shifting/>

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## Revamping Wargaming Education for the U.S. Department of Defense

(CIMSEC 17 Nov 20) ... Jeff Appleget, NPS Operations Research Senior Lecturer; Jeff Kline, NPS Operations Research Professor of Practice; & Rob Burks, NPS Defense Analysis Associate Professor

### Introduction

The U.S. Department of Defense has failed to educate generations of military officers on the skills of wargaming. Wargaming creates the environment in which uniformed leaders practice decision-making against an active, thinking adversary. Wargaming is also required by the Department of Defense's planning process to create sound and executable plans, is inherent to designing new doctrine and operational concepts, and is a vital element in the cycle of research.

For these reasons, military leaders must have the ability to create and conduct wargames. However, the current military education process does not impart this critical knowledge.

### Background

Ed McGrady, distinguished Center for Naval Analyses wargamer, opened a recent commentary on wargaming by saying, "There is a widespread misunderstanding of what wargaming is..." and we agree wholeheartedly. Too many in the Department of Defense believe wargames are computer-based combat simulations used to produce quantitative analyses, but they are not. Wargaming is about human decision-making. Joint Publication 5-0 *Joint Operation Planning's* wargaming definition makes this clear: "Wargames are representations of conflict or competition in a synthetic environment, in which *people make decisions* and respond to the consequences of those decisions" (emphasis added).

Most defense wargaming practitioners recognize three purposes for wargames: educational, experiential, and analytic. Educational and experiential wargames are focused on the player. The primary output of these types of wargames is a better educated or experienced player. For example, success might lead to an officer who now knows how a new weapon system is employed or has experienced fighting against a threat in a different region of the world. There are usually no other 'results' to demonstrate the wargame's value.

On the other hand, analytic wargames focus on producing findings and recommendations in response to a sponsor's tasking. Therefore the product of these wargames is not player-focused but sponsor-focused. Planning wargames, as outlined in Joint Publication 5-0 (Step 4: Course of Action analysis and wargaming), are specific analytic wargames with the task of analyzing courses of action, which then inform the development of a plan. Other analytic wargaming activities include developing new concepts of operations, doctrine, Tactics, Techniques, and Procedures (TTP) for emerging and future technologies, and front-end wargaming for experimentation and exercises to ensure that these expensive endeavors are properly focused and can achieve a high return on investment. We can learn much about new technologies and concepts through wargaming without burning a penny's worth of fuel.

### Current Status

Department of Defense wargaming is at a crossroads. It seems self-evident that the Department of Defense should own the responsibility to improve its wargaming. While Federally Funded Research and Development Centers (FFRDCs), educational institutions, and defense contractors may have roles to play in wargame improvement, only the Department of Defense can choose to lead and embrace a comprehensive end-to-end cycle of research construct. This construct includes wargaming, computer-based combat simulations, and other quantitative and qualitative analytic techniques that, when properly leveraged, provide quality decision support to the department's leadership. It must begin by addressing the shortcomings in wargaming education.

The 2015 call to reinvigorate wargaming has inspired the reintroduction of wargaming into some service school classrooms. Hence, a portion of uniformed field grade officers have an appreciation for, and may have actually played, wargames. However, the inability of the Department of Defense's uniformed members to design and conduct their own wargames still has not been addressed in professional military education. Today, the Department of Defense relies on FFRDCs, educational



institutions, and defense contractors to design and conduct wargames on their behalf. While these organizations produce useful wargames, the sheer number of wargames that should be executed across the department cannot all be performed by these organizations—they simply do not have the capacity, nor does the department have the budget.

However, there is a far more fundamental problem on the department’s reliance on these organizations. This reliance is, in effect, outsourcing the intellectual underpinnings of the nation’s defense strategy, officer professional development, and the department’s acquisition process.

Wargaming should become an integral part of the military officer corps’ professional education. The skills required to design and conduct wargames go hand-in-hand with the skills required to plan and execute military operations.

The lack of wargaming skills and experience in our field grade and senior officers should be a warning to the department’s leadership. Wargaming was once the primary venue for the exchange of ideas, debates on tactics and doctrine, the sharing of lessons learned from previous operations and experiences, and the operational and doctrinal education of junior officers. Now it has largely disappeared from officers’ professional development. The 38<sup>th</sup> Commandant of the Marine Corps’ Commandant’s Planning Guidance states this concern very succinctly:

“In the context of training, wargaming needs to be used more broadly to fill what is arguably our greatest deficiency in the training and education of leaders: practice in decision-making against a thinking enemy. Again, this requirement is inherent in the nature of war. In modern military organizations, it is, along with the fear of violent death, precisely the element of real war that is hardest to replicate under peacetime conditions. Wargaming historically was invented to fill this gap, and we need to make far more aggressive use of it at all levels of training and education to give leaders the necessary ‘reps and sets’ in realistic combat decision-making.”

