

Weekly Media Report - December 21- January 3, 2021-2022

Further reproduction or distribution is subject to original copyright restrictions.

JEOPARDY:

'Jeopardy!' Wants Steve Martin on The Show After His Doppelgänger Wins Big

(New York Post 21 Dec 21) ... Samantha Ibrahim

"Jeopardy!" is seeing double.

The game show is begging Steve Martin to come on following his doppelgänger Sam Buttrey's recent win...Buttrey, who is an associate professor at the **Naval Postgraduate School** in Monterey, Calif., won the Professors Tournament championship on Dec. 17, claiming the \$100,000 grand prize.

'Jeopardy!' Invites Steve Martin on Show 'In Any Capacity' After Star's Lookalike Wins Tournament

(Fox News 20 Dec 21) ... Nate Day

"Jeopardy!" has extended a warm invitation to Steve Martin... Last week, fans took note of a striking similarity between competitor Sam Buttrey, an associate professor at the **Naval Postgraduate School**, and Martin – especially after Buttery won the tournament, prompting a celebratory post on social media from "Jeopardy!," featuring several pictures of the educator.

Steve Martin Invited On 'Jeopardy!' After Lookalike Wins Tournament

(NEWSWEEK 20 Dec 21) ... Ryan Smith

Steve Martin has been invited onto Jeopardy! after learning of his lookalike Sam Buttrey, who last week won the quiz show's Professors Tournament.

Buttrey, an associate professor of operations research at the **Naval Postgraduate School** in Monterey, California, was seen scooping the top prize of \$100,000 on Friday's episode, qualifying him for next year's Tournament of Champions.

EDUCATION:

The U.S. Naval Community College Initiative Has Another Pilot Class in January 2022 (Clearance Jobs 28 Dec 21) ... Ron Kness

The new United States Naval Community College (USNCC) wrapped up the first phase of its pilot program in June 2021. Launched six months earlier in January, almost 600 students, hand-picked from the Navy, Marine Corps, and Coast Guard based on from recommendations from their Commands, selected their study concentrations from these six fields... Community college is just one part of the Navy's overarching education mission of establishing a singular Naval University system taking sailors from an associate degree all the way to advanced post-graduate. Under that singular umbrella, the Community College will be part of a total education system that includes the Naval War College, Marine Corps University, **Naval Postgraduate School** and Naval Academy.













RESEARCH:

COVID-19 Hardships Fuel Increase in Poor Student Behavior, Threats

(My Journal Courier 25 Dec 21) ... Karen Ann Cullotta

When Illinois classrooms fully reopened for in-person learning this fall, teachers anticipated many of their students would need plenty of academic and emotional support to recover from 18 months of COVID-19 disruptions to their education...Between Aug. 1 and Nov. 30, at least 136 incidents involved a gun being brandished, fired or a bullet hitting school property, according to the K-12 School Shooting Database compiled by **the Naval Postgraduate School's** Center for Homeland Defense and Security.

3D Printing Industry Review of the Year: February 2021

(3D Printing Industry 27 Dec 21) ... Paul Hanaphy

Despite the ongoing impact of the global semiconductor shortage, Brexit and COVID-19 on the wider economy, February was still a month of progress in 3D printing, with defense applications, R&D innovation and new system launches all taking major steps forward... The US **Naval Postgraduate School** (NPS) also revealed in February that it had installed Xerox's long-anticipated ElemX Liquid Metal 3D printer at its university campus. Using the system, NPS researchers are currently exploring ways in which the technology can help reduce the US Navy's spare part production costs, as well as its dependency on the US military's complex global supply chains.

Decades of DOD Efforts Fail to Stamp Out Bias, Extremism

(AP News 29 Dec 21) ... Kat Stafford and James Laport

In February, with the images of the violent insurrection in Washington still fresh in the minds of Americans, newly confirmed Defense Secretary Lloyd Austin took the unprecedented step of signing a memo directing commanding officers across the military to institute a one-day stand-down to address extremism within the nation's armed forces... The investigation shows the new guidelines do not address ongoing disparities in military justice under the Uniform Code of Military Justice, the legal code that governs the U.S. armed forces. Numerous studies, including a report last year from the Government Accountability Office, show Black and Hispanic service members were disproportionately investigated and court-martialed. A recent **Naval Postgraduate School** study found that Black Marines were convicted and punished at courts-martial at a rate five times higher than other races across the Marine Corps.

Think Differently about Naval Presence

(USNI 29 Dec 21) ... Robert C. Rubel

With a smaller naval force, forward deployment must be managed on a global basis... There are four options for dealing with this problem. First, Congress could increase shipbuilding funding to bring the fleet to some number of hulls that would provide for sustainable forward presence. That is not likely. Second, the Secretary of Defense could adopt a "supply side" force deployment policy in which the forces made available for forward presence are only those that can be sustained.2 This was advocated by former Deputy Secretary of Defense Robert Work, but it did not materialize.3 Third, the Navy could alter its fleet design to include a significant number of smaller, cheaper ships focused on routine forward presence. This idea was incorporated in the 2007 A Cooperative Strategy for 21st Century Seapower, based on a "bimodal" Navy concept submitted by Professor Wayne Hughes of the **Naval Postgraduate School**.4 However, the Navy has shown no sign of implementing the idea. The final option is to shift management of naval forward deployment to a global basis, centrally managed from the Pentagon.

FACULTY:

Accidents and Escalation in a Cyber Age

(War on the Rocks 22 Dec 21) ... Andrew A. Szarejko and John Arquilla

Sometimes wars, from small ones to big ones, start with accidents. In early American history, for example, accidents associated with good-faith errors and unauthorized acts of violence precipitated several conflicts between the United States and Native American groups. On a larger scale, Scott Sagan has argued that the 18th-century Seven Years' War was sparked by a false warning of French invasion and that the Japanese invasion of Manchuria in 1931 was an unauthorized attack orchestrated by army officers against the expressed wishes of the civilian government. The potential for these sorts of accidents — human or technical errors and unauthorized actions — to induce subsequent escalation has produced much diplomatic effort to mitigate the risks of stumbling into armed conflict. There are hotlines, summits, "open skies" agreements, confidence-building measures, and more. Yet today













the risk of accidents producing escalation persists, especially where states see a first-mover advantage and fear the consequences of underreacting more than the risks of over-reacting... John Arquilla is Distinguished Professor Emeritus of Defense Analysis at the **Naval Postgraduate School** and author, most recently, of Bitskrieg: The New Challenge of Cyberwarfare.

How the Energy Crisis Made 2021 Feel Like the '70s

(Foreign Policies 22 Dec 21) ... Keith Johnson

Record high power prices across Europe. Empty petrol stations in the United Kingdom. Rolling blackouts in China. And congressional hearings and televised fever dreams about gasoline prices in the United States... Brenda Shaffer, a professor at the U.S. **Naval Postgraduate School** and a senior fellow at the Atlantic Council, sees policy failures lurking behind the energy crisis. Banning nuclear power, opting for spot market prices for natural gas, and mandating renewable energy regardless of economics were all part of Europe's plan to update its energy blueprint. The problem is Russia is ascendent, consumers are incandescent, and the world still doesn't have the Paris Agreement.

ALUMNI:

School Closures are Costly Caustion- But are Still Not Enough to Prevent Tragedies

(StarTribune 20 Dec 21) ... David Riedman, James Densley and Jillian Peterson

On Nov. 30, 11 people were shot, four fatally, at Oxford High School, about 45 miles north of Detroit. The crime scene investigation understandably closed the school for a week. Threats of copycat violence then closed the school again... David Riedman is the co-creator of the K-12 School Shooting Database at the **Naval Postgraduate School.**

Sparton Gets Change at The Top

(Beacon 23 Dec 21)

Sparton President and Chief Executive Officer Bill Toti has retired after leading the company for three years, including the company's transition to Elbit Systems of America during 2021, Elbit officials announced recently... Howard earned a bachelor's degree in marine engineering from the U.S. Naval Academy in 1986 and later a master's degree in operations analysis from the U.S. **Naval Postgraduate School**.

Cdr. Richard Marcinko, the First Commanding Officer of SEAL Team SIX, Dies at 81 (We Are the Mighty 26 Dec 21) ... Miguel Ortiz

On December 26, 2021, the National Navy UDT SEAL Museum announced the passing of Richard "Dick" Marcinko. Also known as "Demo Dick," Marcinko was a retired Navy SEAL Commander, Vietnam Veteran, and famous as the first commanding officer of the legendary SEAL Team SIX.

After dropping out of high school, Marcinko tried to enlist in the Marine Corps but was rejected for his lack of a high school diploma. In September 1958, he successfully enlisted in the Navy as a radioman until he was accepted into Underwater Demolition Team/Replacement training in June 1961. Marcinko graduated Class 26 in October that same year. He served with UDT-21 until he was selected for commission as an officer in 1965. Marcinko commissioned through OCS in December 1965 and was reassigned to SEAL Team TWO in June 1966. His education included a Bachelor of Arts degree in International Relations from Auburn University at Montgomery and a Master of Arts degree in Political Science from the U.S. **Naval Postgraduate School**.

Kennewick Native Promoted to Commodore of Navy's Destroyer Squadron 2

(Yak Tri News 29 Dec 21) ... Dylan Carter

A Tri-Cities native recently moved up in the ranks of the U.S. Navy by assuming the role of Commodore for Destroyer Squadron (DESRON) 2 at a naval station in Virginia... Walch was raised in Kennewick and decided to enlist in 1987 as a Sonar Technician. He studied at the **Naval Postgraduate School** and the Eisenhower School at National Defense University before receiving his commission in 1997.













This Navy Officer's Name Tag Invention is Now Available for Purchase

(Navy Times 1 Jan 22) ... Geoff Ziezulewicz

Years ago, Navy Lt. Mitchell Kempisty saw a problem that needed fixing... Kempisty graduated from the **Naval Postgraduate School** in December with a master's degree in aeronautical engineering and is joining the guided-missile destroyer Mason as its operations officer.

Is Ukraine's Reformed Military Ready to Repel a New Russian Invasion?

(Atlantic Council 23 Dec 21) ... Andriy Zagorognyuk, Alina Froloya, Hans Petter Midtunn, Oleksii Payliuchyk
The looming threat of a full-scale Russian invasion poses a wide range of questions for the Ukrainian military.
Currently, most US experts are confident that the threat is very real and should be taken seriously. Are the Ukrainian
Armed Forces capable of inflicting prohibitive costs on a Russian invasion force?... Col (Ret.) Oleksii Pavliuchyk is
a fellow at the Centre for Defence Strategies and an expert in the field of the security and defense sector
transformation. He is a graduate of the Naval Postgraduate School (Graduate School of Business and Public Policy
and Defence Resource Management Institute), Canadian Forces College (JCSP), NATO School Oberammergau, the
Marshall Center, and Kyiv-Mohyla Business School (SLP-2021). Before retirement in 2020, Oleksii occupied the
position of the Deputy Chief of Strategic Planning Department of the MoD. During his military career he had
multiple deployments to Iraq (OIF) and Lebanon (UNIFIL).

Opinion: The Navy SEALs, a Christmas story

(Washington Post 23 Dec 21) ... David Ignatius

It might seem like a stretch to view the Navy SEALs, among the most fearsome warriors on the planet, as a Christmas story of humility and renewal, but let me explain... Howard chose as his closest aide Lt. Cmdr. Forrest Crowell, a SEAL who had been warning that something was wrong. Back in 2015, Crowell had written a thesis for the **Naval Postgraduate School** titled "SEALs Gone Wild: Publicity, Fame and the Loss of the Quiet Professional." Howard began to rebuild a force that, as he put it to me, "had over-rotated to counterterrorism" and "got too famous."

The Changing Face of Russian Counter-Irregular Warfare

(War on the Rocks 21 Dec 21) ... Benjamin Arbitter and Kurt Carlson

The United States has special operators in close proximity to Russian forces on three continents. In many cases, the Russian forces on the ground are either actively countering or preparing to counter irregular threats in the event of a Russian military operation. A fixation on Russian irregular warfare and political warfare threats has obscured Russia's other significant capability: counter-irregular warfare. Russia's military lineage is steeped in successful counter-irregular campaigns, with Afghanistan and the First Chechen War as the exceptions proving the rule. Though the new model bears familiar trappings, with it the Russian military has adapted its force structure to counter irregular threats abroad with a robust suite of expeditionary forces. If the United States intends to seriously compete with and challenge Russia abroad, then it is time to understand the emerging capabilities of Russian counter-irregular forces. Armed with an understanding of Russian counter-irregular warfare, commanders at the tactical and operational level can better exploit Russian weaknesses and manage risk... Maj. Benjamin Arbitter and Maj. Kurt Carlson are Army Special Forces officers with operational and combat experience in the European Command and Central Command areas of responsibility. Both are from 10th Special Forces Group and have recently completed master's degrees in defense analysis at the Naval Postgraduate School in Monterey. These views do not represent those of the 10th Special Forces Group, the U.S. Army, the Department of Defense, or any part of the U.S. government.

COMMUNITY:

Monterey Recreation Trail

(Monterey County Now 23 Dec 21)

If you've been on the Rec Trail in Monterey near the **Naval Postgraduate School** lately, you've probably noticed a new, wooden staircase climbing up the dunes toward the beach: That project is being built by the U.S. Navy, which owns the land seaward of its **NPS** campus, to provide better access to the beach and, importantly, to protect two endangered species, Monterey spineflower and Monterey gilia. Both species have a shrinking habitat generally, but a thriving habitat on the Navy's dunes. The seeds for those plants lay dormant until conditions are optimal (springtime), and the staircase will allow those seeds to lay undisturbed until then. The project was in













planning from 2013-2020, and is expected to be completed in June 2022. John Hoellwarth, a spokesperson for Naval Support Activity Monterey, which houses NPS, does not yet know when it will be open to the public.

Volunteering As Long As Possible

(Swift Headline 26 Dec 21) ... Aaron Sittig

For nearly eight years, Larry Boberg would drive from Monterey to Paso Robles, delivering brochures to hotels up and down the coast. Hour after hour, the route became familiar. Boberg grew to expect his surroundings – including a small group from the Salvation Army he'd see deliver meals on Del Monte Avenue every week.

Fascinated by the team of volunteers, who would station themselves outside the **Naval Postgraduate School** and hand out hot meals to the homeless, Boberg began to picture himself alongside them, a sight that soon became a reality.

UPCOMING NEWS & EVENTS:

Jan 10-13: <u>Center for Executive Education LCSS Seminar</u> Jan 17: Martin Luther King's Birthday (Federal Holiday) Jan 25-28: Center for Executive Education SC Workshop













JEOPARDY:

'Jeopardy!' Wants Steve Martin on The Show After His Doppelgänger Wins Big

(New York Post 21 Dec 21) ... Samantha Ibrahim

"Jeopardy!" is seeing double.

The game show is begging Steve Martin to come on following his doppelgänger Sam Buttrey's recent win.

Buttrey, who is an associate professor at the **Naval Postgraduate School** in Monterey, Calif., won the Professors Tournament championship on Dec. 17, claiming the \$100,000 grand prize.

