



NPS IN THE NEWS

Weekly Media Report – Jan 17 - 23, 2023

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SECNAV:

[SECNAV Names Future Destroyer after MoH Recipient Capt. Thomas G. Kelley](#)

(Sea Power Magazine 17 Jan 23)

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RESEARCH:

[Artificial Intelligence Summit at NPS Accelerates Critical Capabilities](#)

(Navy.mil 19 Jan 22) ... Rose Mena-Werth

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(Military Spot 20 Jan 22) ... Rose Mena-Werth

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U.S. Sen. Mark Kelly, D-Arizona, will deliver the keynote address March 4 for the 45th annual Mansfield Metcalf Dinner in Helena, the Montana Democratic Party's biggest event of the year... Kelly is the son of two police officers and attended public schools through the U.S. Merchant Marine Academy and U.S. **Naval Postgraduate School**.

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Artificial intelligence is in an era of massive growth in the public sector, as evidenced by the exponentially increasing amount of AI offices, leadership and spending in recent years. As AI's footprint continues to expand, the Department of Defense's new office is taking up the mantle for AI innovation in the U.S... In April 2022, the DOD named Dr. Craig Martell as its first ever chief digital and artificial intelligence officer. Prior to his appointment, Martell was a tenured computer science professor at the **Naval Postgraduate School** specializing in natural language processing. He also previously served as head of machine learning at Dropbox and Lyft, and he led a number of AI teams and initiatives at LinkedIn.

[Deterrence Through Doctrine: The Case For A Joint Counter-Landing Doctrine](#)

(War on the Rocks 19 Jan 23) ... Dylan Buck and Zach Ota

"As the British confronted the possibility of invasion during the summer of 1940, military planners faced an obstacle that seemed unbelievable in a nation that had been threatened so many times in the past. They had no doctrine for defending against an amphibious landing..." Dylan Buck is an infantry officer and a regional affairs officer currently serving on the Northeast Asia desk at Marine Corps Forces, Pacific. He received his undergraduate education at the United States Naval Academy and a graduate certificate from the Johns Hopkins School of Advanced International Studies and holds master's degrees from both the Georgetown McDonough School of Business and the **Naval Postgraduate School**.



UPCOMING NEWS & EVENTS:

Feb 6-10: [JIFX 23-2: NPS Field Laboratory at Camp Roberts](#)



SECNAV:

SECNAV Names Future Destroyer after MoH Recipient Capt. Thomas G. Kelley

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WASHINGTON – Secretary of the Navy (SECNAV) Carlos Del Toro announced during the Surface Navy Association Symposium that future Arleigh Burke-class guided-missile destroyer DDG 140 will be named USS Thomas G. Kelley (DDG 140), the Navy said in a Jan. 12 release.

The future USS Thomas G. Kelley will honor retired Captain Thomas G. Kelley, a Medal of Honor recipient. The name selection follows the tradition of naming destroyers after U.S. naval leaders and heroes.

In 2020, former Secretary of the Navy Richard Spencer announced his intention to name a ship after Kelley but had yet to dedicate the name to an assigned hull number. Today, Del Toro assigns the name to DDG-140, which was appropriated in the fiscal year 2023 budget.

“It is with great admiration and great pride that I am announcing the naming of the DDG-140 after Captain (retired) Thomas Gunning Kelley,” said Del Toro. “May we all, especially the future men and women assigned to this ship, always be inspired by Kelley’s brilliant leadership, bold initiative, and resolute determination.”

Kelley was born in 1939 and grew up in Boston, Massachusetts. He graduated from the College of the Holy Cross in 1960 and was commissioned in the Navy. His early assignments as a Surface Warfare Officer included time aboard USS Pandemus (ARL-18), USS Davis (DD-937), and USS Stickell (DD-888). Kelley then volunteered to serve in Vietnam as a lieutenant commanding River Assault Division 152.

Riverine Action

On June 15, 1969, Kelley led river assault craft boats when they fell under attack. Kelley, while severely wounded, continued to protect and lead his men to safety. For this gallant effort, he was awarded the Medal of Honor. Kelley, despite his injuries, continued his naval career, taking on the position of executive officer of USS Sample (DE-1048) and commanding officer of USS Lang (FF-1060). While serving, Kelley earned his master's degree in management from the **Naval Postgraduate School** and completed the Armed Forces Staff College course in Norfolk, Va. Kelley retired from naval service as a Captain after thirty years, ending his tour as the director of legislation in the Bureau of Naval Personnel.

After his military service, Kelley became the Massachusetts Department of Veterans' Services commissioner and was named Secretary of the Department in 2003. In 2011, Kelley retired from public service and focused on charitable pursuits. He is close with the Medal of Honor Society, previously serving as president, Holy Cross' O'Callahan Society, Arlington National Cemetery, the Homebase Program which treats veterans and active military with the hidden wounds of war, in partnership with the Boston Redsox Foundation and Massachusetts General Hospital. He also serves on the board of directors of the USS Constitution Museum.

'Tremendous Honor'

“It is a tremendous honor and I am truly humbled, especially as a Surface Warfare Sailor,” Kelley said. “I trust that those who sail in this ship will be reminded of service to their shipmates and that they will be carrying on a tradition greater than themselves.”

Arleigh Burke-class destroyers, built around the Aegis Combat System, are the backbone of the U.S. Navy's surface fleet providing protection to America around the globe. They incorporate stealth techniques, allowing these highly capable, multi-mission ships to conduct a variety of operations, from peacetime presence to national security, providing a wide range of warfighting capabilities in multi-threat



air, surface and subsurface domains. These elements of sea power enable the Navy to defend American prosperity and prevent future conflict abroad.