Phil Pournelle, Senior Operations Analyst and Game Designer at Group W, points out a 2018 National Defense Strategy Commission finding that the military struggles to “link objectives to operational concepts to capabilities to programs.” Linking of objectives to operational concepts to capabilities is basic military planning. Yet our combatant commands and joint task forces struggle to conduct the planning wargames that Joint Publication 5-0 requires.

According to Joint Publication 5-0, each course of action should be wargamed against the enemy’s most likely and most dangerous course of action for a given plan. Assuming a modest number of three friendly courses of action to analyze, that is a requirement for six wargames per plan. And every plan that has sat on a digital shelf for more than a year needs to be dusted off and wargamed again, as the facts and assumptions that underpinned the plan’s development 12-plus months ago have undoubtedly changed, often significantly.

Unfortunately, due to time, staff capability, and capacity constraints, at best there may be one wargame conducted per combatant commander’s plan: the commander’s favorite Course of Action against the enemy’s most likely Course of Action. Insufficient time is allotted to conduct the wargame, resulting in poor design, less thorough execution, and results that fail to illuminate the plan’s operational risks or propose contingencies. This lack of time inspires the quick application of seminar games that devolve into BOGGSATS – a Bunch of Guys and Gals Sitting Around a Table.

As recent commentary from Peter Perla, author of the seminal book *The Art of Wargaming*, and Phil Pournelle have pointed out, wargaming should also be an integral part of analysis, experimentation, exercises, and the broader cycle of research. Far too often this is not the case. Instead, the department relies on analysis methods such as cost-benefit analysis, capabilities-based assessments, and analysis of alternatives that provide technical rationales for procurement decisions. However, in the Department of Defense, these analyses must be tempered with a thinking adversary in mind. Our potential adversaries in the future are concurrently developing new doctrine and concepts, fielding new technologies and force structures, and procuring new systems that increase our risk or limit our military options. Wargaming is necessary to gain an appreciation for our competitors’ capabilities, options, and objectives.

Wargaming has always been an integral part of the Army’s analysis to support their department’s acquisition of new technology and weapons systems. Army analytic organizations, such as the Center for



Army Analysis and the Training and Doctrine Command's Analysis Center, integrated wargaming with their computer-based combat simulations to provide comprehensive qualitative and quantitative analysis to support key acquisition programs several decades ago. Both tools are still used together, productively, today.

This approach's benefit is two-fold. First, the warfighters brought into the wargame's concepts of operations (CONOPS) that employs units equipped with new technologies provide input into the analysis process and gain a better appreciation for the quantitative analysis products that the combat simulations could provide. Second, the analysts gain a better understanding of how a new force would fight differently and use that knowledge to inform the instantiation of the schemes of maneuver required by their combat simulations, which in turn improves their quantitative analysis products. To do this properly, operations research analysts must create the wargaming environment, conduct the wargames, and determine how to best integrate the wargame's qualitative output into the computer-based combat simulations so that the study produces both qualitative and quantitative analysis.

Unfortunately, some of the department's more senior analysts that cut their analytical teeth using computer-based combat simulations believe that wargames provide little or no analytic value. This view completely misses the fact that counterinsurgency, hybrid warfare, the gray zone of conflict, and competition short of war are not well addressed by the millions of dollars the department invests in the maintenance, staffing, and running of kinetic-focused combat simulations and the organizations that support them.

In a recent *Naval War College Review* article, Capt. Robert Rubel (ret.), professor emeritus of the U.S. Naval War College and former chair of its Wargaming Department, stated, "Two-sided gaming should be a widespread and essential part of the professional education process from pre-commissioning through senior service colleges and even flag level courses." He went on to describe several virtues of wargaming:

- "A routine diet of two-sided gaming can generate and hone the ability to reason competitively."
- "Making two-sided gaming the default PME vehicle will help to re-create a sandbox in which innovative reflexes can be developed."
- "Repeated struggling in competitive situations is more likely to produce new ideas and insights, especially if such experience is widespread in the officer corps."

Rubel also goes on to caution: "Two-sided gaming is not easy. The design of such games must take care to channel competitive instincts properly."