Fans astutely noticed he looks very similar to the "Only Murders in the Building" actor, 76. The two men both have white hair, glasses and nearly identical facial features.

"So great to split the prize money with Sam!" the "Cheaper by the Dozen" star recently joked on Twitter

The long-running game show then responded, "We would love to have you on 'Jeopardy!' anytime, in any capacity!"

Buttrey, for his part, is just happy to compete — with or without his look-alike.

"This has been the greatest time, and to come out ahead of all these other great players is something I'll remember forever," Buttrey gushed in a statement. "The group was uniformly so smart, charming, and warm, and there's been a real feeling of camaraderie from the very beginning."

The prof will next compete in the show's Tournament of Champions, alongside contestants Matt Amodio, Jonathan Fisher, and current 13-game champion Amy Schneider.

"I know there are some strong players, but I want to go up against them," Buttrey said. "I would like to play against Matt Amodio. He's a strong player and I'd like to see how I can do."

Fans tweeted out their hilarious reactions to Martin and Buttrey's resemblance.

"Good to see Steve Martin doing well on Jeopardy #Jeopardy #SteveMartin," one user wrote. Another joked, "Interesting new role for @SteveMartinToGo as college professor and @Jeopardy tournament semifinalist 'Sam." One even suggested that Martin play Buttrey on "Saturday Night Live."

Mayim Bialik and Ken Jennings are currently splitting the hosting gig and will be onstage throughout next year's Season 38.

The series has yet to hire a permanent host after former EP Mike Richards stepped down earlier this year following the resurfacing of sexist comments he had made in 2014.

'Jeopardy!' invites Steve Martin on show 'in any capacity' after star's lookalike wins tournament | Fox News

Return to Index

'Jeopardy!' Invites Steve Martin on Show 'In Any Capacity' After Star's Lookalike Wins Tournament

(Fox News 20 Dec 21) ... Nate Day

"Jeopardy!" has extended a warm invitation to Steve Martin.

The trivia competition show recently hosted the "Professor's Tournament," with the winner being sent on to compete in the coveted "Tournament of Champions."

Last week, fans took note of a striking similarity between competitor Sam Buttrey, an associate professor at the **Naval Postgraduate School**, and Martin – especially after Buttery won the tournament, prompting a celebratory post on social media from "Jeopardy!," featuring several pictures of the educator.

"We're giving an A+ to Sam Buttrey for winning our first-ever #ProfessorsTournament!" read a message from the show's official Twitter account. "We'll see him in the next Tournament of Champions!"

Eventually, the "Cheaper by the Dozen" star, 76, caught wind of his doppelgänger taking the cake on the famed quiz show, and left a goofy reply.













"So great to split the prize money with Sam!" the comedian wrote. Buttrey took home a whopping \$100,000 after his victory.

The jokes continued, however, after "Jeopardy!" took note of Martin's reply and shot off one of their own, making it known that the actor is welcome to join the "Jeopardy!" family at any time.

"We would love to have you on Jeopardy! anytime, in any capacity!" read their response.

The exchange comes as "Jeopardy!" continues to seek out a full-time host to fill the shoes of late host Alex Trebek.

Mayim Bialik, who hosted the "Professor's Tournament," was selected to host special events and spin-off events while producer Mike Richards was set to take over the main hosting duties.

'Jeopardy!' wants Steve Martin on show after doppelgänger wins (nypost.com)

Return to Index

Steve Martin Invited On 'Jeopardy!' After Lookalike Wins Tournament

(NEWSWEEK 20 Dec 21) ... Ryan Smith

Steve Martin has been invited onto Jeopardy! after learning of his lookalike Sam Buttrey, who last week won the quiz show's Professors Tournament.

Buttrey, an associate professor of operations research at the **Naval Postgraduate School** in Monterey, California, was seen scooping the top prize of \$100,000 on Friday's episode, qualifying him for next year's Tournament of Champions.

And while his breadth of general knowledge and speed on the buzzer served him well on his road to victory, he also became a talking point on Twitter, thanks to his uncanny resemblance to comedian Steve Martin.

Following Buttrey's win, images of him celebrating his win with host Mayim Bialik were shared on Twitter, alongside the caption: "We're giving an A+ to Sam Buttrey for winning our first-ever #ProfessorsTournament! We'll see him in the next Tournament of Champions!"

With Twitter users continuing to comment on how much the newly crowned champion resembled Martin, the Cheaper By the Dozen star reacted to the Jeopardy! post on Saturday, writing: "So great to split the prize money with Sam!"

'Jeopardy!' Fans Think New Finalist Looks Just Like Steve Martin

A response soon came from the official Twitter account, which read: "We would love to have you on Jeopardy! anytime, in any capacity!"

On Friday, a Jeopardy! fan tagged Martin in a separate post, in which a captioned screenshot was shown of Buttrey answering a clue that read: "A type of frost and a Middle Eastern ruler."

While Buttrey answered "rime" and "emir" to the clue, Martin kept things comical as he responded: "What is mire?"

The star has yet to publicly respond to the offer to appear on Jeopardy!—which has, in the past, aired celebrities competing on the show for charity.

Speaking of his time on the show after his win, Buttrey told Jeopardy! in an interview: "This has been the greatest time, and to come out ahead of all these other great players is something I'll remember forever.

"The group was uniformly so smart, charming, and warm, and there's been a real feeling of camaraderie from the very beginning."

With his victory qualifying him for the Tournament of Champions, Buttrey will face off against some of the show's biggest names from the past year, such as Matt Amodio, Jonathan Fisher and Amy Schneider—and it's a prospect he's looking forward to.

"I know there are some strong players, but I want to go up against them," he said. "I would like to play against Matt Amodio, he's a strong player and I'd like to see how I can do."

With the two-week Professors Tournament now concluded, broadcasts of the regular primetime show will air from Monday night.











Schneider, who has made history as the first transgender woman to qualify for the Tournament of Champions, will return to vie for her 14th consecutive victory.

Steve Martin Invited On 'Jeopardy!' After Lookalike Wins Tournament (newsweek.com)

Return to Index

EDUCATION:

The U.S. Naval Community College Initiative Has Another Pilot Class in January 2022 (Clearance Jobs 28 Dec 21) ... Ron Kness

The new United States Naval Community College (USNCC) wrapped up the first phase of its pilot program in June 2021. Launched six months earlier in January, almost 600 students, hand-picked from the Navy, Marine Corps, and Coast Guard based on from recommendations from their Commands, selected their study concentrations from these six fields:

- Nuclear
- Cyber security
- Data analytics
- English
- Math
- Naval ethics

As the program matures, so does the number of fields of study. For the second pilot class, starting in January 2022, 5,000 sailors and 500 Coast Guard get to pick their choice from these eight fields:

- Military studies
- Cyber security
- Network administration
- Nuclear engineering technology
- Data analytics
- Organizational leadership
- Maritime logistics
- Aviation maintenance technology

During the four phase, two-year program, students work online toward their associate degrees at any of these participating schools:

- Northern Virginia Community College
- University of Arizona
- University of Maryland Global Campus
- Alexandria Technical and Community College
- State University System of New York (SUNY Online)

The USNCC is also planning some follow-on education opportunities for graduates that want to take advantage of them for the 2024/2025 academic year.

The Navy Community College is independent of other education initiatives, including tuition assistance – although that education option is still available to other sailors, Marines and Coast Guard members.

In an administrative message, the Navy said of its USNCC initiative: "The USNCC offers enlisted Sailors and Marines the opportunity to participate in world-class, naval relevant education programs. No tuition fees, mandatory course fees, or other course material costs are incurred by either participating students or parent commands."













Community college is just one part of the Navy's overarching education mission of establishing a singular Naval University system taking sailors from an associate degree all the way to advanced post-graduate. Under that singular umbrella, the Community College will be part of a total education system that includes the Naval War College, Marine Corps University, **Naval Postgraduate School** and Naval Academy.

The USNCC and the Naval University systems as a whole came about as part of the 2019 Education for Seapower campaign, designed to improve sailors' intellect to keep up with today's and prepare for tomorrow's technical advancements in equipment – both on land and at sea.

In the Secretary of the Navy's strategic guidance to the Navy and Marine Corps he said, "Our mission demands leaders who possess the highest intellectual and warfighting capabilities in order to confront the many dangers of a complex world. The institutions of our naval education enterprise will work together to develop leaders with the warfighting rigor, intellectual dynamism, and innovative creativity to maintain strategic advantage against competitors and global adversaries."

<u>The U.S. Naval Community College Initiative Has Another Pilot Class in January 2022 -</u> ClearanceJobs

Return to Index

RESEARCH:

COVID-19 Hardships Fuel Increase in Poor Student Behavior, Threats

(My Journal Courier 25 Dec 21) ... Karen Ann Cullotta

When Illinois classrooms fully reopened for in-person learning this fall, teachers anticipated many of their students would need plenty of academic and emotional support to recover from 18 months of COVID-19 disruptions to their education.

But just three months into the new school year, pandemic-era quarantines and virus outbreaks have been upstaged by a surge in troubling student behavior that even veteran educators say is unlike anything they have witnessed during decades of teaching.

"Every morning, one of our elementary school teachers has started putting on shin guards, as she knows her shins will take a beating from a student who has been kicking her," said Joe Blomquist, a teacher and union leader at St. Charles Community Unit School District 303.

Blomquist, an elementary school music teacher, said the number of incidents requiring crisis intervention in the district's elementary school classrooms this fall has already doubled from incidents reported during the entire school year pre-pandemic.

"All of our staff do their best, and we really want to take care of our kids, so it breaks our hearts to see them in crisis," Blomquist said.

While virus rates have climbed in recent weeks, many educators in Illinois and across the U.S. are reporting the hardships posed by COVID-19 quarantines and school outbreaks this school year pale in comparison to dealing with the daily barrage of inappropriate student behavior erupting in their classrooms.

This fall, educators have reported everything from violent assaults of teachers and frequent student fistfights, to a spate of menacing threats.

While school shootings are rare, there has been a significant increase in reports of school violence during the new school year nationwide, including at least 38 incidents of gunfire on school campuses that resulted in death and injury between Aug. 1 and Nov. 30, compared with 14 incidents in the same period in 2019, according to data compiled by the nonprofit organization Everytown for Gun Safety and analyzed by the National Association of School Resource Officers.













Between Aug. 1 and Nov. 30, at least 136 incidents involved a gun being brandished, fired or a bullet hitting school property, according to the K-12 School Shooting Database compiled by the **Naval Postgraduate School's** Center for Homeland Defense and Security.

COVID-19 hardships fuel increase in poor student behavior, threats (myjournalcourier.com)

Return to Index

3D Printing Industry Review of the Year: February 2021

(3D Printing Industry 27 Dec 21) ... Paul Hanaphy

Despite the ongoing impact of the global semiconductor shortage, Brexit and COVID-19 on the wider economy, February was still a month of progress in 3D printing, with defense applications, R&D innovation and new system launches all taking major steps forward.

Read on for February's standout developments from ExOne, Markforged, Xerox, Renishaw, Stratasys, 3D Systems, Desktop Metal, America Makes and more.

Global turbulents continue

For much of 2020, COVID-19 prevented the 3D printing sector from holding in-person trade shows, and this trend continued into February 2021. That month, RAPID+TCT became the latest industry event to be moved, with a scaled-down show rebooked for September, on the grounds that its organizers wanted to hold it in the "safest possible environment."

February also saw President Biden address the USA's growing pandemic-induced shortages, via a review into the country's supply chain dependency. Crystalized in the lack of semiconductors needed to build the newly-launched PS5 and Xbox One games consoles, but apparent in other areas of the US economy as well, this scarcity triggered a review focusing on potential in-sourcing opportunities.

At the time, America Makes' Executive Director John Wilczynski hailed the initiative, saying that the group "applauded President Biden's critical executive action to secure and strengthen supply chains vital to America's continued progress," while adding that COVID-19 had revealed its "untenable overdependence on imports, and the need for the capacity to respond quickly in the face of challenges."

On British shores, meanwhile, Renishaw rolled-out a raft of new measures, designed to insulate its EU-based business from the impact of Brexit. Having carried out internal risk analyses, the firm opted to expand its facilities and stock levels at its EU offices, while making some of them independent subsidiaries, with the aim of easing any Brexit-related disruption caused to its supply chain.

Renishaw's Chief Executive William Lee said the move would allow it to "meet the challenges posed by the UK's withdrawal from the European Union," and given that the firm reported a FY pre-tax profit of £120 million, it appears to have been justified.

Patent expiry opens opportunities?

It wasn't all doom and gloom in February though, as a potential window for innovation opened when <u>Stratasys'</u> heated build chamber patent expired. Given that Stratasys held exclusive rights to this FDM design from 2000-2021, those seeking to oppose it in the high-temperature market during this period, were forced to find novel workarounds.

However, the final patents covering this area of the firm's machines went on to expire later in the month, and though Stratasys sought to play down the development, saying that it had already come up with new heated oven technologies and protected them from replication, some sources saw it as an opportunity for 3D printer manufacturers to innovate.

INTAMSYS CEO Charles Han, for instance, said the patents' expiry could make industrial FFF systems "more popular and more competitive," adding that they would now be able to replace "even more traditional manufacturing methods." On the flipside, Davide Ardizzoia of 3ntr.net, said the patents' expiration "wasn't going to change that much," and its new printer would only be "marginally affected."













DoD lays out 3D printing plans

On the military front, the US Department of Defense (DoD) also kicked off a year of experimental 3D printing applications by unveiling its first additive manufacturing strategy. Drafted by the OSD ManTech Program Office alongside the US' military services and other defense agencies, the document saw the DoD outline five key goals, through which it aimed to broaden its adoption of the technology.

During the month, there were already clear signs of this strategy being put into action, with binder jet 3D printer manufacturer ExOne commissioned by the DoD to develop a portable 3D printing factory. Set to be housed inside a standard shipping container, the system is being designed to contain everything needed to manufacture spare parts in the field, whether that be at land, air or sea.

The US **Naval Postgraduate School** (NPS) also revealed in February that it had installed Xerox's long-anticipated ElemX Liquid Metal 3D printer at its university campus. Using the system, NPS researchers are currently exploring ways in which the technology can help reduce the US Navy's spare part production costs, as well as its dependency on the US military's complex global supply chains.

Markforged wraps up IPO

The end of the month also saw industrial 3D printer manufacturer Markforged complete its merger with Special Purpose Acquisition Company (SPAC) one. Following Desktop Metal's \$580 million deal last year, Markforged's transaction saw it become the second in the industry to go public in this way, raising an estimated \$425 million in the process.

At the time, Markforged President and CEO Shai Terem said: "We've been at the forefront of the AM industry, and this transaction will enable us to build on our incredible momentum and provide capital and flexibility to grow our brand, accelerate product innovation and drive expanded adoption among customers across key verticals."

As the year went on, it turned out that Markforged would become the second in a string of high-profile SPAC mergers concerning 3D printing firms, with billions more dollars worth of similar deals being agreed before the end of 2021.