RESEARCH:

Artificial Intelligence Summit at NPS Accelerates Critical Capabilities

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The fourth quarterly Naval Artificial Intelligence (AI) Summit took place December 5-9 at the Naval Postgraduate School (NPS). More than 160 participants from the eight Navy AI Task Forces, Warfare and Warfighting Development Centers, the fleet, Fleet Marine Force and DOD engaged in-person and virtually at the summit co-hosted by the U.S. Navy Chief AI Officer (NCAIO) Brett Vaughan and NPS' Naval Warfare Studies Institute.

Decision Advantage is one of six force design elements and will be enabled by AI as stated in the Chief of Naval Operations' NAVPLAN 2022. These AI Summits are held to tighten the connections between Naval AI enablers, practitioners and users, as well as grow the Naval AI community into a platform for accelerated AI deployment supporting the Navy's highest priorities.

"We focused attendees time on planning Naval AI training and education, AI/machine learning (ML) operations deployment pipelines, and AI Fusion, a concept for the operational deployment of AI in service to distributed maritime operations and the hybrid fleet," said Vaughn. "NPS has been instrumental as a central connector and helping us develop a blueprint for a Naval AI organization and governance structure."

U.S. Marine Corps Maj. Jack Long, PhD, a Marine Reservist at the Office of Naval Research and Deputy Navy Chief AI Officer, introduced summit attendees to the current state of AI in the Navy and began the discussion of future trends to shape impactful Naval AI development and deployment. The Navy and its AI Task Forces were joined at the summit by partners from the U.S. Army, U.S. Marine Corps, U.S. Coast Guard, the Defense Intelligence Agency, the Joint Staff and the Chief Digital and AI Office (CDAO).

AI is a tool that becomes ever more applicable as the world becomes more wired, generates more data, and increasingly taps advanced processing power.

"We think AI is widely applicable to warfare, so we want to make sure the Naval services and the DoD in general are able to efficiently harness this emergent and disruptive tool. It's important that we are ready to use it for our own purposes, whether in warfighting or corporate functions, and be ready to have it used against us," said Long.

With discussions held at varied classification levels, a significant part of the summit focused on skills that the Navy and Marine Corps will need to channel this capability. Past innovations like submarines and aviation have reshaped naval warfare, with each invention requiring new doctrine, equipment, and personnel to support it. As the required skills become more specialized, those personnel have required new career paths to allow them to become masters at their crafts.

The Navy must learn to operate at the speed of AI. As expertise becomes internal, the Navy will need a workforce capable of coding, building models, and harnessing AI in a similar fashion to how Sailors once had to know how to use a sextant. AI application would become part of basic seamanship. Alternatively, the Navy could rely on industry and contractors to bend AI to the Navy's purposes in much the same way as the service has them build ships.

This summit started the conversation on what the services will need to have about how they define their core competency and what they choose to not do.

"Right now, there's a small cadre of people in the Navy that have thought about this extensively," said Long. "Before the CNO or CMC sign off on strategic AI decisions, a much wider group must be engaged. Ultimately this is a conversation about the future identity of the Services in an age of digital warfare."



During the week-long summit, attendees connected, received informational briefs, and took part in several practical workshops on topics such as Naval AI training and education, practical AI/ML deployment pipeline architecture and operational AI employment at the forward edge of naval operations.

Some of these conversations will inspire projects and partnerships that will be realized through a Naval Innovation Exchange (NIX) led by Dr. Mathias Kolsch at NPS. Kolsch is working to tie the summit, courses and research together.

“I am figuring out the ideal workforce composition for AI/ML involved projects, and the AI Summit also informs me how to do that,” Kolsch explained. “I meet and talk to these people. I see where there are successful projects and begin asking questions. How many are listed here for this? What do they know? Can they code? ... What are the skills needed for this project? So, this summit informs the NIX.”

Cooperative planning for the next Naval AI Summit in March 2023 has already begun, and Kolsch plans to offer a version of the popular “AI for Leadership” course specifically designed to support active general officers, flag officers, and Senior Executive Service civilians during the same week.

NPS is currently a center of gravity for advanced AI training and education within the Naval Education Enterprise. If the NCAIO and Long have their way, that role will grow in the near term. At the crux of research and operational experience, NPS is an ideal center for AI advanced education and implementation.

“The vision of accelerated Naval AI training and education, anchored at NPS, closely resembles the role of Top Gun for Naval Aviators. NPS as a center for advanced AI training in much the same way pilots go to flight school and then later in their career go back for advanced training to keep current and learn how to employ the craft at the pace of industry and adversaries,” said Long. “That’s the core role that we see NPS playing in the coming years – the central hub for the diffusion of AI knowledge across the Navy and Marine Corps.”

Since inception of the program, the AI Summit continues to grow and evolve. What began as an ambitious effort of less than a dozen practitioners has grown by orders of magnitude. And it’s a number that will surely grow as the Navy and Marine Corps further embrace the widespread applications of AI, and the necessity to evolve and innovate at great speed and scale. NPS will continue to play a leading role in AI education, research and innovation with the next AI Summit scheduled for March 2023.

[Artificial Intelligence Summit at NPS Accelerates Critical Capabilities > United States Navy > News-Stories](#)

[Artificial Intelligence Summit at NPS Accelerates Critical Capabilities - Naval Postgraduate School](#)
[Artificial Intelligence Summit Accelerates Critical Capabilities - MilitarySpot.com](#)

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NPS Office of Research and Innovation will Accelerate Solutions from Idea to Impact

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The Naval Postgraduate School (NPS) has established the new Office of Research and Innovation (OR&I) in order to empower the work of faculty members like Anthony Gannon, an associate professor in the school’s Department of Mechanical and Aerospace Engineering, and students such as those conducting modeling and simulation research. OR&I was created by NPS in response to higher Department of Defense and Navy guidance for greater leadership in technology and innovation that enables our nation’s and military’s strength.