In summary, the Department of Defense's need for increased capacity to conduct quality wargaming starts by educating its officer corps on how to design, conduct, and assess analytical, educational, and experiential wargames.

## The Way Ahead

We propose jumpstarting wargaming education in the Department of Defense with a two-pronged approach. First, the Department of Defense needs wargame designers at an apprentice level. Any officer who is a candidate to serve on a general or flag staff (most field grade line officers) should complete a basic analytic wargaming course to enable them to bring value to a wargaming design team. We do not advocate for a specialty track for wargamers. Instead, all military leaders should be wargamers (such as the Navy's flag ranks at the onset of WWII). The Army and Marine Corps do a decent job of introducing their young officers to some of the building blocks of wargaming. While sand table discussions, table-top exercises, and rehearsal of concept drills incorporate several of the elements of wargaming, they are typically missing the conflict or competition that a thinking adversary produces. These events provide a wargaming-like basis from which to build. A logical place for such a course is in the command and general staff college level of Joint Professional Military Education.

Second, there needs to be an executive-level wargaming course for senior leaders. Senior officers who supervise and consume the results of wargaming today, such as primary staff officers on Combatant Command or other flag officer commanded staffs, need to understand what wargames are, how they are



different from computer-based combat simulations, what to expect from well-designed wargames, and the level of resource investment required from them and their staff to obtain quality wargaming results. They also need to realize that their younger charges must couple their wargaming education with playing and designing wargames to become proficient wargamers. They must give their subordinates enough time to game. Moreover, senior leaders should lead by example, participating in and encouraging wargaming activities in their commands.

Over time, the wargaming apprentices, through playing, designing, and conducting wargames, will mature in their wargaming skills and take on wargaming leadership roles. Note that the goal is not to identify a pipeline to create wargaming masters. Such masters are rare individuals, and some may emerge from the ranks of military wargamers produced. But, just as most officers will never achieve flag rank, most uniformed wargamers will never become wargaming masters. The FFRDCs, educational institutions, and Department of Defense contractors have wargaming masters, and their expertise will still be needed to support the department. However, many good wargames can be designed without requiring the supervision of a wargaming master.

Since 2009, the Naval Postgraduate School's Operations Research Department has offered an 11-week Wargaming Applications course to its resident students that focuses on the design, conduct, and analysis of wargames for Department of Defense, allied, and partner sponsors. The faculty designed the course recognizing that the Naval Postgraduate School's Operations Research graduates – our military's newest Operations Research analysts–needed to be able to design, conduct, and analyze a wargame. Acquiring these skills enables them to participate in, lead, and eventually supervise the end-to-end campaign analysis that incorporates wargaming, computer simulations, and other qualitative and quantitative analytic tools as future analytic assignments will require. The course organizers did not fully recognize the added benefit of this education until some of the Operations Research graduates started serving at Combatant Commands. These graduates, now staff officers, reached back to the Naval Postgraduate School to report how useful their wargaming design skills were in helping the Combatant Command staffs design and conduct useful planning wargames. They asked if the Wargaming Applications instructors could come to their location and teach a cadre of the Combatant Command personnel the same basic wargaming design skills they had internalized at the Naval Postgraduate School.

In response, NPS developed the week-long Mobile Education Team Basic Analytic Wargaming Course around the same philosophy as our resident wargaming course: learn by doing. The objectives for this course were two-fold.

First, it builds a cadre of personnel who can initiate, design, develop, conduct, and analyze a wargame. Unified Combatant Commands have leveraged this opportunity by having personnel from their operational planning teams and staff sections attend the course and work in teams to learn how to design, develop, and execute a wargame.

Second, since the sponsoring organization chooses the wargaming topic used in the course's practical exercises, the organization can have the core foundation of a wargame created and demonstrated that can then be further built out and used by the organization to meet other organizational wargaming requirements. NPS has conducted over 20 week-long Mobile Education Team Basic Analytic Wargaming Courses around the world, including five at Combatant Commands. Today, NPS conducts 6-8 Mobile Education Team events annually, and demand remains high.