3D Systems, Stratasys and ExOne launch new 3D printers

February proved to be a bumper month for 3D printer releases too, and Stratasys kicked things off early on, with its new J850 Pro PolyJet 3D printer. Featuring a 255 x 252 x 200mm build capacity and multi-material processing capabilities, the system has been built to address low-cost prototyping applications in the automotive, medical, and consumer sectors.

Stratasys' launch was closely followed by that of ExOne's new Metal Designlab 3D printer and X1F furnace. Powered by Rapidia's 'two-step' technology, the firm's manufacturing unit works with 'HydroFuse' alloys, which can be used to fabricate highly-complex support-free parts. The systems' launch also coincided with a deal between the firms that saw ExOne gain first refusal over any acquisition of Rapidia.

3D Systems made a splash in February as well, by making its first foray into FFF, with its new 'Roadrunner' 3D printer. Developed alongside Jabil, the system is said to be capable of printing high-temperature filaments at a rapid pace, potentially making it ideal for aerospace and automotive manufacturers, and putting it in direct competition with Essentium's High-Speed Extrusion (HSE) platform.

Dr. Jeffrey Graves, President and CEO of 3D Systems, said at the time that the launch of its High Speed Fusion filament printer, would allow the firm "to build on the organizational focus it had adopted in 2020," in addition to "expanding its presence in growing markets that demand high reliability products."

A month of dope new R&D

Away from high-profile launches, business deals and shifts in macroeconomic trends, February also saw several innovative 3D printing research projects come to fruition. One of the most eye-catching of these was an open-source lung simulator, developed at McMaster University and the University of Waterloo, that proved capable of replicating the impact of smoking cannabis on the human lung.













At the Technical University of Denmark, on the other hand, gaming readers will be happy to hear that researchers managed to turn part of a Microsoft Xbox 360 into a nanoscale medical 3D printer. Using the console's optical pick-up unit (OPU), the team found they were able to replace the optical system of a normal SLA machine, in a way that could reduce its production cost by thousands of dollars.

"The original goal for developing our own 3D printer was to be able to print cubic centimeter volume with micro/nanoscale resolution for our own micro-container based drug delivery development," DTU Associate Professor En Te Hwu explained back in February. "We couldn't find a 3D printing system on the market that could do this, so we had to make our own."

3D Printing Industry review of the year: February 2021

Return to Index

Decades of DOD Efforts Fail to Stamp Out Bias, Extremism

(AP News 29 Dec 21) ... Kat Stafford and James Laport

In February, with the images of the violent insurrection in Washington still fresh in the minds of Americans, newly confirmed Defense Secretary Lloyd Austin took the unprecedented step of signing a memo directing commanding officers across the military to institute a one-day stand-down to address extremism within the nation's armed forces.

The stand-down came in response to the participation and the subsequent arrests of several veterans and at least one active duty service member, who along with thousands of supporters of former President Donald Trump on Jan. 6, stormed the U.S. Capitol in a melee that sent lawmakers scrambling for safety, left one person fatally shot by Capitol Police and caused millions of dollars in damages to the building largely seen as the symbol of American democracy.

Austin's order, which also came as America as a whole was grappling with how to address systemic racism, was the latest in a series of decades-long efforts by the military to purge its ranks of extremists and white supremacists. Last week, in response to the order the military issued new rules to deal with extremism that included social media usage policy updates where "liking" and reposting white nationalist and extremist content could result in disciplinary action. The DOD also updated its screening of recruits and is looking at how to prepare troops who are retiring from being targeted by extremist organizations.

But an AP investigation found that despite the new rules, racism and extremism remain an ongoing concern in the military.

The investigation shows the new guidelines do not address ongoing disparities in military justice under the Uniform Code of Military Justice, the legal code that governs the U.S. armed forces. Numerous studies, including a report last year from the Government Accountability Office, show Black and Hispanic service members were disproportionately investigated and court-martialed. A recent **Naval Postgraduate School** study found that Black Marines were convicted and punished at courts-martial at a rate five times higher than other races across the Marine Corps.

The AP investigation also shows the military's judicial system has no explicit category for hate crimes – something the federal government, 46 states, and the District of Columbia have on the books – making it difficult to quantify crimes motivated by prejudice.

As a result, investigative agencies such as the Naval Criminal Investigative Service or Army Criminal Investigative Division also don't have a specific hate crime category, which impacts how they investigate cases.

"While it's possible hate crimes have occurred, our investigations are not titled as such," the NCIS said in an email. "For example, an assault on a person, regardless of the reason for the assault, would still be categorized as an assault...regardless of what motivated the crime."

The new National Defense Authorization Act signed into law by President Biden on Monday directs the Secretary of Defense to make a recommendation to Congress within 180 days if a new statute is needed to address violent extremism, but does not address hate crimes or racial disparities in military law.













The new Pentagon rules do not outright ban service members from being members of extremist organizations, such as the Ku Klux Klan, Oath Keepers, or other right-wing and white nationalist groups. The regulations, like the previous ones, only prohibit "active participation," in such groups, a murky policy that civil rights organizations have raised concerns about for years. The military describes active participation as "publicly demonstrating or rallying, fundraising, recruiting and training members," as well as organizing or leading organizations.

Experts interviewed by the AP say there's also ongoing concern over the military commander's ability to enact a wide range of administrative and disciplinary actions -- including administrative separation or appropriate criminal action -- against military personnel who engage in prohibited activities.

Commanders essentially have total discretion to determine how to address situations as they arise, which experts say has created non-uniform, scattershot enforcement, with some commanders establishing a no-tolerance approach and others employing weak enforcement of the rules.

The AP investigation also found that while the Department of Defense says it considers racism and extremism within the military to be a "security concern," it does not have dedicated funding that specifically supports efforts to address extremism. Instead, military officials said the Pentagon uses personnel vetting programs, training and education programs, and the Insider Threat Program to "positively contribute to countering extremism within the force."

The Pentagon did not respond to questions about how much money it has spent or budgeted for efforts solely related to diversity and inclusion, and how many employees are dedicated to it.

Pentagon Spokesperson Maj. César Santiago acknowledged in a statement to the AP that extremism and extremist ideology can have an outsized effect on the military force.

But he added: "The vast majority of the women and men in uniform serve their nation with honor and integrity." He said since taking office in January, Secretary Lloyd Austin, the first African American to serve as Secretary of Defense, has taken immediate action to address extremism. In addition to the new guidelines on extremism, the Defense Department appointed an interim deputy inspector general for diversity and inclusion and military insider threats in April.

Susan Corke, the director of the Southern Poverty Law Center's Intelligence Project, commended the Defense Department for taking key steps this year, including the changes announced last week, to address extremism. She said the Defense Department sought the expertise of civil rights organizations, academics, and others who have sounded the alarm about the dangers of extremism in the ranks for years.

But Corke said it's too soon to definitively say whether the updated policies will purge extremism from military ranks.

"The devil will be in the details," she said. "I do appreciate that there is a commitment from the Defense Department to have much more consultation with outside partners and that there's much more focus on doing additional research. So, we're going to hold their feet to the fire."

Corke said the SPLC is still pressing for additional reforms, including how the military's command structure allows commanders to have virtually absolute command authority over subordinates, which might discourage members from reporting incidents or concerns of extremism.

Even some in the military agree that the armed forces need to do more. "There needs to be a change in action and behaviors – elements that can't be so easily influenced by a change in military law, " said Maj. Tyrone Collier, a judge advocate in the Marine Corps Reserve, in an interview with the AP.

"Even if some legislation is passed from the highest echelons of government that says you will do this and that, will it actually get done?" Collier said.

Decades of DOD efforts fail to stamp out bias, extremism | AP News

Return to Index













Think Differently about Naval Presence

(USNI 29 Dec 21) ... Robert C. Rubel

With a smaller naval force, forward deployment must be managed on a global basis.

In a recent interview, Marine Corps Commandant General David H. Berger was asked whether there is a dialogue between service chiefs and combatant commanders (CoComs) over force demands and whether the CoComs would moderate their demands. Berger was unequivocal in saying there is no prospect the CoComs will moderate their demands, because they have to manage risk on a day-by-day basis.1 So, even as the Navy and Marine Corps have gotten smaller, the demand for forward presence has remained constant or even increased, placing intense pressure on the services.

There are four options for dealing with this problem. First, Congress could increase shipbuilding funding to bring the fleet to some number of hulls that would provide for sustainable forward presence. That is not likely. Second, the Secretary of Defense could adopt a "supply side" force deployment policy in which the forces made available for forward presence are only those that can be sustained.2 This was advocated by former Deputy Secretary of Defense Robert Work, but it did not materialize.3 Third, the Navy could alter its fleet design to include a significant number of smaller, cheaper ships focused on routine forward presence. This idea was incorporated in the 2007 A Cooperative Strategy for 21st Century Seapower, based on a "bimodal" Navy concept submitted by Professor Wayne Hughes of the **Naval Postgraduate School**.4 However, the Navy has shown no sign of implementing the idea. The final option is to shift management of naval forward deployment to a global basis, centrally managed from the Pentagon.

Making an argument for the fourth option requires returning to a 1974 article by Vice Admiral Stansfield Turner entitled "Missions of the U.S. Navy." In it, Admiral Turner noted the traditional mission of command of the sea had been redefined as sea control. As a result, the basis for Navy planning became operational vice strategic—ignoring the geopolitical impact of a single world ocean—and naval presence became a regional function at the mercy of the CoComs.

When the fleet was sufficiently numerous, these doctrinal shifts did not adversely affect Navy and Marine Corps operations. When it fell to a level not seen since before World War I, however, the regionalization of U.S. maritime strategy began to have negative effects on combat readiness.

The Navy is beginning to rediscover the idea of command of the sea. The latest version of Naval Doctrine Publication 1, Naval Warfare (NDP-1), mentions command of the sea in its foreword.6 It correctly states, "Command of the seas is a fundamental strategic pillar of our nation, necessary for the security and prosperity of our citizens." But it misses the mark when it defines command of the sea as "the strategic condition of free and open access and usage of the seas necessary for our nation to flourish." It confuses cause and effect. A free and open sea is a policy the United States has adopted, one that is enabled by having command of the sea. Thus, a proper basis for formulating strategic plans and allocating resources still awaits a correct definition of command of the sea and an appreciation of all its implications.

The world ocean is very large, and, relatively speaking, ships are very small, so what constitutes command of the sea can be a confusing matter. American theorist Alfred Thayer Mahan came closest when he said, "It is the possession of that overbearing power on the sea which drives the enemy's flag from it, or allows it to appear only as a fugitive."7 Command of the sea, rightly understood, denotes a strength relationship between or among contending navies in which the difference is such that the weaker navies dare not directly challenge the stronger. This is the cause; all the benefits of command derive from it. While this definition might seem arbitrary or academic, a study of long-term geopolitical trends reveals its significance.

Geopolitical Trends

Researchers George Modelski and William Thompson studied the relationship between sea power and global politics from 1494 to the late Cold War. They examined the dynamics among nations that realistically could vie for global leadership, using warship numbers as a surrogate for the rest of the aspects of national power.8 They identified five "long cycles" of competition in which global war













produced a world power that possessed command of the sea, followed by a peace in which that power used its command to maintain an international order congenial to its interests.

Command of the sea was defined as concentration of naval power, in which one nation possessed roughly 50 percent of the total relevant warships owned by all contending powers.9 When "deconcentration"—the more even distribution of naval power among contending nations—occurred, global war eventually followed, producing a new global leader having command of the sea. Then the cycle repeated. "The long cycle of global politics refers to the process of fluctuations in the concentration of global reach capabilities which provide one foundation for world leadership," Modelski and Thompson explained.10

For the past five centuries, oceangoing sea power has been the foundation of global reach and influence. Command of the sea permits unfettered movement and thus use of the oceans to project influence. Command of the sea, therefore, is at heart a global concept. Moreover, its DNA is composed of deterrence: the unwillingness of other navies to directly challenge the strongest. When the strength relationship changes—the deconcentration of sea power—the erosion of command contributes to the eventual breakout of global war, according to the Modelski/Thompson analysis. Third, command is relevant in both war and peace. Not only must a dominant concentration of naval power be maintained in peacetime—a difficult proposition for any government—but that power also must be exercised to defend and support the international order the global leader desires. That is, command of the sea consists of two components: maintenance and exercise. These are not analogues to Admiral Turner's sea control and power projection; they are global and strategic vice regional and operational.

It is to exercise command of the sea to support and defend a desired global order that the United States deploys its naval forces around the world. The combination of the policy to promote a global liberal trading order and the decision to deploy military forces to defend that order is a tacit U.S. grand strategy, one that has been remarkably consistent across administrations and that continues to this day. Through the late 1970s, the Navy's focus was either directly projecting power over land, as in Korea and Vietnam, or supporting land forces. It also undertook a nuclear deterrent using its aircraft carriers and, later, ballistic-missile submarines. By the late 1970s, the Soviet Navy had grown to be a significant threat. At that point, the Navy shifted gears, and its 1980s Maritime Strategy included aggressive forward operations to push back and intimidate the Soviet Navy. All these actions were instances of exercising command of the sea to defend the global order it had established.

In 1946, President Harry Truman dispatched the USS Missouri (BB-63, center) to the Turkish Straits to demonstrate U.S. opposition to Soviet territorial claims in Turkey. This was the leading edge of what turned out to be a continuous globe-girdling deployment of U.S. naval forces. Credit: Naval History and Heritage Command

In the wake of the Soviet Union's collapse, the United States did not demobilize or bring home its naval forces. This was an indicator of the true nature of the maritime component of its grand strategy—not to defeat the Soviet Union, but to exercise command of the sea to support and defend the global system. The Navy and Marine Corps issued a new capstone document in 1992. . . . From the Sea clearly articulated the reasons for continuing to exercise command of the sea: "Our forces can help to shape the future in ways favorable to our interests by underpinning our alliances, precluding threats, and helping to preserve the strategic position we won with the end of the Cold War."11

Tellingly, that document also said, "Our strategy has shifted from a focus on a global threat to a focus on regional challenges and opportunities." With the 1986 Goldwater-Nichols Act that strengthened the authorities of the CoComs, a fleet large enough to sustain forward deployments in all regions, and the lack of challenge to U.S. command of the sea, exercise of command became the province of the CoComs. The only global component was the Global Force Management process that apportioned forces in response to CoCom requests.

The U.S. policy of supporting a liberal trading order—the end of U.S. strategy—has remained constant since the end of World War II. The means of the maritime component of the strategy is a powerful U.S. Navy. The way has been to forward deploy a significant portion of that Navy around the periphery of Eurasia to deter aggression, assure allies and partners and build naval interoperability with them, and have forces available for contingencies ranging from military aggression to disaster relief. But













the Navy is now at its lowest ebb, in fleet size, since before World War I, and it is stressed beyond its ability to sustain the necessary pace of deployment. If the end is constant and means shrink, the way must change.