“Technology is central to today’s geopolitical competition and to the future of our national security, economy and democracy. U.S. and allied leadership in technology and innovation has long underpinned our economic prosperity and military strength.” – National Security Strategy

The Naval Postgraduate School (NPS) recently established the Office of Research and Innovation (OR&I) in response to the National Security Strategy and National Defense Strategy’s call to leverage emerging technologies and innovative design practices to accelerate the development of full spectrum capabilities in order to maintain decisive maritime advantage and hedge against uncertainty.



During a recent address at Columbia University, Secretary of the Navy Carlos Del Toro stated, “The best way to deter our adversaries is for the department to restore its technological superiority.” The Department of the Navy is driving innovation across every aspect of the service.

“Education is the key connector for this work. Our educational institutions hold great promise and opportunity,” Del Toro added.

NPS is a central connector in the naval innovation ecosystem, uniquely positioned to complement the Naval Research and Development Establishment (NR&DE). OR&I will fully leverage the school’s enduring and fundamental strengths – motivated warrior-scholar students with fleet and field experience; renowned, defense-expert faculty; a mission grounded in advancing the naval services; and close proximity to the heart of American technological innovation.

“OR&I will be a support mechanism to take NPS’ research enterprise to an entirely new level, leveraging our naval innovation ecosystem – a network of academia, defense researchers, and industry working with NPS faculty, students and the operational fleet,” according to Dr. Kevin Smith, NPS Vice Provost for Research and head of OR&I.

Academic basic research drives the discovery and dissemination of new knowledge, which helps to ensure the veracity of NPS cutting-edge curricula. The former NPS Research Office provided vital support to the school’s academic research function. OR&I will continue to support foundational research, while also promoting faculty and student engagement in larger, multidisciplinary projects to help advance the Navy and Marine Corps as an integrated, all-domain force. “OR&I will continue to provide support to NPS faculty and researchers, such as processing proposals and support agreements,” said Smith.

Under Smith’s leadership, OR&I, along with the Naval Warfare Studies Institute (NWSI), is working to strengthen relationships throughout the NR&DE and across the Navy and Marine Corps staff, combatant commands, and others in the Department of Defense to provide NPS with important engagement and support for research projects that take solutions to key operational problems from concept to capability through academic research.

Together, OR&I and NWSI are developing collaborative industry partnerships, enabling project management, and promoting interdisciplinary, multi-organizational research teams conducting repeatable, rapid innovation processes, prototyping and experimentation.

“NPS’ secret weapon is its students,” said U.S. Marine Corps Col. Randy Pugh, director of NWSI. “They are warrior-scholars with incredible talent and operational insights. Working alongside expert faculty, they inform research and the innovation process. We are working to strengthen our connection between them and the challenges of the fleet and Fleet Marine Forces (FMF) and the Sailors and Marines out ‘doing the job,’ and they will far exceed our highest expectations. The Office of Research and Innovation is critical to achieving this vision at scale.”

“We are increasingly offered a space at the table for discussions on how NPS can contribute to the challenges facing the Navy,” said Smith. “And our formal membership within the NR&DE provides NPS with significant capacity in technical capabilities, opportunities to do testing on ranges, build prototypes, and really expand what we can do on the engineering side. With the operational experience of our warrior-scholars, this provides NPS and our partners with the opportunity to support test and evaluation of systems being developed through the Navy’s process of innovation.”

Many of these partnerships are supported by Cooperative Research and Development Agreements (CRADAs) that allow government researchers to work with industry partners such as Microsoft, AT&T, and Xerox. Additionally, the Naval Research Program (NRP) links the operational Navy and Marine Corps commands with researchers to solve timely operational fleet and FMF needs.

Naval forces operate under, on and above the ocean, as well as ashore in space and cyberspace. Over the past decade, NPS research has expanded to larger endeavors that address increasingly complex, multidomain challenges and span NPS departments. Ultimately, Smith said that OR&I is about fully leveraging the enduring strengths of NPS – something which is more important than ever given today’s rapidly changing security environment.

“The imperative is that we develop solutions and capabilities faster than our adversaries to reestablish and sustain the technological advantage critical to warfighting, as well as the cognitive readiness to fight and win,” added U.S. Navy Capt. Bill Sherrod, director of the NPS Office of Strategic Initiatives.



Effective solutions must involve the fleet and increasingly industry partners where much of today's technology innovation is occurring. OR&I will connect fleet needs with researchers, support proposal development, find funding sources, identify partners, and provide program managers to support the administration of larger projects at an institutional level.

“The reason we are moving to an Office of Research and Innovation is because we are now making an intentional institutional effort to capitalize on the attributes unique to NPS that we have here to support innovation within the Department of the Navy and accelerating research solutions from idea to impact,” Smith said.

Learn more about the Office of Research and Innovation and how it will advance NPS priorities and desired outcomes outlined in the NPS Strategic Framework.

[NPS Office of Research and Innovation will Accelerate Solutions from Idea to Impact - Naval Postgraduate School](#)

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FACULTY:

How Masking Degrees Has Affected Promotion Outcomes in the Air Force

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What is education good for? The recent flip flopping on whether to consider advanced degrees when promoting mid-level officers shows that the Air Force has struggled with this question.

At times, we have masked, or purposely omitted, advanced academic degrees, or AADs, from officer promotion boards while at other times leaving them viewable. Masking may reduce officers' incentive to pursue higher-level degrees, weakening our intellectual comparative advantage. On the other hand, the promotion system is meant to advance the best people, not “square fillers.” Masking may focus reviewing officials on relevant job performance metrics rather than distract them with potentially unrelated credentials.