The philosophy in teaching wargaming is that it requires a hands-on, learn-by-doing approach. Both the resident and Mobile Education Team courses are over 70 percent practical exercises, where the students are applying the techniques that we illustrate in the lectures. In both courses, a Department of Defense, ally, or partner sponsor provides the wargaming topic that serves as the impetus behind the practical exercises. Student groups design, conduct, and then analyze wargames for their sponsors as the course's graduation exercise. Since 2009, the Naval Postgraduate School resident student wargaming teams have conducted over 70 wargames for 35 Army, Navy, Marine Corps, Joint, International, and Industry sponsors. NPS views the wargaming course graduates as wargaming apprentices. They have enough knowledge and experience to make useful, often significant, contributions to any wargaming



effort required in the department. Several recent graduates have actually led wargaming design initiatives at their respective organizations soon after graduation.

## Conclusion

If the Department of Defense is serious about improving its wargaming capability, it needs to invest in its people through wargaming education. That education needs to be practical and applied at the company and field grade level, preferably as part of their Joint Professional Military Education or graduate school opportunities. If it is a priority to emphasize wargaming's role in Department of Defense decision-making, simply "doing more wargames" is insufficient. Preparing warfighters to employ wargaming to the full extent of their purposes must be a necessary element.

<http://cimsec.org/revamping-wargaming-education-for-the-u-s-department-of-defense/46037>

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## ALUMNI:

### Colts VP of Player Development Brian Decker Named Team's NFL Salute to Service Award Nominee

*(StampedBlue.com 11 Nov 20)* ... Luke Schultheis

Indianapolis Colts Director of Player Development Brian Decker, a Naval Postgraduate School alumnus, has been named the team's 2020 NFL and USAA Salute to Service Award nominee.

Via NFL.com:

Born into the military in Texas and raised in Kentucky - for Brian Decker, service was in his blood. His grandfather served in the military in the Korean War and his dad served in the military in Vietnam. There After attending community college for a year and a half, he joined the military – working his way up to Lieutenant Colonel of the United States Special Forces, he did two tours of duty in Iraq. After graduating from Eastern Kentucky and getting his **master's degree from the Naval Postgraduate School**, Decker continued to serve - overseeing the talent acquisition strategy for future Green Berets. During his three years as Commander of Special Forces Assessment and Selection, the program saw success - so much so that other organizations - military, business, and even sports teams wanted to hear about it. What they realized was that by focusing solely on performance, they were missing on the person. Decker consulted with professional organizations of every major sport and eventually, the Cleveland Browns brought him in to oversee their player selection process. When the Colts brought Ballard in as general manager, he brought Decker in to help with player selection and development. Decker continues to serve and give back by investing in veterans like himself and shining a spotlight on nontraditional ways to bring people in from the military and have them contribute in a valuable way. After 22 years of service, no matter where he goes - in his heart, he's always a soldier.

The NFL's Salute to Service Award is presented annually by the USAA and NFL to honor a league member who "demonstrates an exemplary commitment to both honoring and supporting the military community."

Finalists for this year's award will be announced in January of 2021, and the recipient will be recognized at NFL Honors Night—which is set to air the eve of Super Bowl LV weekend.

The Athletic's Zak Keefer (formerly of the IndyStar) had a prior insightful editorial on Decker, and if you haven't already, I recommend reading it—as it'll paint a much more in-depth/interesting picture of the Colts former Green Beret than I reasonably could.

Decker has contributed heavily to the Colts front office's evaluation of prospective incoming players' character, leadership, drive, and commitment to the team. He's both helped bring in such 'Horseshoe guys', and I'm sure helped vet out those that aren't a natural cultural or character fit for the organization.

Obviously, on Veterans Day, this is a tremendous honor for Decker—who deserves such recognition—regardless if he's the ultimate recipient of the award or not.



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## **Former Astronaut Recounts How He Reached for the Stars at American Indian Heritage Month Event**

*(NAVAIR News 11 Nov 20)*

An 8-year-old boy built a rocket ship out of a cardboard box, dreaming he could fly to the moon.

That boy was Dr. John Herrington, who grew up to become the first American Indian (Chickasaw tribe) NASA astronaut, flying to space with STS-113 Endeavor in 2002. Herrington, a retired Navy commander and graduate of the Naval Test Pilot School (TPS) here, shared his story at NAVAIR's national virtual American Indian Alaskan Native Heritage Month event Nov. 5.

"My ancestors — my parents, my grandparents — were able to make decisions that allowed them to survive," he said. "My heritage, based on making good decisions, allowed me to do what I've done. It's influenced my life greatly. My ancestors have given me the opportunity to walk the earth and fly above it."

Herrington made decisions that took him down an unorthodox path of becoming an astronaut. Both his parents loved to fly; he got his first flying lesson from his father at age 10. After graduating early from high school in Texas (but subsequently suspended from college for poor grades), he turned to something entirely different: rock climbing.