There are two elements to the current maritime strategy of ringing Eurasia with naval power: location and purpose. Where ships are deployed and for what purpose governs the number and type needed. If location and purpose are managed strategically—a new variation of the way—then a smaller number of ships might suffice. But managing deployments strategically on a global basis means some staff must be established with the requisite authority to do so.

New Staff with a New Perspective

The focus of the CoComs is managing risk on a day-to-day basis, and they also must develop and maintain productive relationships with the countries in their areas of responsibility. Their perspective, therefore, is near term and regional, whereas the overall focus of the exercise of command should be global. Allocating naval forces on a regional demand basis has the effect, especially when forces are scarce, of diluting maintenance and training. This erodes maintenance of command, because the same forces that exercise command are the ones relied on to maintain it.

Hard decisions are needed to strike the necessary balance between the maintenance of command and its exercise—or, stated in more conventional but somewhat inaccurate terms, between combat readiness and forward presence. These decisions cannot be made by the CoComs, and the Chief of Naval Operations has no authority to do so, nor does the Joint Staff. The only place where the necessary perspective and authority are married up is in the Office of the Secretary of Defense (OSD). Priorities must be established not only among the deterrence, assurance, and response functions of forward presence, but also among regions.

But there is another strategic aspect of exercising command of the sea that is connected to its maintenance. An inherent principle of exercising command is that one should not risk the maintenance of command in the process of exercising it. If, for example, the United States lost enough naval forces of the kind that underpin command of the sea, command could be lost. This would open the door to China or perhaps Russia to use the sea to undermine the world order. As Seventh Fleet commander in the mid-1970s, Vice Admiral Thomas Hayward was motivated by a form of this logic. He was concerned about the possibility of Washington transferring his carrier battle groups to the Atlantic to reinforce NATO. If that happened, he feared, opportunities would open for the Soviets to seize the Aleutian Islands or take other actions that would harm the United States.12 In other words, the U.S. Navy would lose command of the Pacific, and deterrence there would evaporate.

Whether by incurring losses in a regional operation or through the maldeployment of forces, command of the sea could be lost through injudicious exercise of it. Thus, exercise of command and maintenance of it can be understood only on a global basis, and risk thereby properly assessed.

Beyond the need for a staff with the perspective and authority to develop and execute a global exercise of command of the sea strategy, what can be said about the elements of such a strategy? The first place to look is deterrence. Is deterrence a local matter, or is it a global issue? Based on the Modelski/Thompson research, command of the sea is a global concept based on the overall naval strength relationship. With regard to Taiwan and the advent of Chinese land-based, long-range antiship missile systems, deterrence appears to be a local matter, but China also is building an oceangoing navy that has demonstrated the ability to deploy globally. So the outcome of a fight over Taiwan could have implications for global command of the sea:

- An unsuccessful invasion could precipitate the fall of the Communist Party, perhaps ending any bid to displace U.S. command of the sea.
- Win or lose, if in defense of Taiwan the United States were to lose too many naval forces, especially aircraft carriers and submarines, its command of the sea could be threatened.
- If China succeeded in seizing Taiwan, the invasion could lead to escalation and widening of the war, especially if others such as Russia decided it provided an opportunity for aggression in their regions.

If such a war did widen, a centralized (read global) strategy would be needed to properly allocate forces. Individual regional fights must be regarded as the exercise of command, and risk must be managed













centrally. All of this argues not only for centralized risk management of naval forces, but also for a fleet design in which the kind of forces applied to exercise command are such that their loss does not affect overall command.

As the Navy is now structured, the forces that form the basis for maintaining command of the sea are the same ones that exercise it. The locus of risk assessment and management, therefore, should reside at the national rather than regional level. However, the current unified command structure—philosophically and doctrinally based on the operational level of war—effectively turns the national authorities into strategic sponsors rather than supervisors.13 There is no effective mechanism for coherently balancing maintenance and exercise of command of the sea, something that is critical in view of current fleet design and the reduced hull numbers.

Current statute prevents investing either the Navy or the Joint Staff with the authority to dictate naval force distribution globally or to develop the strategy to govern it. The likelihood of Congress amending existing legislation is low, so another approach is needed. The Secretary of Defense possesses the requisite authority, so an operational staff embedded within OSD could be created without the need for legislative relief.14 The staff would inherently be joint, although heavily naval to ensure the necessary expertise. The CoComs would retain authority to plan and execute campaigns in their regions, but the centralized maritime staff would allocate naval forces on the basis of a global strategy developed by OSD, perhaps with the advice of both the Navy and Joint Staffs.

Both the Air Force and the Navy have developed operational command-and-control centers that could serve as a pattern for establishing a global staff, and much of the communications infrastructure already is in place. However, to operate effectively, such a staff will require specialized training and education to generate the kind of global strategic/operational fusion of thinking required.

A New Approach to Maritime Strategy

Command of the sea and its associated logic must be the basis for a new approach to U.S. maritime strategy, including a global staff situated in Washington to govern the strategic application of scarce naval forces. The Navy also should redesign its fleet to better adhere to the principle of not risking command while exercising it, but a new layer of command and control within the Office of the Secretary of Defense is the quicker and surer way to address the problem of a Navy too small to properly support national policy. Such a staff would possess a form of the authority invested in Fleet Admiral Ernest King in World War II, who had "the latitude to change the longitude" of Navy forces.

Think Differently about Naval Presence | Proceedings - December 2021 Vol. 147/12/1426 (usni.org)

Return to Index

FACULTY:

Accidents and Escalation in a Cyber Age

(War on the Rocks 22 Dec 21) ... Andrew A. Szarejko and John Arquilla

Sometimes wars, from small ones to big ones, start with accidents. In early American history, for example, accidents associated with good-faith errors and unauthorized acts of violence precipitated several conflicts between the United States and Native American groups. On a larger scale, Scott Sagan has argued that the 18th-century Seven Years' War was sparked by a false warning of French invasion and that the Japanese invasion of Manchuria in 1931 was an unauthorized attack orchestrated by army officers against the expressed wishes of the civilian government. The potential for these sorts of accidents — human or technical errors and unauthorized actions — to induce subsequent escalation has produced much diplomatic effort to mitigate the risks of stumbling into armed conflict. There are hotlines, summits, "open skies" agreements, confidence-building measures, and more. Yet today the risk of accidents producing escalation persists, especially where states see a first-mover advantage and fear the consequences of underreacting more than the risks of over-reacting.













The rising salience of cyber warfare contributes dangerously to the traditional set of concerns about the onset of armed conflict. Now, in addition to wars waged with bombs and bullets, militaries have become highly dependent upon the security of the bits and bytes that empower their "sensing and shooting" capabilities. And the link between incidents starting in cyberspace and ending up in battlespaces on land, at sea, and in the aerospace environment is getting the attention of policymakers. So much so that, as President Joe Biden noted that "we're going to end up, if we end up in a war — a real shooting war with a major power — it's going to be a consequence of a cyber breach of great consequence."

Some have argued that cyber operations are actually unlikely to prompt military escalation, but we would argue that this possibility ought to receive policymaking attention to reduce its probability. There remains much uncertainty about the frequency and severity of cyber accidents that are occurring now and that will arise in the future. This uncertainty extends to whether any given cyber accident will spark military escalation. But a growing body of evidence, beginning with the Moonlight Maze cyber intrusions into military systems in the late 1990s and other serious events that have continued to this day, make clear that potential adversaries are testing out virtual ways to disrupt physical operations.

What sorts of accidents might occur in cyberspace, and how might they prompt military escalation? We have three basic categories in mind. First, there are human actions in cyberspace that could provoke escalation. These include human errors, such as mistaken perceptions. During the Cuban Missile Crisis, for example, a U.S. destroyer's use of training depth charges to target a Soviet submarine very nearly led the submarine's captain to launch a nuclear torpedo because he reportedly believed a war might have already started. The difficulties of ascertaining intent and attributing responsibility for actions in cyberspace may produce similar human errors. Alternatively, intentional actions not authorized by any proper authority would fit this category. Non-state-affiliated hackers, for example, could individually or collectively target or unintentionally affect highly sensitive systems such as those related to critical infrastructure, conventional military systems, or nuclear command-and-control processes. Similarly, state-linked cyber proxies could engage in such actions of their own volition and have their actions incorrectly attributed to their state sponsor.

As a case in point, in 2001 through 2002, Gary McKinnon, a Briton whose autism played a central role in his legal defenses after he was caught, hacked into U.S. military systems in a purported effort to uncover information about unidentified flying objects he believed the U.S. government was hiding. This hack kept about 2,000 military computers offline for days, caused alarm in the Pentagon — American air defenses and the Atlantic Fleet's logistics had been compromised — and led to questions about who was targeting the United States and who ought to face retribution. The prosecutor in charge of the effort to extradite him from the United Kingdom described the incident as "the biggest military computer hack of all time." Needless to say, had this occurred during a major international crisis — and had the United States failed to sufficiently harden those military networks despite being in a crisis — the consequences could have been dire.

Our second category of concerns is about technical errors that could lead to military escalation. During the Cold War, for example, there were occasions on which the United States and the Soviet Union each thought the other had begun a nuclear attack. In the American case, a war-scenario training tape was mistakenly inserted and played at a strategic command. On the Soviet side, a computer malfunction reported that five American missiles were heading toward the Soviet Union. Fortunately, those involved in both cases waited long enough before retaliating to ascertain that their identification of an incoming attack was mistaken, but there is no guarantee that such events will always resolve so well. That we are all still here speaks to the caution that nuclear weapons can induce. In the case of escalation to conventional military action from cyber operations, however, those involved may be less cautious.

The third categorary of potential problems consists of intentional cyber operations that may have unintended consequences. Due to the complexity and interconnectedness of advanced information systems, any offensive cyber operation engenders uncertainty as to the effects it will cause. Thus, to the extent that human and/or technical errors could be the source of such effects, it is worth considering them here. One could imagine, for example, that either Israeli or Iranian cyber operations targeting the other in their current "virtual conflict" might yield greater consequences than the attacker intended. In an already













tense, volatile situation, such a perceived escalation, even if unintended, might prompt an armed, "kinetic" response.

How might states reduce the risk of accidents in cyberspace escalating into open warfare? Bringing arms control into cyberspace could be both feasible and worthwhile. Given the inability to monitor cyber capabilities in the same way that states can monitor more observable nuclear systems, however, any such efforts will need to focus on behavior rather than "bean counting." With respect to the prospect of accidents in cyberspace, the 1972 U.S.-Soviet Incidents at Sea Agreement may offer an excellent model of the sort of agreement that could limit military escalation in the wake of cyber accidents.

The Incidents at Sea Agreement stemmed from a similar concern that accidents could provide incentive for escalation and established a framework for information-sharing when an accident did happen. The agreement stipulated, for example, that U.S. and Soviet ships would use "accepted international signals when ships maneuver near one another" and would inform surface-going vessels "when submarines are exercising near them." It also established that the reporting of any accidents would go through naval attachés in the respective capitals and that the parties would meet annually to review implementation.

Any such effort in cyberspace should similarly take a two-fold approach in trying to reduce the risk of accidents and provide mechanisms for the provision of information on accidents that do occur. With respect to risk reduction, states could establish clear guidelines on which systems are off-limits (such as critical infrastructure or nuclear command-and-control systems), attacks on which would prompt reciprocal action, even military escalation. As for the provision of information on accidents, the sensitivity of cyber operations and exploited systems will necessitate that this information-sharing be kept limited, but a similar system of national attachés could work here. It is unlikely that states would be willing to share such information with a centralized, international body run through the United Nations or elsewhere. Quiet bilateral diplomacy is more likely to work.

There are, however, important differences between the maritime and cyber operations that any analogous agreement would need to address. First, given the significance of private stakeholders in cyberspace, any effort at behavior-based cyber arms control will need to bring these actors into the policymaking process in a way that was not necessary for the functioning of the Incidents at Sea Agreement. This may cut against the desire for secrecy in information-sharing, but non-state stakeholders need not be involved in every part of the process. Second, bilateral agreements may be easier to establish than multilateral ones. Given the dozens of states with significant cyber capabilities (as opposed to fewer with significant blue-water navies), any single bilateral agreement might not do much to address broader multilateral concerns. Policymakers might thus consider starting with a bilateral agreement — perhaps beginning with confidence-building measures — and expanding carefully from there. More ambitious work might eventually be undertaken to address wartime incentives for escalatory information operations.

Nonetheless, there are significant limitations and degrees of uncertainty that will make it difficult to agree on and implement any such efforts at behavior-based cyber arms control. The Incidents at Sea Agreement involved accidents in which it was generally clear which actors were involved and who was at fault, something that may less frequently be the case in cyberspace. Relatedly, any framework for the avoidance of accidents in cyberspace would require the offending party to admit responsibility and acknowledge that the operation's effects were unintentional. Moreover, when an offending state claims to have accidentally affected a target state or claims that a non-state actor was the origin of the attack, the target state may not believe the offending state (whether it was being truthful or otherwise).

All these factors will make it rather difficult to establish and sustain cyber arms control. Yet, even very narrow agreements would be helpful in reducing risks and the potential costs associated with escalation, and continued innovation and investment in digital forensics may ameliorate some of the difficulties by piercing the veil of anonymity that too often shrouds cyber malefactors. Moreover, agreements and advances of this sort need not stand on their own. As in the U.S.-Soviet relationship, deterrence — particularly in its "denial" aspect, based on strong defenses — may complement shared understandings of the "rules of the road," and strategies of deception or information camouflage may bolster cyber defenses in ways that reduce the severity of cyber accidents.













Like any other tool of statecraft, diplomacy is not a cure-all. But if accidents are going to happen — in cyberspace or in elsewhere — it is worth taking steps to mitigate the risks associated with them. This is clearly a concern on Biden's mind. It should also be on the minds of all whose duties consist of ensuring the national security.

John Arquilla is Distinguished Professor Emeritus of Defense Analysis at the **Naval Postgraduate School** and author, most recently, of Bitskrieg: The New Challenge of Cyberwarfare.

Accidents and Escalation in a Cyber Age - War on the Rocks

Return to Index

How the Energy Crisis Made 2021 Feel Like the '70s

(Foreign Policies 22 Dec 21) ... Keith Johnson

Record high power prices across Europe. Empty petrol stations in the United Kingdom. Rolling blackouts in China. And congressional hearings and televised fever dreams about gasoline prices in the United States.

This fall has been marked by an energy crisis that seemed to pistol-whip every kind of fuel—coal, oil, natural gas, even renewables—in every conceivable country. Ramifications were felt nearly everywhere. European governments came under fire as prices for natural gas and electricity skyrocketed. Some factories cut back hours or closed altogether while consumers were forced into the streets.

Russia chuckled as Europe begged for more of the gas it spent years trying to ditch. U.S. lawmakers who spent ages crowing about American energy dominance and growing oil and gas exports suddenly scrambled to raise the drawbridge. China, which has spent the last five years trying to convince the world it was going green, rediscovered the virtues of cheap coal as soon as it didn't have any. Meanwhile, power disruptions played havoc with factories all over the world—especially in China—which made the post-pandemic global supply chain an even messier train wreck.