The question over masking mirrors a broader economic debate over how to value the returns of education. The “human capital” view says the more education one receives, the more skilled they become. The signaling view holds that degrees primarily help distinguish high- and low-skilled individuals, since more talented people should find it easier to complete degrees. Under this theory, managers can use degrees as a proxy for productivity. But apart from that, the education itself may provide no inherent benefit.

Economists still debate this, and so does the Air Force — at least as evidenced by its flip flopping on masking. Prior to 1996, officer selection records included degree information comprising the level of education achieved, major, school name and completion year. Advanced academic degree masking first went into place in 1996 for officers eligible to promote to O-3 and O-4: these promotion boards could no longer see any degree information. This policy was extended to O-5 and O-6 boards in 2006. In 2008, however, the policy was reversed; all officer boards unmasked advanced degrees. This reversal was itself reversed in 2014, with masking reinstated for O-4 and O-5 boards. And, most recently, Air Force Secretary Frank Kendall unmasked advanced degrees for all O-4 and O-5 boards effective Jan. 1, 2023.

Our research, covering all active duty Air Force officers from 2007 to 2020, explored how the service's advanced degree masking policies influence promotion outcomes. Under periods of unmasking, were board members relying on advanced degree information as a signal for productivity? And, when masked, did the lack of degree information change which individuals were selected for promotion?

The results for in-the-promotion zone candidates meeting O-4 and O-5 promotion boards from 2007 to 2019, seen at Figures 1 and 2, provide suggestive evidence that promotion boards reward advanced degrees when visible. Figure 1 shows that in 2012, officers with advanced degrees meeting O-4 boards



had a selection rate 22 percentage points higher than their non-advanced degree holding counterparts. This gap narrowed once the 2014 masking policy went into place, reducing to approximately 6 percentage points in 2019. O-5 promotion boards show similar trends, as seen in Figure 2. Non-advanced degree holders meeting O-5 boards during the unmasked period promoted at an average selection rate of 18%. Following masking implementation, their average selection rate rose to 26%, similarly narrowing the gap with advanced degree holders.

We also considered how this policy may have affected different types of career fields. The Air Force was in the middle of a pilot shortage in 2014, and rated officers (pilots, navigators, air battle managers) are less likely to acquire advanced degrees earlier in their career due to their intensive training regimen. We found that the promotion rate to O-4 for rated officers without advanced degrees increased from 80 to 90 percent under masking, which may have helped retain pilots.

Regardless of masking, Figures 1 and 2 clearly show that advanced degree holders are more likely to promote. This premium, however, shrunk by about 50 percent for O-4 boards and 20 percent for O-5 boards because of the 2014 masking policy. This suggests that promotion board members used advanced degrees as discriminators during periods of unmasking. Although advanced degree holders continued to promote at higher rates following masking implementation, it became more difficult for board members to promote based on credentials — and perhaps the remaining premium reflects a positive association between job performance and advanced degrees.

Our results suggest that advanced degree masking policies affect the types of officers the Air Force promotes at O-4 and O-5 boards. We also found that rated officers without advanced degrees experienced a significant jump in their selection rate to O-4, a key outcome considering our continued struggle to fill cockpits. The Air Force's recent decision to unmask advanced degrees again beginning in 2023 demonstrates that they think highly of continuing education and graduate-level degrees. Is this the right move? Longer-run career outcomes of past promotions could be an important guide for policy steps going forward. If the less-educated officers from the 2014-2019 promotions are performing at similar levels to advanced degree holders, maybe the maskers had a point.

Capt. Katie Albright is an active duty Air Force officer and a 2022 graduate of the Naval Postgraduate School. Maxim Massenkoff is an assistant professor in the Department of Defense Management at the **Naval Postgraduate School**.

[How masking degrees has affected promotion outcomes in the Air Force \(militarytimes.com\)](https://www.militarytimes.com/story/news/defense/2023/01/17/air-force-promotion-outcomes-2014-2019/7000000001/)

[How masking degrees has affected promotion outcomes in the Air Force \(yahoo.com\)](https://www.yahoo.com/news/air-force-promotion-outcomes-2014-2019-1700000001.html)

[How Concealment Grades Have Affected Promotion Results in the Air Force - \(upjobsnews.com\)](https://www.upjobsnews.com/news/2023/01/17/how-concealment-grades-have-affected-promotion-results-in-the-air-force/)

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ALUMNI:

Yuma Fire Department Captain Completes Master's Degree

(KYMA 17 Jan 23)

Fire Captain Alvin Luedtke of the Yuma Fire Department graduated with a Master's Degree from the **Naval Postgraduate School's** Center for Homeland Defense and Security (CHDS) on December 16.

CHDS is the nation's homeland security educator and offers a program that brings homeland security professionals together where participants can develop critical thinking, leadership, and policy skills say the press release.

Captain Luedtke was able to collaborate with homeland security officials on the current policy, strategy, and organizational design challenges through the 18-month hybrid program mentioned in the press release.

Luedtke is the City of Yuma Fire Department's Technical Rescue Project Manager where he oversees the training development, equipment procurement, and response practices related to specialized rescue events says the press release.



He is also a certified paramedic, Technical Rescue Technician, Hazardous Materials Technician, and Incident Safety Officer, and has served eleven years in the fire service.

[Yuma Fire Department Captain completes Master's degree - KYMA](#)

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Former Gwinnett County police officer now heads security for NGTC

(Now Habersham 17 Jan 23)

There's a new man in charge of campus security for North Georgia Technical College. Former Gwinnett County police officer Mark Fitzgerald was named chief of campus police in December. He took over the job on January 2.