Learning to calculate heights, navigate sharp angles and solve puzzles on how to place his body to avoid falling, Herrington realized, in the process, he was becoming adept at mathematics.

"I learned trig on the side of a cliff," he said. "I saw the practical nature of mathematics." Spurred on by his hiking partners, he reenrolled at the University of Colorado. "I had a motivation to learn something I'd only seen in a textbook," he said.

He joined the Navy and graduated from TPS in 1988. "I took my math background and applied it to fly airplanes in TPS," he explained. "[At TPS], you're the bridge between the engineering world and the operational world."

He later became an aeronautical engineering duty officer and earned a master's degree in aeronautical engineering from the U.S. Naval Postgraduate School. He was selected by NASA in 1996 and formed part of the largest class of NASA selectees. Nicknamed "the Sardines," their motto was "Space is no problem."

That motto proved true for Herrington, who fulfilled his childhood dream and logged more than 330 hours in space, including close to 20 hours doing space walks, during the 16th Shuttle mission to visit the International Space Station. In honor of his heritage, Herrington brought a hand carved flute and eagle feather on the voyage; both are now displayed at the National Museum of the American Indian in Washington, D.C.

For Herrington, diversity and inclusion are imperative to mission success.

"Honor and respect people of all ethnicities; we're all on this team together and have the same goal," Herrington advised. "Honor them for who they are and what they're capable of doing and what they believe in."

Herrington's remarks echoed the theme of the event, "Many Nations, One Fight!" The event was co-sponsored by NAVAIR's American Indian Alaskan Native Diversity Action Team and the NAVAIR Equal Employment Opportunity Office.

The team's mission is to support and enhance the recruitment, retention, professional development and advancement of members of the American Indian and Alaskan Native communities within NAVAIR. Currently, NAVAIR is comprised of 0.7% American Indian men and 0.3% American Indian women. Within the Department of Defense, there are 21,000 American Indian and Alaskan Native service members and civilians.



“When we bring together teammates from diverse backgrounds, we can leverage that diversity of thought and perspectives,” said Gary Kurtz, the team’s executive champion. “These important discussions have the power to galvanize our organization and compel us to action. More importantly, treating our teammates across the board with dignity and respect is foundational to how we operate as a command. Treating others with dignity and respect is, after all, not only the right thing to do, but also critical to mission success.”

American Indian Alaskan Native Heritage Month is observed each November to celebrate the diverse cultures, traditions and histories of native people and acknowledge their contributions to the U.S.

<https://southernmarylandchronicle.com/2020/11/11/former-astronaut-recounts-how-he-reached-for-the-stars-at-american-indian-heritage-month-event/>

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## **NASA and SpaceX Set to Launch First Operational Crew Dragon Mission**

*(Space Flight Insider 15 Nov 20) ... Matt Haskell*

Following up on the successful launch and return of NASA Astronauts in May, SpaceX is on the cusp of flying the first certified operational mission of their Crew Dragon capsule. The launch of the Crew 1 mission atop a SpaceX Falcon 9 from Kennedy Space Center’s Launch Complex 39A is targeted for 7:27 p.m. EST this evening, Sunday November 15.

Considered to be another historic first for both NASA and SpaceX, hot off the heels of the highly successful *Demo-2 flight test mission*, the launch serves as the very first flight of a fully certified and qualified Crew Dragon capsule. Having been given the fully operational designation during the flight readiness review prior to launch, the capsules will now be in a full rotation for transporting crew to the International Space Station. For this flight, the first of Dragon Capsule no. 207, the crew have aptly named their capsule “Resilience.”

NASA Astronaut Michael Hopkins Spoke on the name choice earlier this year in September. “If you look up the definition of the word resilience, it means functioning well in times of stress or overcoming adverse events. I think all of us can agree that 2020 has certainly been a challenging year, with a global pandemic, economic hardships, social unrest, and isolation... Despite all of that, SpaceX and NASA have kept the production line open and finished this amazing vehicle that is getting ready to go on its maiden flight to the International Space Station... So the name Resilience is really in honor of the SpaceX and NASA teams, and, quite frankly, it is in honor of our families, our colleagues, our fellow citizens, our international partners and our leaders, who have shown that same quality, those same characteristics all through these difficult times.”