A series of unfortunate events colluded to create this year's energy crisis. First was a surprisingly robust recovery after the worst of the pandemic receded: Growth roared back in the United States, Europe, and China while energy producers and the people who move things around the world were still under lockdown. That created a glaring mismatch between demand and supply, with predictable results. Then there was extreme weather: cold snaps that drove up natural gas consumption, doldrums that silenced wind farms, and flooding that wrecked coal forecasts. But it wasn't just weather.

Bad policy and myopia also played a big part. Europe, like the United States, opted for liberalized energy markets, trusting the invisible hand to tend to the thermostat. In China, of course, it wasn't an invisible hand but a heavy one. Either way, the results were the same: an utter mismatch between what producers were paid to produce and what consumers were prepared to put up with. The clean energy transition, meanwhile, raced ahead of any actual transition to a different source of energy. And nobody seemed to pay attention to geopolitics anymore, which is why Russia still has one foot on the hose and one hand on the valve, confident in the knowledge it remains kingmaker of Europe's energy fortunes.

Some of the energy crisis's causes are passing; most are not. So buckle up, and enjoy some of Foreign Policy's best pieces from this past year on what's in store.

1. Why This Energy Crisis Is Different

by Jason Bordoff, Sept. 24

Markets are bad at dealing with energy. Markets are especially bad when they're trying to change their spots—like suddenly going green when the world still needs a whole lot of black. Jason Bordoff, a founding director of the Center on Global Energy Policy at Columbia University and a former White House advisor, notes climate change and efforts to come to grips with it have made for a wrenching ride in the short term. Fossil fuels are being phased out, but there's nothing in the wings quite yet.













"But in the same way that flooding, drought, and wildfires have long existed but are now being intensified by climate impacts, so too are market forces that long existed are now being supercharged by climate change impacts and responses," Bordoff writes.

2. Is Europe's Energy Crisis a Preview of America's?

by Brenda Shaffer, Oct. 5

Brenda Shaffer, a professor at the U.S. **Naval Postgraduate School** and a senior fellow at the Atlantic Council, sees policy failures lurking behind the energy crisis. Banning nuclear power, opting for spot market prices for natural gas, and mandating renewable energy regardless of economics were all part of Europe's plan to update its energy blueprint. The problem is Russia is ascendent, consumers are incandescent, and the world still doesn't have the Paris Agreement.

"Just like Europe, the Biden administration has made energy policy a subset of climate policy," she writes.

3. The Real Reasons Behind China's Energy Crisis

by Lauri Myllyvirta, Oct. 7

China, a nominally communist country, fittingly had nonmarket failures to blame for its energy woes. Beijing wanted cheap energy to spur growth. Coal miners didn't get the memo. The result, writes Lauri Myllyvirta, lead analyst at the Centre for Research on Energy and Clean Air, was a catastrophic breakdown of China's main energy source, which led to a cascade of economic and political turmoil felt around the world.

4. China's Energy Conundrum

by Melinda Liu, Nov. 5

China's efforts to wean itself off coal hit the inconvenient roadblock of blackouts and popular unrest. So Chinese President Xi Jinping pivoted quickly back to all-out coal production to keep factories humming and the population mum. The problem, writes Melinda Liu, Newsweek's Beijing bureau chief, is it runs entirely counter to China's pledges to go green in the next few decades. But there's a method to the madness.

5. Winter Is Coming, and It's Only a Preview

by Keith Johnson, Oct. 19

Short-term issues played havoc this fall: weather, lack of natural gas storage, and the like. But the bigger issue is that after the pandemic and before the energy transition, nobody's investing in fossil fuels like oil and gas. There are lots of terrible downsides: inflation, manufacturing shortfalls, empty shelves, and an alarming number of Sunny Jim Callaghan references.

The 2021 Energy Crisis Brought High Power Prices, Blackouts, and Political Turmoil (foreignpolicy.com)

Return to Index

ALUMNI:

School Closures are Costly Caustion- But are Still Not Enough to Prevent Tragedies

(StarTribune 20 Dec 21) ... David Riedman, James Densley and Jillian Peterson

On Nov. 30, 11 people were shot, four fatally, at Oxford High School, about 45 miles north of Detroit. The crime scene investigation understandably closed the school for a week. Threats of copycat violence then closed the school again.

Shooting threats typically increase after a high-profile school shooting because the public is on high alert and violence is socially contagious. Michigan's online threat reporting system received more than













3,000 anonymous tips after the Oxford shooting. Many threats were hoaxes or not credible, but officials closed schools anyway out of an abundance of caution.

The problem was not limited to Michigan. Over 500 school systems across the country, including Philadelphia, Houston, Oakland, North Texas, and Bellingham, Wash., closed owing to shooting threats in recent weeks. In the tiny Cuba Independent School District, 85 miles north of Albuquerque, school officials ended fall semester early following threats posted on Instagram.

And on Dec. 17, schools nationwide, including in Minnesota, closed in response to an anonymous threat on TikTok warning against students attending class. The viral trend encouraged students to participate in "National Shoot Up Your School Day."

School closures offer no long-term solution to school violence. Our research shows that the lead-up to a school shooting is years of trauma, isolation and hopelessness, and months of preparation.

Would a student who has assembled a hit list and an arsenal of "ghost guns" simply give up on the plan of attack because school was closed that day?

School closures also are expensive. The cumulative economic cost of shuttering schools nationwide last week is billions of taxpayer dollars. That's on top of the costs to frustrated parents missing work to home-school their children and anxious children missing valuable classroom learning time to process the prospect of potentially being shot and killed at school.

The problem is schools are already overburdened and they don't know what more they can do. All schooling is local. Responses to threats vary and rarely do they follow best practices in threat assessment and crisis response. Many school systems struggle to buy textbooks and tablets. Absent the resources needed to conduct a formal assessment and make an intervention plan, they have no choice but to close their doors.

Our research shows school shooters regularly post threats and communicate intent to do harm in advance, so the warning signs must be taken seriously. Any school closure must be followed up with vigilance from parents (including safe storage of firearms), support from school staff, and appropriate intervention from police and community partners.

On Dec. 17, we hosted a webinar for school leaders to help them prepare for the next threat of school violence. It all starts with creating a culture of care that ensures every child has at least one trusted adult in their lives and is empowered to say something if they see or hear something.

Our research with school shooters shows that many real threats are a cry for help and we must recognize them as such. The Department of Public Safety Bureau of Criminal Apprehension (BCA) has a new app for reporting planned or threatened violence at Minnesota schools called See It, Say It, Send It. The BCA will triage any tips that come in and either notify local law enforcement or work with the Minnesota School Safety Center, the Minnesota Department of Education, and with schools to determine the appropriate response.

See It, Say It, Send It was developed with a one-time federal grant, but it will need ongoing investment to keep up with rising demand — over 40,000 Minnesotans have downloaded it already. At the same time, schools need funding to set up dedicated "crisis response teams" made up of educators, public safety experts and mental health practitioners who can help assess incoming threats in the context of students' development and unique circumstances. These teams coordinate restorative interventions for students in crisis and follow up to make sure they are working.

The financial burden of this work need not fall on each individual school or district. When there is a national trend in online threats and every school shooting reverberates around schools nationwide, the federal government has an obligation to resource a solution. There is presently no clear national standard or guidance for evaluating online threats nor federal appropriations for building a crisis response team.

An overused phrase — an ounce of prevention is worth a pound of cure — rings true. Spending a few thousand dollars on threat mitigation could save millions in just one day. Closing schools in response to each and every violent meme posted on social media is unaffordable — a knee-jerk reaction when many threats are just impulsive teenagers trying to force a day off.

But the cost of inaction — the next Oxford, Parkland or the tragically long list of American school shootings — is too high a price to bear.













David Riedman is the co-creator of the K-12 School Shooting Database at the **Naval Postgraduate School.**

School closures are costly caution — but are still not enough to prevent tragedies - StarTribune.com

Return to Index

Sparton Gets Change at The Top

(Beacon 23 Dec 21)

Sparton President and Chief Executive Officer Bill Toti has retired after leading the company for three years, including the company's transition to Elbit Systems of America during 2021, Elbit officials announced recently.

Before joining Sparton at its manufacturing facility in DeLeon Springs, Toti had a long career serving in the Navy and private sector. He will stay on for a couple of months to work on some special projects for Elbit Systems of America, then will move on to private life, pursuing his own interests, which are many, according to one official.

Tracy Howard became Sparton's new president and CEO effective Dec. 8, according to a news release. Howard joins Sparton following his leadership of Leonardo DRS Naval Electronics business as senior vice president and general manager since 2020.

"We congratulate Bill on his retirement, and thank him for his commitment to help ensure Tracy enjoys a seamless transition into his new position," Raanan Horowitz, president and CEO of Elbit Systems of America, said in the release. "Under Bill's strong leadership, Sparton has achieved great things, and is poised for an exciting future of growth, as the leading provider of undersea warfare solutions."

Howard is a retired U.S. Navy submarine officer, with more than 37 years of military and defense-industry experience. Prior to Leonardo DRS, he held multiple senior leadership roles at L3 Harris and General Dynamics Mission Systems business areas.

Howard earned a bachelor's degree in marine engineering from the U.S. Naval Academy in 1986 and later a master's degree in operations analysis from the U.S. **Naval Postgraduate School**.

Elbit Systems' release noted that Howard is also the former commanding officer of nuclear-powered attack submarine USS Salt Lake City (SSN-716), and former commodore of Submarine Squadron 16, where he commanded all of the U.S. Navy's East Coast guided missile and ballistic missile submarines.

His other military assignments included: serving as the Chief of Naval Operations (OPNAV) Director of Submarine Tactical Systems Integration and Future Capabilities for the Undersea Warfare Systems Directorate (N97); Eastern Europe and Eurasia division chief for the Joint Staff; and Homeland and National Security adviser to the vice president.

"Tracy has deep roots in Sparton's customer community, and he brings a proven record of success, leading high-performing teams and achieving high-growth goals in the technology field," Ken Krieg, Sparton's chairman of the board, said in the news release. "We are honored to have Tracy join the Elbit America team, and excited about what Sparton will accomplish under his leadership."

With more than a 120-year history and decades of defense experience spanning the decades since World War I, Sparton has become the partner of choice for domestic and international defense applications. As a pure-play defense supplier, Sparton focuses exclusively on providing best-in-class, innovative solutions and executing on strategic opportunities to build upon its market leadership.

Sparton gets change at the top - The West Volusia Beacon (beacononlinenews.com)

Return to Index

Cdr. Richard Marcinko, the First Commanding Officer of SEAL Team SIX, Dies at 81 (We Are the Mighty 26 Dec 21) ... Miguel Ortiz













On December 26, 2021, the National Navy UDT SEAL Museum announced the passing of Richard "Dick" Marcinko. Also known as "Demo Dick," Marcinko was a retired Navy SEAL Commander, Vietnam Veteran, and famous as the first commanding officer of the legendary SEAL Team SIX.

After dropping out of high school, Marcinko tried to enlist in the Marine Corps but was rejected for his lack of a high school diploma. In September 1958, he successfully enlisted in the Navy as a radioman until he was accepted into Underwater Demolition Team/Replacement training in June 1961. Marcinko graduated Class 26 in October that same year. He served with UDT-21 until he was selected for commission as an officer in 1965. Marcinko commissioned through OCS in December 1965 and was reassigned to SEAL Team TWO in June 1966. His education included a Bachelor of Arts degree in International Relations from Auburn University at Montgomery and a Master of Arts degree in Political Science from the U.S. **Naval Postgraduate School**.

In 1967, Marcinko deployed to Vietnam with 2nd Platoon, SEAL Team TWO for a six-month tour of duty. On May 18, he led his platoon in an assault on Ilo Ilo Hon where they killed a large number of Viet Cong fighters and destroyed six of their flat-bottom sampan boats. The assault would become known as the Navy's most successful operation in the Mekong Delta. For his leadership in the operation, Marcinko was awarded the first of his four Bronze Stars, the Vietnamese Cross of Gallantry and the Silver Star.

After his first tour in Vietnam, Marcinko served as Officer-in-Charge of 8th Platoon for stateside duty for a few months before he returned to Vietnam in December 1967. During the Tet Offensive, Marcinko ordered his platoon to assist U.S. Army Special Forces at Châu Đốc. The SEALs engaged in an urban street battle before conducting a rescue mission to save American nurses and a schoolteacher who were trapped in the city's church and hospital.

Following his second tour in Vietnam, Marcinko served a two-year stateside staff assignment. He was later promoted to Lt. Cdr. and assigned as the Naval Attache to Cambodia in 1973. Afterwards, Marcinko returned stateside and took command of SEAL Team TWO from 1974 to 1976.

During the Iran Hostage Crisis in 1979, Marcinko was one of two Navy representatives on the Joint Chiefs of Staff Terrorist Action Team task force. TAT was assembled to develop a plan to free the American hostages in Iran. The plan developed was the ill-fated Operation Eagle Claw. Following the failed rescue, the Navy realized the need for a full-time, dedicated counter-terror team and tasked Marcinko with its creation. Moreover, Chief of Naval Operations Adm. Thomas B. Hayward selected Marcinko to serve as the first commanding officer of the new unit.

Marcinko named the new counter-terror unit SEAL Team SIX. At the time, the Navy only had two SEAL Teams. Marcinko reportedly selected the unit's name to confuse hostile nations, specifically the Soviet Union, into believing that the United States had at least three other SEAL Teams that they were not aware of. To form SEAL Team SIX, Marcinko hand-picked sailors from the existing SEAL Teams and Underwater Demolition Teams including he special counter-terror tactics section of SEAL Team TWO, MOB-6. SEAL Team SIX would serve as the Navy's equivalent to the Army's Delta Force. Although the typical command in the Navy at the time was two years long, Marcinko commanded SEAL Team SIX for three years from August 1980 to July 1983.

After leaving command, Marcinko was selected by Deputy Chief of Naval Operations Vice Adm. James "Ace" Lyons to design another new unit. This time, Marcinko's objective was to develop a unit to test the Navy's vulnerability to terrorism. This new unit became known as the Naval Security Coordination Team OP-06D, unofficially called Red Cell. Marcinko left the Navy in 1989 as a Commander after 31 years of service.

Marcinko's impact on the Navy SEALs and American Special Operations is unlike any other. He is considered the United States' premier counterterrorism operator and leaves behind a legacy of tier-one operators to this day.

Cdr. Richard Marcinko, the first commanding officer of SEAL Team SIX, dies at 81 - We Are The Mighty

Return to Index













Kennewick Native Promoted to Commodore of Navy's Destroyer Squadron 2

(Yak Tri News 29 Dec 21) ... Dylan Carter

A Tri-Cities native recently moved up in the ranks of the U.S. Navy by assuming the role of Commodore for Destroyer Squadron (DESRON) 2 at a naval station in Virginia.

According to an outreach team representing the U.S. Navy, Capt. Stefan Walch relieved Capt. Matthew Kawas during a ceremony on December 16, 2021 at the Norfolk Naval Station.