Fitzpatrick worked for the Gwinnett County Police Department for over 25 years. He most recently served as commander of GCPD's special operations unit. In that role, Fitzpatrick was responsible for SWAT, aviation, K9, DUI, accident investigations, motors unit, and Explosive Ordinance Disposal divisions.

He began his law enforcement career at the Gwinnett County Sheriff's Department in 1992 as a deputy sheriff. At GCPD, Fitzpatrick rose through the ranks to police major.

Fitzpatrick holds a master of arts degree in homeland security and defense from the **Naval Postgraduate School** in Monterey, California. He also holds a bachelor of business administration degree in finance from Georgia State University and an associate degree in business administration from the University of North Georgia.

NGTC President John Wilkinson says Fitzpatrick's background in law enforcement and years of service are a "true testament to his knowledge and abilities and make him an ideal candidate for this position."

"We are excited to welcome Chief Fitzpatrick to North Georgia Technical College," says NGTC Executive Vice President Of Administrative Services Dr. Michele Shirley. "His knowledge and experience will be an invaluable asset to our college, and we look forward to his leadership in this role as he works with students, faculty, staff and the community."

As chief of campus police, Fitzpatrick oversees security operations at all three of NGTC's campuses – Clarkesville, Curahee, and Blairsville. He is the college's fourth police chief in eight years, succeeding David Savage who was hired in April 2021.

[Former Gwinnett County police officer now heads security for NGTC - Now Habersham](#)

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Sen. Mark Kelly of Arizona to headline Mansfield Metcalf Dinner in Helena

(Kilgore News 18 Jan 23)

U.S. Sen. Mark Kelly, D-Arizona, will deliver the keynote address March 4 for the 45th annual Mansfield Metcalf Dinner in Helena, the Montana Democratic Party's biggest event of the year.

Kelly is a retired U.S. Navy combat pilot, engineer and NASA astronaut.

This year's celebration will be at the Lewis and Clark County Fairgrounds. Tickets will be on sale beginning Jan 24 at montanademocrats.org.

Journalzine

Kelly took office in December 2020 after Arizonans elected him to fill out the remainder of the late Sen. John McCain's term. And in 2022, Arizonans elected him to a full six-year term in the Senate.

Kelly lives in Tucson with his wife, former U.S. Rep. Gabby Giffords. They were married in 2007. She has retired from Congress after an assassination attempt nearly killed her on Jan. 8, 2011.



“We are thrilled to host Senator Kelly in Montana. Although it’s a much shorter trip to Helena than to the International Space Station, we are honored he is making the journey,” Montana Democratic Party Executive Director Sheila Hogan said Wednesday in an email.

She said Kelly has dedicated his life to service, protecting Americans, and fighting for working families. “He’ll feel right at home among Montana Democrats.”

Past speakers of the Mansfield Metcalf Dinner have included Joe Biden, who was then a former vice president, in 2018, Sen. Cory Booker in 2017, and DNC Chair Jamie Harrison in 2021.

Kelly is the son of two police officers and attended public schools through the U.S. Merchant Marine Academy and U.S. **Naval Postgraduate School**.

He flew 39 combat missions in Operation Desert Storm. He has logged more than 5,000 flight hours in more than 50 aircraft and completed over 375 carrier landings. Kelly is the recipient of the Defense Superior Service Medal, Legion of Merit, two Distinguished Flying Crosses, and multiple Air Medals.

Kelly was selected as an astronaut in 1996 in the same class as his twin brother, Scott. He flew his first of four missions into space in 2001 aboard Space Shuttle Endeavour.

He spent more than 50 days in space and has lived on the International Space Station.

[Sen. Mark Kelly of Arizona to headline Mansfield Metcalf Dinner in Helena | | kilgorenewsherald.com](#)

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The Future of Artificial Intelligence: A Look Inside DOD’s Newest AI Office

(GovCon Wire 18 Jan 23) ... Summer Myatt

Artificial intelligence is in an era of massive growth in the public sector, as evidenced by the exponentially increasing amount of AI offices, leadership and spending in recent years. As AI’s footprint continues to expand, the Department of Defense’s new office is taking up the mantle for AI innovation in the U.S.

Learn more about the future of AI and its role on the modern battlefield during the Potomac Officers Club’s 4th Annual AI Summit on Feb. 16. The DOD’s Chief Digital and Artificial Intelligence Officer Craig Martell is confirmed to keynote. Register here to save your spot!

DOD’s Chief Digital and Artificial Intelligence Office

The Office of the Chief Digital and Artificial Intelligence Officer, or CDAO, was established in December 2021 for the purpose of creating “stronger alignment and synchronization” in the DOD’s historically disparate AI efforts, according to a memo issued by Deputy Secretary Kathleen Hicks.

Reporting directly to Hicks, the CDAO was planned to succeed the Joint Artificial Intelligence Center and oversee the Defense Digital Service. In the memo, Hicks also noted that the occupant of the new role would be tasked with integrating AI, data and digital solutions into the department.

Craig Martell Appointed First-Ever CDAO

In April 2022, the DOD named Dr. Craig Martell as its first ever chief digital and artificial intelligence officer. Prior to his appointment, Martell was a tenured computer science professor at the **Naval Postgraduate School** specializing in natural language processing. He also previously served as head of machine learning at Dropbox and Lyft, and he led a number of AI teams and initiatives at LinkedIn.

“With Craig’s appointment, we hope to see the department increase the speed at which we develop and field advances in AI, data analytics, and machine-learning technology,” Hicks said.

Martell assumed the post from DOD Chief Information Officer John Sherman, who served as acting CDAO prior to Martell’s appointment.

CDAO Achieves Full Operating Capability



The CDAO achieved full operating capability in June 2022, and with the FOC designation, the JAIC, Defense Digital Service and Advana were rolled under the new office.