The honor of commanding the first operational mission is bestowed upon NASA Astronaut and U.S. Space Force Colonel *Michael Hopkins*. Hopkins is a graduate of both the University of Illinois and Stanford University, holding a Masters degree in aerospace engineering. A veteran astronaut, he was selected to become an astronaut while a member of the U.S. Air Force in 2009. Hopkins has flown to space once before on Soyuz TMA-10M, and served as a Flight Engineer for ISS Expedition 37/38, a role he will again assume for Expedition 64/65.

Piloting the mission is 2013 NASA Astronaut selectee and U.S. Navy Commander *Victor Glover*. Glover is making his first spaceflight as part of the mission, and will serve as Flight Engineer for Expedition 64/65. Glover has a vast education background, receiving a Bachelors in general engineering from California Polytechnic State University, as well as Masters degrees in Flight Test Engineering from the U.S. Air Force Test Pilot School, **Systems Engineering from Naval Postgraduate School**, and Military Operational Art & Science from the U.S. Air Force Air University. Glover has flown 24 combat missions, accumulated over 3,000 flight hours in over 40 aircraft, and performed over 400 aircraft carrier arrested landings.

Flying as one of two Mission Specialists for the mission, NASA Astronaut and Physicist *Shannon Walker* will serve as a Flight Engineer for Expedition 64, before assuming command of the ISS as



Commander of Expedition 65. Walker holds a Bachelor of Arts in Physics, as well as Masters and Doctorate degrees of Philosophy in Space Physics from Rice University. Walker first began working as a contractor for Rockwell at Johnson Space Center in 1987, serving as a flight controller for multiple Space Shuttle missions before becoming a NASA employee in 1995. Selected as an astronaut in 2004, Walker has one previous spaceflight onboard Soyuz TMA-19, serving as Flight Engineer for Expedition 24/25.

The most experienced member of the crew is Japan Aerospace Exploration Agency (JAXA) Astronaut *Soichi Noguchi*. Noguchi first flew to space aboard the *STS-114 "return to flight"* mission as a Mission Specialist. Noguchi also flew as Flight Engineer onboard Soyuz TMA-17, serving in the same role for Expedition 22/23. He has also spent a combined 20 hours in space over the course of 3 spacewalks. Selected as an astronaut by JAXA in 1996, Noguchi holds both a Bachelors and Masters degree in aeronautical engineering from the University of Tokyo. He will serve as Flight Engineer for Expedition 64/65. With his flight on Crew Dragon, Noguchi joins an elite club of astronauts who have flown on 3 different types of spacecraft, becoming only the third astronaut, and the first non-American to accomplish the feat.

Following the launch, the new manufacture first stage Falcon 9 booster will guide itself back to Earth for a landing, and recovery, onboard the company's Autonomous Drone Ship "Just Read The Instructions." The second stage will continue on, ultimately delivering Resilience to its orbit and on route to the station. After catching up and docking with the station, the capsule will remain on station for approximately 6 months, with the crew remaining on station as part of the *Expedition 64/65* crew.

The launch has been subject to some delays in the past few weeks, the first of which caused a 2 week shift from October 31st to November 14th, when an issue was found in new production Merlin engines following an aborted launch attempt of a GPS payload. This mechanical issue ultimately resulted in the removal, and replacement, of two engines from the rocket for this mission. Another 24 hour delay occurred on November 13th, when it was decided to move the launch attempt to the 15th due to projected high offshore winds and seas. Unlike other missions, crew launches require good weather conditions not just at the launch site, but at multiple abort recovery zones as well. With Dragon being a capsule that lands in the ocean, the seas must be stable enough to allow safe recovery of the astronauts should an abort occur. The same principal also applies to return to Earth following the end of a mission.

Launch site weather for this attempt however, is not as forgiving as the original launch date. The U.S. Space Force and 45th Space Wing's *45th weather Squadron* is responsible for launch forecasts. For the launch attempt on Sunday, weather at launch is currently projected to offer only a 50% chance of launch, with the primary concerns being the cumulus cloud rule, flight through precipitation, and surface electric field rule. The conditions are very similar to the launch of Demo-2, which suffered a weather related scrub just before its scheduled launch.

Should a delay be incurred, the launch sits within an instantaneous launch window, meaning any delay will cause a scrub for the attempt. For this mission, the next attempt is Wednesday, November 18, and weather conditions are significantly better. For the 72 hour delay window, the launch sits at an 80% chance of launch, with concerns being the cumulus cloud rule and liftoff winds.

<https://www.spaceflightinsider.com/missions/human-spaceflight/nasa-and-spacex-set-to-launch-first-operational-crew-dragon-mission/>

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