"It is a privilege to command a great squadron with a long, distinguished history," Capt. Walch said. "Commodore Kawas has raised the bar in supporting force generation and combat readiness throughout his tour and I look forward to continuing that upward trend as we prepare to support the upcoming USS Gerald R. Ford employment while training and certifying our destroyers for combat operations."

This marked the 76th change of command for the "Greyhounds," which were established shortly after World War I in 1919.

Walch was raised in Kennewick and decided to enlist in 1987 as a Sonar Technician. He studied at the **Naval Postgraduate School** and the Eisenhower School at National Defense University before receiving his commission in 1997.

The Kennewick native holds master's degrees in both Computer Science and National Resource Strategy. His previous assignments include Commanding Officer of USS Gonzalez (DDG 66), Branch Head for the Joint Staff, and J8 in missile defense analysis.

Kennewick native promoted to Commodore of Navy destroyer squadron (yaktrinews.com)

Return to Index

This Navy Officer's Name Tag Invention is Now Available for Purchase

(Navy Times 1 Jan 22) ... Geoff Ziezulewicz

Years ago, Navy Lt. Mitchell Kempisty saw a problem that needed fixing.

Namely, the name tag on his coveralls kept wrinkling and curling during the rigors of warship life.

"They just look really bad," he said this spring. "People just walk around looking disheveled with that nametag. It's the first thing you notice."

So, he set about creating and then patenting a simple invention to fix this "unsat" look.

And now, Kempisty has teamed with one of the nation's biggest military insignia companies to bring his invention to other service members.

Kempisty's basic concept is simple: a backing board attached to the back of the nametag that has its own Velcro to attach to the uniform, keeping the nametag straight and true in the process.

"The Enforcer," as it's been named by Vanguard, the military insignia company, gives a stiffer spine to name tags on coveralls, flight suits and other uniforms, preventing the curled and tattered edges that look anything but squared away.

"When I began the invention that has become 'The Enforcer,' all I wanted to do was to fix the sloppy, curled, wrinkled mess that I saw as my coverall name tag," Kempisty told Navy Times. "To have 'The Enforcer' on shelves means the world to me, as it signals the culmination point of three years of effort."

Vanguard officials read a prior Navy Times article about Kempisty's invention earlier this year and realized it would fit their existing product line, according to Michael Harrison, the company's chief operating officer.

The company entered into a licensing agreement with Kempisty, and the product is now available online.

Vanguard is also negotiating to get the product on shelves in military exchanges, Harrison said.

"It was a good idea," he said of the product, which is not a mandated piece of insignia. "For the guy who wants to stand out among his peers, this product provides a service."

Kempisty, who graduated with an engineering degree from the U.S. Naval Academy in 2014, said it took nearly three years to move his idea from the lightbulb stage to prototype.











He bought a basic 3D printer, futzed around with it on his dining room table during his off time, learned computer-aided design, or CAD, and then cranked out a prototype.

A childhood friend and patent attorney helped him legally lock the idea down.

Kempisty graduated from the **Naval Postgraduate School** in December with a master's degree in aeronautical engineering and is joining the guided-missile destroyer Mason as its operations officer.

"My hope is that 'The Enforcer' becomes a standard purchase, to protect and enhance the appearance of anyone wearing a working uniform with identification: name tag, unit patch or other," he said. "This could apply whether in the military, or other professions or activities performed in uniform.

This Navy officer's name tag invention is now available for purchase (navytimes.com)

Return to Index

Is Ukraine's Reformed Military Ready to Repel a New Russian Invasion?

(Atlantic Council 23 Dec 21) ... Andriy Zagorognyuk, Alina Froloya, Hans Petter Midtunn, Oleksii Payliuchyk The looming threat of a full-scale Russian invasion poses a wide range of questions for the Ukrainian military. Currently, most US experts are confident that the threat is very real and should be taken seriously. Are the Ukrainian Armed Forces capable of inflicting prohibitive costs on a Russian invasion force?

The authors of this report believe that Ukraine's defense forces can cause significant damage. In collaboration with reservists, civil society, and volunteers, they can make any attempted invasion a miserable experience for Russia. We recognize that it is also vital for international audiences to understand this.

Ukraine-based analysts owe US readers a better assessment of Ukraine's defense sector reform progress since the watershed of the country's 2014 Euromaidan Revolution. Indeed, there is currently very little available on this topic in the information space.

Considering the recent appointment of a promising new Minister of Defense, new armed forces command, and new defence reform roadmaps (a new edition of the strategic defense bulletin has been approved just two months ago), now is a good time to assess the current position.

Also, we could not help but notice that the most visible English language report about Ukraine's reform progress currently available is Glen Grant's work "Seven years of deadlock" published in June 2021. Unfortunately, we believe this assessment provides an inaccurate view of the current state of affairs and can create a flawed understanding of the results of post-2014 reforms, including the impact of US military assistance.

Any assessment of Ukraine's defense reforms should be done with reference to key documents including the Strategic Defense Bulletin, the NATO-Ukraine Annual National Program, the Planning and Review Process (PARP) PGs Package, and the Development Program of the Armed Forces of Ukraine (Defense Forces). These guidelines have been developed by the Ukrainian authorities, often with input from international advisors. This was not the case in Mr. Grant's assessment.

A number of factors have slowed reforms. The starting position for Ukraine was extremely unfavorable. The onset of war in 2014 exposed Ukraine as completely unprepared. The Armed Forces of Ukraine (AFU) were not manned, equipped, or trained to meet Russian aggression. Ukraine was neither psychologically nor legally prepared for hybrid war. Its logistic stockpiles were, with the exception of weapons and ammunition mostly from the Soviet period, non-existent. At the beginning of the war, there was virtually no budget. The command and control system was not suited to combat activities.

The defense budget allocation for more than 250,000 personnel is and will objectively remain a problematic issue in the coming years. The spending per service person (full-time equivalent) is one of the lowest in Europe. Ukraine's defense budget is one of the highest in terms of percentage of GDP (around three percent) even for NATO member states. However, the UAF started the war with a huge "backlog" after years of neglect and downsizing with most equipment obsolete. The relatively low













salaries of military personnel compared to the risks and burdens of combat operations greatly influenced retention perspectives.

Even though the military has been prioritized for the last seven years, it has been impossible to overcome decades of neglect. The UAF therefore still has several enduring strategic vulnerabilities. Funding is limited due to the general economic conditions of the country. Ukraine has been forced to down-prioritize many important acquisitions, not for lack of will, but due to a desperate lack of funding.

Ukraine started to reform its armed forces during the active phase of the war, which naturally distracted the attention, resources, and time of commanders and political leaders. Most reform decisions and actions were taken prudently and cautiously.

Military doctrines are greatly challenged by new wars. Most armies have been in constant transformation for decades and their systems, doctrines, and approaches have not always worked well in new operational environments. Ukraine is not an exception to this rule.

As survival was the top priority, the preference was given to commanders who were available at the time, while assuming they could effectively develop and use limited capabilities during the war. The majority did not know NATO standards and were not prepared for rapid change.

For many, it was a dilemma to drop the existing standard operating procedures and change them to something new. In general, personnel doctrine was based on post-Soviet standards. English language proficiency was low, as was the understanding of NATO principles and concepts.

We acknowledge the significant role that corruption has played in the actions of many defense officials, especially during the first years of the war. This factor significantly limited momentum for change and positive transformation outcomes. The issue is still relevant, although the influence of corruption has declined due to reforms and the active role of government, civil society, the public sector, and agents of change within the armed forces.

Equipment coming from foreign military assistance covers some of the tactical gaps of the armed forces. For a long time, such assistance did not include lethal weapons to Ukraine, which is currently in the eighth year of war. Only the United States and Lithuania have provided such support.

In line with the above-mentioned budget constraints, Ukraine's ability to domestically produce inexpensive military equipment is critical. Existing production capacity has been negatively impacted by the institutional weaknesses of the government-owned defense industry and outdated defense procurement system. Part of Ukraine's defense industry capacity was lost during 2014-2015 as more than 20 defense industry companies, including ammunition factories, were based in occupied parts of Ukraine.

At the same time, Ukraine has achieved a lot. We believe that detailed assessment requires a separate report, but some accomplishments are worth mentioning specifically.

Most importantly, Ukraine has built and engaged capabilities which have been able to stop the Russian advance on the ground. The original Russian ambition at the beginning of the campaign in 2014 was much greater than the occupation of parts of the Donbas region. Stabilizing and maintaining the line of contact became possible due to the efforts of the UAF. Ukraine managed to build fortifications on the line of contact, which now represent over 400 kilometers of complex engineering structures in various terrains. A strong second line of defense has also been built.

Thus far, Russia has failed to achieve its goal by military invasion in the east of Ukraine of splitting Ukrainian society and reversing the nation's democratic European choice. On the contrary, we can argue that armed aggression has strengthened civil society in Ukraine and made it more resilient.

Civil society has realized its responsibility for national security, with private citizens and businesses donating substantial funds to the Ukrainian army. Civil volunteers and activists have helped on many important issues. Society respects and supports the army. According to opinion polls since 2014, the Armed Forces consistently enjoy the highest levels of trust in society among all state institutions.

The combat capabilities, readiness, and practical skills of Ukraine's Armed Forces, Special Operations Forces, and National Guard have reached much higher levels compared to 2014. Ukraine has gained invaluable experience of war, given the duration and multidimensional nature of the ongoing conflict. This experience is studied and analyzed by military and civilian experts who regularly come to Ukraine. The multinational training of the Ukrainian Armed Forces in the framework of military assistance is recognized by partner countries as a mutually beneficial exchange of experience.













Ukraine's path towards NATO membership is imprinted in the Constitution of Ukraine and underlying policies. The country's pro-NATO course is supported by a majority of Ukrainians.

The transition to NATO standards has been carried out with the participation of NATO advisers helping to integrate the security and defense sector into the Euro-Atlantic community. Ukrainian personnel are constantly undergoing special training activities based on NATO approaches and practices.

Ukraine's defense management system has incorporated new approaches, including capability-based planning. The command and control system of the UAF has been transformed in accordance with the principles and logic of NATO J (L/M/N/A)-structures to the level of brigades, unified ranks, and basic job descriptions. Extended programs of bilateral and multilateral cooperation are being implemented, including the training of servicemen of combat units (about 10,000 people per year), as well as the development of institutional and combat capabilities.

Ukraine's defense planning system meets the key requirements of the NATO planning process, including the logic of building and developing capabilities on all basic components (DOTMLPF-I) taking into account capability life cycle considerations.

The defense policy and strategic planning departments of the Ministry of Defense and the UAF have since 2019 implemented NATO approaches in new cycles of defense planning and defense reviews. Key strategic documents for the development of defense forces (Military Security Strategy and Strategic Defense Bulletin) have been developed based on the results of the Defense Review 2019. Implementation documents on the development, generation, and employment of the armed forces are being produced within this framework.

Ukraine has been granted the status of NATO Enhanced Opportunities Partner due, in part, to evidence of the progress it has made. This status provides multiple new practical opportunities in addition to the existing support of the NATO-Ukraine Comprehensive Assistance Package. The NATO Summit in 2021 reaffirmed the strategic agreement of all NATO countries that Ukraine will become a full member.

There are a number of positive trends evident in the new generation of Ukrainian commanding officers. Many commanders are relatively young people. Many (including the Commander-in-Chief of the UAF) are military professionals who built their careers in independent Ukraine not during Soviet times and have practical combat experience. This establishes a new generation of Ukrainian leaders with a distinct national identity, vision, approaches, and values.

Ukraine shows considerable progress in the area of civilian democratic control. The role of parliament as a democratic oversight institution over the armed forces has significantly increased. The Law on National Security adopted in 2018 defined and increased the role of the civilian Ministry of Defense and the Cabinet of Ministers while strengthening the government's control over the defense forces.

We can argue that the current level of public oversight of the military, while not perfect, is unprecedented for Ukraine. The system of civilian democratic control is moving closer to approaching the full spectrum of Euro-Atlantic standards, as currently developed amendments to a number of laws should resolve existing inconsistencies and formalize a stable and effective control and oversight system.

However, unless proposed changes to the law on national security are adopted, the civilian control system is still not going to meet NATO standards. It retains an ambiguous division of functionality and reporting between the Ministry of Defense and military command, which has led to conflict between the previous Minister of Defense and Commander-in-Chief. Their replacement restored the balance but has not resolved institutional gaps.

The place and role of the NCO corps have been revised for the new armed forces. A new concept of NCO development is being implemented, with the full review of NCO roles, responsibilities, and career development. New doctrinal documents were introduced in line with NATO approaches and practices.

Equipment and armament have been significantly renewed. This process mostly concerned the armament of Ukrainian Land Forces and was justified by the nature of ongoing warfare and limited financial resources. Attention has now finally extended to the development of other critical combat capabilities, particularly for the Ukrainian Navy.

A new law on defense procurement was adopted in 2020 as part of procurement reform. It aims to bring procurement in line with Western practices and to eliminate corruption. Half of procurement has been transferred to the public category and subjected to bids in transparent open tenders. Additionally,











half of military equipment is procured from private-sector manufacturers of goods and providers of services.

The largest state-owned defense industry corporation, Ukroboronprom, has finally begun restructuring and moving towards a conventional Western corporate governance model based on modern principles and business practices. This is currently at the very early stage, but the process has received support at the highest levels of government.

In recent years, the transformation of the logistics and public procurement system has addressed issues with material, food, and medical supplies. Although this process is not fully completed, shortages present in the first years of war are long gone.

The new Military Security Strategy of Ukraine (2021) was developed to include the maximum involvement of Ukrainian citizens in national defense. As part of the implementation of strategy provisions, parliament adopted a new law "On the Fundamentals of National Resistance". This should lay the foundation for a comprehensive defense doctrine and upcoming reform of territorial defense.

Subscribe for the latest from UkraineAlert

UkraineAlert is a comprehensive online publication that provides regular news and analysis on developments in Ukraine's politics, economy, civil society, and culture.

There are a number of key shortcomings and gaps in defense reform and the development of defense forces.

There are gaps in key operational and combat capabilities, namely Navy, Air Defense, and Tactical Aviation. The Navy's capabilities are growing, but in contradiction with the priorities set out in the strategic documents based on the results of the last Defense Review (2019) and the Navy Development Strategy 2035, developed with the participation of representatives of NATO member states.

Capstone and keystone doctrinal documents (operational concepts) are being adapted to NATO principles and standards at a rather slow pace. The amendments to the Statutes of the Armed Forces did not manage to bring them much closer to the norms and practices of NATO member armed forces. This requires further expert discussions and rethinking of the content of most of the provisions.

Replacement of armament and equipment with new models is still insufficient and requires significant budget expenditures and profound changes in business practices. Maintaining a large amount of obsolete equipment and infrastructure takes away a significant chunk of the budget and does not allow for the proper investment of resources in modern systems and platforms.

Defense procurement, despite the newly adopted law, is stagnating in the implementation of new rules and practices. There are some alarming signs of reform setbacks, while the content of the state defense order (defense equipment procurement plan) remains unreasonably classified.