What's next for the CDAO? Join the Potomac Officers Club's 4th Annual AI Summit to find out directly from CDAO Craig Martell! This can't miss in-person event takes place on Feb. 16. Register here.

[The Future of Artificial Intelligence: A Look Inside DOD's Newest AI Office - GovCon Wire](#)

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Deterrence Through Doctrine: The Case For A Joint Counter-Landing Doctrine

(War on the Rocks 19 Jan 23) ... Dylan Buck and Zach Ota

“As the British confronted the possibility of invasion during the summer of 1940, military planners faced an obstacle that seemed unbelievable in a nation that had been threatened so many times in the past. They had no doctrine for defending against an amphibious landing.”

– Theodore Gatchel, *At the Water's Edge*

In 1940, as Great Britain truly grappled with the possibility of a Nazi invasion, the nation still had not settled on a doctrine to defend against an amphibious landing. As Washington and Taipei consider the possibility of a Chinese invasion of Taiwan, the two nations — working with other countries in the region — would be wise to learn from British failings to plan for the worst and jointly work together to come up with the means to defend the island.

China and Taiwan are roughly separated by 100 miles of water. Thus, to forcefully annex Taiwan, the People's Republic of China would most likely have to conduct a cross-strait amphibious invasion. Even an all-out effort by the people of Taiwan cannot guarantee the island's defense. Taiwan's partners in the region will significantly increase the likelihood of a successful defense by rapidly and cohesively assisting Taiwan militarily. Accordingly, the 2022 National Defense Strategy clearly identifies China's “coercive activity towards Taiwan” as the “pacing challenge” for the Department of Defense. Alliances and partnerships were identified as the “center of gravity” for the strategy, and these partnerships were conveyed as America's “greatest global strategic advantage.” Lastly, the strategy prioritizes “detering aggression, while being prepared to prevail in conflict” in the Indo-Pacific region.

Despite the severity and urgency of this recognized threat from China, however, the United States, Taiwan, and key partners lack a unifying doctrine to counter an amphibious invasion. U.S. military doctrine “constitutes official advice” from the Joint Chiefs of Staff, and while there are joint doctrines for combatting terrorism, counterinsurgency, and counterdrug operations, no joint, multinational counter-landing doctrine exists. A counter-landing doctrine would better align the military capabilities of Taiwan, the United States, and close partners such as Japan, the Philippines, and Australia. Additionally, a counter-landing doctrine would facilitate a rapid and cohesive military response by regional partners to repel an enemy invasion from the sea. Finally, the successful implementation of a counter-landing doctrine and its downstream effects would better deter an amphibious invasion of Taiwan. While key allies and individual services within the U.S. military are developing concepts and capabilities to deter a Chinese invasion, a common counter-landing doctrine would bridge theory and methodology while amplifying the effects of these approaches to improve deterrence.

Three Reasons for a Counter-Landing Doctrine with Allies and Partners in the Indo-Pacific

Without a common doctrine, military forces may not be able to respond with sufficient capabilities, cohesion, and time to deter or defeat an adversary invasion. While competent commanders and staffs could determine the necessary conditions for a successful counter-landing operation given sufficient time, the proximity of the Chinese threat to Taiwan may not afford the time to make such decisions. Additionally, the absence of a counter-landing doctrine forfeits the opportunity to deliberately inform the development of critical counter-landing capabilities during a period when the balance of force is rapidly changing in the Indo-Pacific. Furthermore, the lack of these benefits associated with a counter-landing



doctrine weakens deterrence of a cross-strait invasion of Taiwan. For these reasons, a counter-landing doctrine should be developed and rehearsed with key partners.

Reason 1: Unifying Efforts and Resources for the Priority Challenge

A joint, multinational counter-landing doctrine provides a foundation for developing and integrating the defense capabilities of key militaries across the western Pacific. The Taiwan Navy and Marine Corps, the Japan Self-Defense Forces, the Philippine Marine Corps, and the Australian Defence Force are modernizing their forces and concepts to meet the growing threat from China. As Gen. David Berger implored, “[H]ow can we help [allies and partners] get there faster?” A counter-landing doctrine could provide a common approach to multilateral command and control, supporting relationships, information sharing, and battlespace frameworks to defend against a Chinese amphibious invasion.

While key militaries in the region are already developing concepts and capabilities to conduct sea denial and counter an amphibious landing, the hub-and-spoke network of alliances in the Pacific makes the U.S. military a key integrator of these multinational capabilities. Taiwan’s Navy, which includes its Marine Corps, already fields indigenous Hsiung Feng anti-ship missiles and is procuring U.S.-produced mobile Harpoon Coastal Defense Systems. Japan’s civilian and military officials increasingly recognize that a “Taiwan crisis would be a Japan crisis” and are improving maritime interdiction capabilities on Japan’s Southwest Islands off the coast of Taiwan. The Philippines’ BrahMos supersonic anti-ship missiles in their newly-formed Coastal Defense Regiment reflect a prevailing approach towards maritime security in the western Pacific. Australia’s recent \$3.5 billion maritime defense procurement also indicate a growing recognition that deterrence and homeland defense is best achieved in the littorals. If properly integrated, these counter-landing capabilities offer the United States an enduring advantage over a potential Chinese amphibious force.

Several services within the Department of Defense have also developed separate and distinct future operating concepts that aim to achieve the objectives of the 2022 National Defense Strategy. The U.S. military, however, should seek to unify these disparate concepts to counter the pacing challenge in the western Pacific. Lt. Gen. Eric Wesley, the deputy commanding general of the Army’s Futures and Concepts Center, stated that operations in the Pacific “have to be able to rapidly integrate all domains in order to achieve overmatch,” and that “[W]e think we need a solid description of how the joint force sees that fight going, and I think that is the next significant effort the services should get after.” Vice Adm. Stuart Munsch, deputy chief of naval operations for operations, plans and strategy, added that the military must reach a “degree of integration you have never imagined before,” to include space and cyber domains “that we traditionally don’t think about that need to be brought in.”

China has invested in its maritime forces and, as Thomas Shugart has written about, a large number of civilian cargo ships that could also support an invasion. Given the disparity in deployed forces, countering China’s maritime force will undoubtedly require marshaling the efforts and resources of numerous partners, and these partners can no longer afford an approach that lacks a common focus, foundation, and guidance.

Service operating concepts are often associated with unique acquisitions programs that often lack joint integration and interoperability. Multi-domain capabilities have changed the character of war, which has been historically divided between air, land, and sea domains. While future concepts account for multi-domain operations, no doctrine exists to leverage joint and multinational assets to counter a Chinese amphibious invasion across these multiple domains. The doctrine would focus training and acquisitions to achieve a joint capability against China’s most dangerous course of action to annex Taiwan. The U.S. military should seize this opportunity to internally align concepts and unify defense acquisitions.

Reason 2: Facilitating a Rapid Military Response Within Existing Policy

Although the National Defense Strategy clearly articulates the challenges and priorities of deterring China’s aggression towards Taiwan, policy considerations limit the scale and scope of military cooperation between many of Taiwan’s closest partners. Within these limitations, however, militaries in the region are counting on a common defensive doctrine to help deter an invasion. Rehearsing the tenets of a counter-landing doctrine with allies and partners in the western Pacific would increase the



effectiveness of existing defense capabilities, decrease the time needed to respond to a cross-strait invasion of Taiwan, and ensure that the U.S. military is prepared to respond to executive orders.

With “official advice” from the Joint Chiefs of Staff codified in doctrine, combatant commanders could unleash the full potential of each U.S. military services’ evolving concepts and capabilities to counter amphibious operations. While the need for this doctrine is most acute in the U.S. Indo-Pacific Command, all geographic combatant commands could benefit from such a unifying approach. By defining the roles, responsibilities, command relationships, support relationships, and battlespace frameworks of a notional counter-landing operation, combatant commanders can more effectively rehearse the employment of multinational forces to integrate mutually supporting capabilities, decrease response times to likely crises, and thereby increase deterrence.

Reason 3: Integrating Deterrence Through Doctrine

Deterring conflict and defending allies in the Indo-Pacific has remained a consistent objective in successive U.S. defense strategies. The 2018 National Defense Strategy directed the Department of Defense to “[defend] allies from military aggression,” and the updated 2022 strategy expands on this objective by directing the department to “act urgently to sustain and strengthen deterrence.” Both documents overwhelmingly prioritize China as America’s “most consequential strategic competitor.”

Given that China’s joint force can generate more combat power in the Indo-Pacific than the United States alone, some contend that Beijing is no longer deterred by unilateral U.S. demonstrations of force. As former Secretary of Defense Jim Mattis stated, deterrence is achieved when the enemy decides. A counter-landing approach applied by a network of allies and partners would reinforce like-minded partners’ strongest advantage over China’s defense forces.

In this context, two sub-regions in the Indo-Pacific highlight the ongoing efforts of U.S. allies and partners to deter China: the East China Sea and maritime Southeast Asia. In both sub-regions, U.S. allies and partners are building capabilities to counter increasingly aggressive Chinese actions. The collective sea control capabilities of the United States and its allies and partners in the region present a credible challenge to China, but the military’s collective sea denial capabilities offer an advantage over China’s military.

Case Study 1: East China Sea

The preponderance of allies and partners in the Indo-Pacific region have had to deal with China making aggressive claims to disputed territory in the East and South China Seas. China also declared an extended air defense identification zone in 2013. This zone overlaps two-thirds of the East China Sea and requires foreign aircraft to report flight plans, maintain radio communications with China, and keep transponders on. It also overlaps with the air defense identification zones of Taiwan, Japan, and the Republic of Korea. These countries have experienced a rapid influx of Chinese military incursions into these zones with military aircraft, the Coast Guard, and the People’s Armed Forces Maritime Militia.

The United States and its allies and partners have predominantly responded to the incursions by alerting naval and air assets and by conducting freedom of navigation missions. These operations, however, are costly, vulnerable to threat weapons, and create a dilemma between readiness and responsiveness. Additionally, some scholars increasingly question the ability of these response missions to change Chinese behavior. Counter-landing operations could more effectively and efficiently demonstrate the capability and resolve to defend against aggression.

Japan consistently observes air and maritime threats by Russian, Chinese, and North Korean incursions into its sovereign territory, yet it has responded by concentrating its military strategy on ground forces that support integrated defensive maritime fires. Japan has surged intelligence, surveillance, and reconnaissance assets into the vicinity of the Senkaku sea lanes to improve situational awareness. China’s aerial incursions prompted 851 responses from the Japan Air Self-Defense Force in 2016, an increase of nearly 800 percent since 2001. The Japanese military has postured more personnel and hardware in its southwest islands in the East China Sea and in 2018 established the 2,100-strong Japanese brigade with the mandate to “defend — and if necessary, retake — Japanese islands that could be targets of invasions.” As Sheila Smith observed, Japan has also built new (and has reinforced existing)



intelligence facilities on the islands of Yonaguni and Miyakojima that are approximately 70 miles east of Taiwan to monitor Chinese air and maritime forces.