Much-sought reform of housing for servicemen as part of the social package has not taken place, despite promises and expectations. Despite partial rent compensation implemented in recent years, the housing issue remains a major demotivating factor for servicemen and their families.

A large part of military infrastructure does not meet the basic needs of personnel and military organizations and units. At the same time, the Ministry of Defense manages a high number of underutilized assets including tens of enterprises and hundreds of thousands of hectares of land.

Corruption still significantly impacts the efficiency and effectiveness of processes and decisions in the defense sector. Key areas prone to corruption risks include career and job appointments, housing distribution, land asset management, management of defense companies, fuel procurement, procurement of goods and services and employment abroad in peacekeeping units.

So far, Ukraine hasn't managed to establish the domestic manufacturing of ammunition.

Information Systems (Logistical, Medical, Defense Resource Management, and C4ISR) either have not yet been deployed or are still far from achieving their full operational capabilities and interoperability.

We need to acknowledge that, based on the experience of past NATO enlargement processes, it takes generations to change institutional culture and mindset. This process, however, starts in the military education system. Reform is not irreversible until NATO doctrine, tactics, procedures, principles, and values have been introduced into the military education system. Education programs should be improved, approaches to teaching and knowledge evaluation need radical modernization, along with implementation of critical thinking and other approaches.













English language proficiency of the majority of officers and sergeants is below the minimum required to work with documents and to interact with respective NATO units.

The transformation of organizational culture is a complicated issue. This is hindered by resistance to change mostly among the older generation of officers and civil servants. Personnel policy does not consider modern requirements for personnel management and is not fully incorporated into the capability-based defense planning process. The Military Personnel Policy of the Ministry of Defense is inadequate.

Internal culture depends on the personalities of the commanding officers along with their talents and shortcomings. This is frequently cited as the number one reason for personnel quitting the military.

The conscription process is an anachronism of the old days. The conscription system must be immediately transformed into a more efficient and modernized process of preparing a military-trained reserve.

Gender equality issues have just started to be addressed more systemically and still require fundamental changes to improve gender equality in the armed forces, including career-building and education opportunities.

The Atlantic Council's Eurasia Congressional Fellowship Program aims to educate Congressional staff on current events in the Eurasia region and engage staff with the Council's latest research. The program connects Congressional fellows with our larger community, which includes leading experts on Ukraine, Russia, Central Asia, and the South Caucasus.

We would like to address the most important points of Mr. Grant's report in order to create a more balanced overview for readers who are not well acquainted with the development and recent transformation of the UAF.

For a number of reasons, the UAF does not have all the capabilities required to deter Russian aggression. Ukraine was in no way prepared for the start of Russian aggression in 2014. The reform process began from the worst possible baseline with very limited funding and with hardly any NATO experience and knowledge at hand.

Despite this, while still acknowledging that many issues remain unresolved, great progress has been made. We have, however, not found any recognition of the achievements of the armed forces or analysis of any positive trends of Ukraine's defense reform in Mr. Grant's recent article.

Although the article identifies many problems and challenges, we also found a number of factual and logical errors. Below are the top 10 false or inaccurate statements.

Legacy of Post-Communist and Post-Soviet Ideology

The dominance of Soviet ideology, values, and culture in the defense forces is one of the key narratives in the article. The article is loaded with words like "Soviet", "communist" and "red commander", which appear dozens of times. The author claims that "it is important to keep in mind that the Ukrainian military, from the political leadership down to the basic soldier, functions as one of the last vestiges of the Communist and Soviet system."

We find this premise to be flawed. Ukrainian officers share the same military culture as their peers in NATO and are a result of their upbringing, education, and experience. The USSR collapsed 30 years ago. The share of people who consider it good that the USSR fell apart has risen from 36% in 2010 to 61% in 2021, with a fall from 46% to 32% in people who feel nostalgic towards the USSR. The older generation is, by default, more nostalgic than those born after Ukraine gained independence. After 30 years of independence, only a minority of officers were educated in the USSR, while all have served in an independent Ukraine for the majority of their service.

The Ministry of Defense has historically never made well-argued policy and still does not Although the government can be criticized for the slow and inefficient implementation of policy, Ukraine cannot be blamed for the lack of a state defense policy, especially at the strategic level. There is a streamlined architecture of strategic documents developed with the support of NATO advisers, publicly available and implemented or in the process of implementation, including the presidential National Security Strategy and the MoD's policy documents, the Military Security Strategy 2021, and the Strategic Defense Bulletin. In general, despite some shortcomings and delays, the overall quality of defense policy in Ukraine has improved dramatically over the past seven years.













The statement that "the Ukrainian defense system has not reformed" is essentially inaccurate since reform is not a state of affairs but a strategic process with milestones and interim results. Defense officials have never claimed the completion of defense reform but outlined its results which correlate with political and defense planning cycles. This continuous transformation process moves ahead and correlates with current and projected changes in the security environment.

The article features factual mistakes regarding policy and strategic decisions. One error is the claim that the Joint Operational Command was disbanded during Yanukovych's time and has never been since reestablished. In reality, it was indeed closed during Yanukovych's time as part of the campaign to destabilize the armed forces, but was reestablished in 2015 as the Joint Operational HQ. Furthermore, after delineation of force generation and force employment was completed in 2020, the Joint Forces Command reached almost its full operation capability, compatible with NATO structures and approaches.

The Russian operation effectively ended with two savage defeats of Ukrainian forces at Ilovaisk in August 2014 and again at Debaltseve in January 2015

The author's claim that Russian aggression resulted in two Ukrainian defeats at Debaltseve and Ilovaisk demonstrates an inaccurate strategic perspective of the Russo-Ukrainian War. Firstly, the war is still in the active phase. Secondly, neither Debaltseve nor Ilovaisk were the ultimate goals of Russian aggression.

Russia's goal in 2014-2015 was not to occupy parts of the Luhansk and Donetsk regions, but a greater geopolitical seizure of Ukrainian lands. The Russian goal was to destroy Ukraine as a single unitary state, and this plan has so far failed. The combined efforts of the Ukrainian military, citizen support, and international pressure succeeded in stopping Russia in 2014-2015. Currently, Ukraine continues to counter hybrid aggression in all domains of national security.

United States assistance to Ukraine of more than \$2 billion since the start of Russian aggression has not had any noticeable, let alone quantifiable, return on investment

The allegedly failed policy of receiving and managing foreign military aid, primarily from the United States, is one of the key narratives of the article. We dispute this assessment.

Although, in our opinion, the planning and application of foreign aid can be improved, it has already had a significant effect on the capabilities of the Ukrainian military. It has significantly improved the tactical and operational training of combat units. In addition, it has contributed to the development of new capabilities. There are outstanding examples of the use of foreign military assistance, such as the development of Ukraine's Special Operations Forces and the creation of a modern International Security and Peacekeeping Center. In both cases, success was defined by a comprehensive approach to developing specific capabilities, clear and measurable objectives, and close partnership with NATO member states.

Ukraine conducts a series of regular military exercises with allies on its territory. It provides advanced training for personnel. The positive impact of this can be seen in the historical certification of a non-NATO Ukrainian unit to join the NATO Rapid Response Force in 2019.

Foreign military experts involved in cooperation programs also emphasize that Western forces consistently learn from Ukrainian experience of modern warfare.

Planning and evaluation of foreign military assistance is carried out jointly within the framework of the Multinational Joint Committee (MJC), a body that has been planning military assistance from allied countries since 2014. It is currently composed of eight countries. Members, together with Ukrainian counterparts, plan and evaluate foreign military aid.

Certain change is, of course, happening. Some of this is because of war and the natural passage of time, but much is because of the energy and huge resources poured in by US and NATO allies

The author appears unaware of progress made by the Ukrainian military. For instance, he writes, "Ukraine has made virtually no more changes than would have occurred naturally by evolution over time or in reaction to Russian attacks." At the same time, whatever positive results were achieved are attributed to partner support. We already mentioned Ukraine's achievements in reform, but would also like to clarify our position on foreign support. With huge respect to Ukraine's partners and great gratitude for their support which is one of the key factors driving reform, Ukraine's resilience is first and foremost an achievement due to domestic effort. Foreign defense assistance is about 5% of the annual defense budget. During the most active phase of the war in 2014-2015, Ukraine's personnel losses were staggering.













Logistics was in disarray and equipment was mostly obsolete and broken. The amount of foreign aid was minimal. Ukraine has always ultimately relied on its own resources and capabilities.

The lessons of the war have provided Ukraine with tragic but unique experience that shapes current military policy and doctrines. Therefore, it is impossible to talk about this without considering the practical actions already taken by the leadership of the armed forces to institutionalize hard-earned experience.

The Illusion of Defense Reform and Reaching NATO Standards

We strongly disagree with this thesis and also with the author's statements that "the hardest thing for outside observers to accept is that much of what they read and hear is an illusion created by the government and defense staffs, designed to convince their own countrymen, NATO allies, and probably even Russia that reform is underway and that the armed forces are powerful and strong."

There are a substantial number of officers and observers from NATO countries and NATO HQ who have been assessing Ukraine's efforts. Ukraine's standpoint in this regard is complex and has its own advantages and disadvantages. Partners are well-aware of the situation and have enough professional experience to objectively and consistently assess Ukraine's progress.

The author also argued that President Zelenskyy, on April 6, 2021, exposed his lack of confidence in his own forces when talking to the NATO Secretary General by stating that Ukraine is "fully dedicated to reforms, but cannot stop Russia just by reforming. NATO is the only way to stop the war." We would argue that on the contrary, this demonstrates a strategic understanding the author himself does not possess.

US Congress should not grant money for defense if that money is not properly focused

We strongly disagree that this statement applies to Ukraine. Mr. Grant argues that "The United States "Gold Standard" assistance of more than \$2 billion to Ukraine since the Russian war started has not had any noticeable, let alone quantifiable, return on investment" and makes a huge effort to explain why the US Congress should not grant money for Ukraine's defense. His exact wording is "Congress should not grant money to defense if that money is not properly focused" while simultaneously arguing that the US support system (1) "is simply not designed to deal with this complexity at any single level" and (2) "has not dug deep enough or spent enough time trying to understand the beast" (which we assume is Ukraine). There (3) "appears to be no coherence to US support", (4) "no senior officer is focused solely on helping Ukraine reform", (5) "the US commander of European Command is too busy", (6) "his staff is too far geographically removed to be actively engaged" and (7) the US defense attache team "to a large extent formally controlled by the Ukrainians and are kept far away from the parts of the system the General Staff and Ministry of Defense do not want them to see."

Mr. Grant's assessment of the US structure, as well as its insight and experience, is no better or no worse than his understanding of Ukraine and the UAF. We have already explained why his claim of no reform is wrong, and why his statement that the reform process lacks political direction is false, and why his assessment that the "continued selection of senior officers who are opposed to NATO and wishing to maintain the Soviet legacy" is without value, and why the "illusion of Defense Reform and Reaching NATO Standards" is not an illusion (but rather a lack of insight).

Make no mistake, there remains a lot to be done. Ukraine is today facing a bigger threat by far than at any given time since it gained independence. Ukraine will remain vulnerable until outstanding reforms have been implemented and critical vulnerabilities have been closed. Reform is therefore a prerequisite for Ukraine's sovereignty and independence. The will to reform is, therefore, not in question, but abilities must be demonstrated.

The Ukrainian military, from the political leadership down to the basic soldier, functions as one of the last vestiges of the Communist and Soviet system. It is not representative of the vast body of Ukrainian society but rather should be seen as a historic anomaly in a country that is slowly modernizing

Isolation of the military from society and subordination of the armed forces inclusively and directly to the president has been a true state of affairs in Ukraine until 2014. Currently, the situation is radically different as younger commanders of the new generation have been appointed to lead the armed forces. Many service people have joined from civilian life. Civil society maintains awareness of aspects of the military's well-being through a large network of volunteers and watchdogs. The army and society are now













unprecedentedly connected, even in comparison with many Western countries. Never in Ukrainian history have the armed forces been as transparent as today.

The author of the article explains his statement of "The Mirage of Civilian Control" with the following arguments: 1) lack of integration of the Reforms Project Office in the MoD and its closure in 2020; 2) disbandment of the MoD Public Council; 3) replacement of Captain (Navy) A. Ryzhenko; 4) influence of the oligarchs; and 5) alleged subordination of the civilian MoD to the military leadership, namely to the Commander-in-Chief. In fact, all of these statements are false.

The Reforms Project Office (RPO) was disbanded, which we consider a mistake by the MoD. At the same time, over the past seven years, the RPO has been integrated into every part of defense reform and has been located within the main MoD premises. The Reforms Project Office was an official advisory body, subordinated directly to the Minister of Defense. Thus, its status as an independent organization allowed it to avoid much bureaucracy and act as a component of civilian democratic oversight.

The MoD Public Council has not been disbanded and still holds sessions.

With all due respect to Captain Ryzhenko (who is coincidentally a fellow at our think tank), he held a military rank and position and has nothing to do with the civilian democratic control status in the military.

Oligarchic influence over the military is significantly less than in other areas of Ukrainian society. There is a lack of evidence proving direct or indirect influence in the Armed Forces of Ukraine.

Actual civilian control lies in the ability of civil society to establish effective oversight over the military. Traditional means are parliament, the civilian cabinet (including the Ministry of Defense) with firm control over the military establishment and non-governmental oversight via a free press and NGOs. All of these elements are substantially progressing in Ukraine.

Exactly how many senior appointments inside the defense system are still of the "Russian World" (Russkiy Mir) is hard to judge, but there are a few who are notable for talking a great game with NATO allies while afterward ensuring that no reform of significance ever takes place

Russia's influence on the Defense Ministry was strong in 2010-2013, due to the systematic activities of Russian representatives under President Yanukovych. In the first years of the war in 2014, military counterintelligence regularly identified agents of Russian influence in the UAF and Ministry of Defense. Some of this information was made publicly available to the media and some is known only to insiders. We assume that the risk of the presence of staffers recruited by Russia still exists but is much lower, as the personnel of the Ministry of Defense and the armed forces have been significantly changed over the past seven years. Allegations of possible influence and allusions to "some people" sabotaging reform or NATO integration efforts is purely speculative.

Inability or unwillingness of officers to challenge a system marked by outdated or detrimental laws, rules, and regulations, since breaking these ensures punishment and career failure

We could not find anything useful in this statement other than the intention of the author to add more negativity to the article. In our opinion, any military is very resistant to change by the nature of "closed systems" and human behavior. Such changes often proceed at the slowest pace. But we certainly do not want to have a country where the military defies laws, rules, and regulations.

The organizational culture of the UAF is based on discipline, respect, and strict adherence to laws and regulations, which, we should point out, are gradually being updated. This process is ongoing, and we expect that the implementation of new rules will continue.

In any case, Western observers note that there are significant changes for the better in many commands and units, especially compared to 2014. Changes in personnel, the opportunity to observe in practice the organizational culture of the armed forces of partner countries, and the above-mentioned change of statutes, should lead to a radical change in organizational culture. That is to say, we are in the process of change. A good public example of such changes was the rescue operation of the civilian population in Afghanistan by the Ukrainian military. The value of human life for the military was higher than their own security.