Japan's six surface-to-ship missile regiments have the greatest capability to defend key maritime terrain in the first island chain. Japan's Ministry of Defense recently approved an upgrade with Mitsubishi Heavy Industries that reportedly extends the Type 12 anti-ship missile's range from 200 kilometers (124 miles) to 900 kilometers (559 miles). With this range, Japanese forces could interdict maritime assets operating near the Senkaku or Sakishima Islands while being employed from the mainland. Such assets could create even more of an operational dilemma if they deployed to Japan's most southwest islands that lie 70 miles off Taiwan's coast.

A joint, multinational counter-landing doctrine would provide a foundational framework on which to rehearse a counter-landing operation in the western Pacific. Improved intelligence sharing, coupled with well-timed counter-landing rehearsals, would strengthen recognized air and maritime boundaries. The recent bilateral announcement to transition the 12th Marine Regiment on Okinawa to a Marine Littoral Regiment reinforces the opportunity and need to align the efforts of Japanese and American forces on the Southwest Islands. Wallace Gregson even calls for the United States and Japanese forces to create a "Standing Combined Maritime Joint Task Force" in order to test and develop counter-landing capabilities and techniques. Rehearsing rapid deployments to key maritime terrain in the first island chain would enhance credibility and capability and communicate a unified approach to counter Chinese aggression.

Case Study 2: Southeast Asia and Oceania

A counter-landing doctrine would also strengthen a multinational approach to challenges around and near the South China Sea. Beginning with the seizure of Scarborough Shoal in 2012, China has intimidated regional partners as part of a "broader pattern of destabilization and coercive People's Republic of China behavior that stretches across the East China Sea, the South China Sea, and the Line of Actual Control." U.S. allies and partners in maritime Southeast Asia and Oceania continue to withstand this Chinese aggression across all elements of national power, and a counter-landing doctrine would bolster their efforts and effectiveness.

After a brief period of attempted rapprochement, the Philippines is once again enduring an intense campaign to force its acquiescence over sovereignty of possessions in the South China Sea. In May 2021, 287 vessels of the People's Armed Forces Maritime Militia violated the Philippines' exclusive economic zone. In November 2021, three Chinese Coast Guard vessels fired water cannons on Filipino supply vessels intended for Second Thomas Shoal, blocking their access.

China's intimidation campaign has reinvigorated Filipino efforts to bolster its maritime security. These initiatives include the development of the Philippine Navy's Active Archipelagic Defense concept and the Philippine Marine Corps' Archipelagic Coastal Defense Concept, which articulates how Philippine Marines will be "integrated in naval, joint, and inter-agency operations" in a maritime fight. In a tangible commitment to these concepts, the Philippine Marines established its Coastal Defense Regiment in 2021 and recently signed a \$368 million contract with India for three batteries worth of BrahMos coastal defense cruise missiles to equip this new formation. The 3rd Marine Littoral Regiment recently participated in Exercise Balikatan with the Coastal Defense Regiment during its inaugural deployment to northern Luzon. A counter-landing doctrine would enable the U.S. Marine Corps to more effectively compliment and cooperate with this key ally in future engagements of increasing complexity.

Similarly as in the Philippines, Australia is resoundingly responding to Chinese coercion by developing concepts and capabilities commensurate to the growing threat. Through a 20-year Force Structure Plan, the Australian Defence Force seeks to better maneuver forces in the littorals, field long-range precision fires in the maritime domain, and increase interoperability with key allies such as the United States and the Philippines. Australia's much-anticipated Defense Strategic Review may potentially accelerate this change in the Australian Defense Force. A counter-landing doctrine could provide the common foundation to develop capabilities with these allies in the western Pacific. Furthermore, existing multilateral exercises provide opportunities to rehearse counter-landing operations and employ corresponding capabilities to better deter Chinese aggression.



Across the region, key allies are strengthening their resolve and optimizing their forces for fighting in the littorals. Japan is buttressing their Southwest Islands to resist capture, and the Philippine Marine Corps is preparing to defend their coasts with coastal defense cruise missiles. Simultaneously, the Australian Defence Force is undergoing generational reform to thwart threats in the first and second island chain. Now, it is America's turn to maximize the competitive advantage of our allies and partners by coalescing these concepts and capabilities under a cohesive doctrinal framework.

Conclusion

It has been nearly 80 years since like-minded partners established the defensive network in the Pacific that underpins today's regional security. Allies and partners remain critical in competition and conflict, and many continue to develop sophisticated and advanced technologies to defend their territory. A common counter-landing doctrine would capitalize on the innovation in Taiwan, Japan, the Philippines, and Australia, amongst others.

The U.S. Joint Chiefs of Staff, in coordination with counterparts from key allies and partners, should promulgate a multinational counter-landing doctrine as soon as possible to better unify efforts and resources for the most dangerous contingency. Military services, especially in the United States and the Indo-Pacific, should then use this doctrine to inform the development of organizational capabilities. Geographic combatant commanders, especially the U.S. Indo-Pacific Command, should concurrently rehearse counter-landing operations on key terrain alongside allies and partners to refine techniques and procedures, iteratively inform service acquisitions, and improve responsiveness to an amphibious assault. There is also great opportunity to apply a counter-landing doctrine in Europe, where Sweden and Finland's pending accession to NATO offers more than an additional 4750 miles of coastline from which to deter further Russian aggression. Collectively, these activities will improve a multinational force's ability to thwart an enemy amphibious force from their ports of embarkation to debarkation near friendly shores — and thus better deter potential adversaries from launching such an invasion.

Using this doctrine as a foundation, U.S. Indo-Pacific Command should then integrate these mutually-supporting capabilities through planning, common command and control procedures, and rehearsals that counter China's most dangerous course of action. The lessons learned from these activities should then inform the development of capabilities across all interested organizations. The United States has an unprecedented opportunity — and an urgent requirement — to stitch together counter-landing concepts and capabilities across the Indo-Pacific region.

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