The Ukrainian Armed Forces today are going through significant struggles, fighting on the Eastern Front, restoring Ukraine's presence in the Black Sea, developing capabilities, assisting partner countries in military operations, and transforming itself from within.













We require and expect much from the UAF in terms of consistent and effective transformation. At the same time, we clearly understand that they deserve our respect, which should be expressed in an objective assessment of their achievements and further support for their development and transformation. A strong Ukrainian Armed Forces is a safeguard against the major war that is emerging on Europe's eastern borders. Therefore, the support of our partners is not an issue of compassion, but a matter of being able to gain time to strengthen their own defenses.

Andriy Zagorodnyuk is chairman of the Center for Defence Strategies. He is a former Minister of Defense of Ukraine (2019–2020) and was the head of the MOD Reforms Project Office (2015–2018).

Alina Frolova is deputy chairman of the Center for Defence Strategies, Deputy Minister of Defense of Ukraine (2019–2020), Adviser to the Ministry of Defense (2015–2016), Adviser to the Ministry of Information Policy (2016–2018), founder of the Invictus Games Team Ukraine Project.

Hans Petter Midttun is a fellow of the Centre for Defence Strategies and a former Norwegian Defense Attache to Ukraine (2014-2018).

Col (Ret.) Oleksii Pavliuchyk is a fellow at the Centre for Defence Strategies and an expert in the field of the security and defense sector transformation. He is a graduate of the **Naval Postgraduate School** (Graduate School of Business and Public Policy and Defence Resource Management Institute), Canadian Forces College (JCSP), NATO School Oberammergau, the Marshall Center, and Kyiv-Mohyla Business School (SLP-2021). Before retirement in 2020, Oleksii occupied the position of the Deputy Chief of Strategic Planning Department of the MoD. During his military career he had multiple deployments to Iraq (OIF) and Lebanon (UNIFIL).

Is Ukraine's reformed military ready to repel a new Russian invasion? - Atlantic Council

Return to Index

Opinion: The Navy SEALs, a Christmas story

(Washington Post 23 Dec 21) ... David Ignatius

It might seem like a stretch to view the Navy SEALs, among the most fearsome warriors on the planet, as a Christmas story of humility and renewal, but let me explain.

Two years ago, the SEALs were near rock bottom. Almost two decades of vicious war in Iraq and Afghanistan had exhausted and degraded these elite fighters. SEALs were carrying hatchets into battle. Some bragged of "canoeing" their victims by splitting their heads open with a bullet. Too many were behaving like pirates rather than disciplined warriors.

"We have a problem," Rear Adm. Collin Green, the SEALs commander, announced in July 2019. The most obvious example was Special Operations Chief Eddie Gallagher, who had been convicted that month by a military court for posing with a trophy photo of a dead Islamic State prisoner in Iraq.

The problem was much deeper than that. Gallagher was a symbol of a force that had become too glamorous for its own good. America wanted heroes after 9/11, and the SEALs fit the bill. Gallagher was a walking poster boy: He was super-fit, fearless, churchgoing, movie-star handsome and ready to do anything and go anywhere to destroy America's enemies.

But Gallagher lost his way, senior Navy officers told me. He became a political figure in an organization that required discipline and professionalism. When a Navy review board was considering whether to strip Gallagher of his prized Trident pin after his conviction, President Donald Trump ordered it to stand down. Young SEALs who had reported Gallagher's improper actions were "ostracized," commanders told me.

"We were soft on accountability," a senior Navy commander recalled this week. "Our junior officers were more cheerleaders than naval officers. ... I think we needed to look at ourselves." Green moved on to Special Operations Command (SOCOM), where he is now deputy commander and was promoted last week to vice admiral.













The Gallagher tale is superbly told in the recent book "Alpha: Eddie Gallagher and the War for the Soul of the Navy SEALs," by New York Times reporter David Philipps. But there's an epilogue about how the SEALs recovered their balance, as told in interviews this week with top commanders.

The redemption story began two years ago, in the aftermath of the Gallagher fiasco. Army Gen. Richard Clarke, head of SOCOM, ordered a comprehensive review of the "culture and ethics" of all special forces, including the SEALs. Clarke summarized the findings in January 2020: Nearly two decades of war had "imbalanced" the elite combat forces and "set conditions favorable for inappropriate behavior."

"Trust is our currency," but recent discipline issues had "jeopardized that trust," Clarke wrote in a letter to service members.

Then something amazing happened. The SEALs regrouped to begin a process of healing and rebuilding. A new commander, Rear Adm. H. Wyman Howard III, opted for "a complete restart," he told me. He cut the operational side of the organization nearly in half, from 72 platoons to 48. He changed recruitment, training, assessment and promotion procedures. He actually borrowed some ideas from the Army and Marines!

Howard chose as his closest aide Lt. Cmdr. Forrest Crowell, a SEAL who had been warning that something was wrong. Back in 2015, Crowell had written a thesis for the **Naval Postgraduate School** titled "SEALs Gone Wild: Publicity, Fame and the Loss of the Quiet Professional." Howard began to rebuild a force that, as he put it to me, "had over-rotated to counterterrorism" and "got too famous."

As the SEALs reinvented themselves, they focused on new missions for a world where counterterrorism is no longer the overriding priority. Facing peer competitors such as China and Russia, the SEALs now conduct intelligence-gathering and other secret missions that are, if anything, more dangerous than sniping at Islamic State fighters, as Gallagher's generation did.

To remind today's SEALs about the essence of their mission, Howard gives them a copy of the Constitution and a letter he wrote with Force Master Chief Bill King, his top enlisted man. The letter is worth a careful read in this season of reflection.

The SEAL commander reminds his warriors that they are "a team humble in triumph and fully accountable in failure. Our pride is a quiet one — firmly anchored in humility, a humility sharpened through combat losses, mission failures, and imperfection. ... We must all guard against activities that provide opportunities to politicize Naval Special Warfare."

Clarke told me this week that intense combat such as the kind his Special Forces experienced over the past 20 years brings two kinds of dangers: The first, obviously, is being killed or wounded by the enemy. But the second is internal: "the risk of moral injury in going outside the rules of conduct."

The rebirth of the SEALs carries an important message for the United States in this testing time for our national institutions: The efforts by Gallagher and Trump to write their own rules failed. Good leaders did the right things. Real toughness, the kind that wins battles but never boasts, ended up winning. As the SEAL motto puts it: "The deed is all — not the glory."

Opinion | The Navy SEALs, a Christmas story - The Washington Post

Return to Index

The Changing Face of Russian Counter-Irregular Warfare

(War on the Rocks 21 Dec 21) ... Benjamin Arbitter and Kurt Carlson

The United States has special operators in close proximity to Russian forces on three continents. In many cases, the Russian forces on the ground are either actively countering or preparing to counter irregular threats in the event of a Russian military operation. A fixation on Russian irregular warfare and political warfare threats has obscured Russia's other significant capability: counter-irregular warfare. Russia's military lineage is steeped in successful counter-irregular campaigns, with Afghanistan and the First Chechen War as the exceptions proving the rule. Though the new model bears familiar trappings, with it the Russian military has adapted its force structure to counter irregular threats abroad













with a robust suite of expeditionary forces. If the United States intends to seriously compete with and challenge Russia abroad, then it is time to understand the emerging capabilities of Russian counter-irregular forces. Armed with an understanding of Russian counter-irregular warfare, commanders at the tactical and operational level can better exploit Russian weaknesses and manage risk.

What Is Counter-Irregular Warfare?

What do we even mean by "counter-irregular warfare"? We use this term to capture three types of military operations — counter-insurgency, foreign internal defense, counter-terrorism — executed by Russian forces. The Russian tradition of counter-insurgency diverges starkly from doctrinal Western concepts, with implications for Department of Defense strategists and their allies. Whereas Western counter-insurgency responses focus on bolstering governance, Russian approaches are focused on targeting and destroying guerilla forces. Counter-irregular warfare is not intended to replace counter-insurgency in the Western lexicon, but to more accurately describe Russian approaches and methodology.

In short, Russian counter-irregular warfare encapsulates how the Russian military would seek to counter a U.S.-led unconventional warfare campaign in a third country, secure vulnerable rear areas, and how it may increasingly compete for influence at the tactical and operational level.

Ministry of Defence Reform Trickle-Down Effects

By pivoting away from a force reliant upon mass conscription and short terms of service, the Russian military has opened the door to increased readiness, specialization, and technical proficiency within its ranks. As of 2020, the majority of the Russian army was composed of volunteers, and a ban on service abroad for conscripts has forced recent counter-irregular warfare efforts to be executed exclusively by contract soldiers. This is not to say that Russian conscripts receive less initial-entry training, nor are they necessarily less "professional" than their contracted counterparts. They do, however, have less than 12 months of service as compared to longer-term kontraktniki. When personnel accrue experience consistently, units are more cohesive and proficient in advanced technologies at the tactical level, such as digital command and control systems or drones. Although not directly targeted at creating effective counter-irregular formations, the increase of kontraktniki in the Russian military has contributed to a marked increase in expeditionary capability and retained experience — which trickles down to counter-irregular operations.

The Shift to an Agile and Interoperable Force

Russian counter-irregular forces prior to 2015 struggled to coalesce into effective formations. Current Russian operations, such as those in Syria and Libya, demonstrate increased interoperability within the Russian defense enterprise. While Syria and Libya remain two distinctly different types of military operation, Moscow can now adeptly employ combinations of forces from across its military, intelligence and domestic security services, and the private (or, more accurately, semi-state) sector. These custombuilt task forces in Syria and Libya have not yielded the egregious failures in communication and coordination seen prior to 2015. Private military contractors provide plausibly deniable maneuver elements, combat trainers, close air support (in the case of Libya), and a whole suite of specialty logistic and support services depending on the operational environment.

Russian Special Operations Command: An Eastern Facsimile

In 2013, after a four-year study of similar institutions across the globe, the Russian Ministry of Defence created the Kommadovaniye sil Spetsialnykh Operatsiy — Special Operations Forces Command. This organization represented both a capitalization of late-adopter advantage on the part of the Russian Ministry of Defence, and a shift in Russian perspective on the role of special operations forces. Historically, Russian special assignment forces (spetsnaz) functioned exclusively as light infantry augmenting regular army formations. While spetsnaz units absolutely still exist, Russian special operations forces (many recruited from spetsnaz and military intelligence directorate formations) have expanded outside of their traditional roles of direct action and special reconnaissance. Though gaining













notoriety as the "polite people" of Crimean fame, Russian special operations forces in Syria demonstrated a broader mission set. Rather than carrying out unilateral missions, Russian special operations forces augmented Syrian partners and bolstered local operations by coordinating with Russian air assets. The use of indigenous forces in counter-irregular campaigns is by no means new (reference the Army of the Democratic Republic of Afghanistan, or the use of the kadirovtsi in Chechnya). However, the use of special operations forces as connective tissue and force multipliers to indigenous formations highlights a marked shift in Russian military organization. This is a technique — enshrined as a special operations role in NATO doctrine — that Russia has now adopted for use in counter-irregular operations abroad.

Drone Warfare as a Core Component

Drones, which rose to prominence within counter-insurgency operations led by the United States, now form a core component of the Russian counter-irregular approach. This capability is improving quickly due to significant investment and emphasis from the Kremlin. Even with unarmed drones (e.g., during the siege of Aleppo in 2016 and 2017), Russian forces successfully integrated these platforms to provide timely intelligence and enable maneuver. As of 2021, Russian forces training domestically had integrated unarmed and armed unmanned platforms with a ground maneuver force — synchronizing strikes using a Strelets-enabled command post. The Russian kill chain is getting shorter and more precise with the syncing of digital command and control and drones, an important improvement for future campaigns.

Likewise, Russian experiences in Syria, Libya, Ukraine, and (by proxy) Nagorno-Karabakh, have kept the Russian military at the forefront of technologies to counter drones. As a result of these experiences, each Russian military district now has a dedicated element to counter enemy drone attacks and routinely drill against mass drone attacks in unit training scenarios. Russian counter-drone tactics rely predominately upon layered electronic warfare defenses to defeat the threat drone's navigation and communication system. But they also include techniques for physically destroying adversarial drones with standard weapon systems. While these methods do not provide a total defense against enemy unmanned systems, they have proven effective against even U.S. and Operation for Security Cooperation in Europe drones in Syria and Ukraine, respectively.

Beyond the Traditional Military

Another significant change in force structure was the 2016 creation of the Rosgvardia, or the "National Guard" (bearing no resemblance to the Western concept). The Rosgvardia combines internal affairs forces, law enforcement capabilities, and paramilitary units (such as existing Cossack formations) with the stated purpose of countering domestic security threats both independently and in support of the armed forces. Although theoretically focused on domestic territorial defense, National Guard special designation units have demonstrated the ability to effectively integrate with regular forces, deployed to Syria, and would likely be used to secure vulnerable rear areas and target resistance forces in the event of Russian incursions into Ukraine or other neighboring states.

In addition to military forces and the Rosgvardia, Russian intelligence services such as the Foreign Intelligence Service (specifically Zaslon) and Federal Security Service provide yet another capability to any campaign against insurgents or rebel groups. Russia has opaque and limited restrictions on employing these elements abroad, as evidenced by activities in Syria and Venezuela. Each of Russia's intelligence services brings networks and finishing forces that can be used to target resistance movements. While the scale and purpose of the intelligence services' role in recent counter-irregular campaigns remains unclear, the integration of military, Rosgvardia, and intelligence assets provides Moscow with layered options for targeting irregular threats.

Implications

Today, Russian expeditionary counter-irregular packages draw from professional volunteer brigades and battalions, including force multipliers such as special operations forces, drone forces, military police, and private military contractors. When integrated with air power, these force packages allow Moscow to













conduct sustained operations abroad with a relatively small and scalable footprint on the ground. This ability to tailor force composition to create expeditionary counter-irregular task forces is new in the Russian experience, and represents a watershed in expeditionary mobility and command organization. The Russian kill chain is now shorter, its forces are more specialized and capable, and it retains the ability to rapidly scale Moscow's investment abroad in a way new to Russia's historical experience as a continental power.

Developing countries now have a Russian option to provide them with foreign internal defense, security force assistance, or counter-terrorism capabilities against irregular threats. Such a choice is especially appealing to authoritarian or corrupt regimes who want a military answer to an irregular threat but have limited interest in the oversight and pressure to reform that comes from Western support. This is especially relevant in Africa, where Russia continues to increase its military involvement while the United States has begun to scale down. Although training engagements and combined exercises are nothing new, the spread of Russian forces into Mozambique, Central African Republic, and the recent request for Russian mercenary support in Mali are indicative of this shift. For the past 20 years, many of these countries' options for importing military support and security expertise consisted of the United States and U.S. allies such as the United Kingdom or France. The United States and its allies will increasingly need to assess which relationships (and therefore military access), they desire to maintain and which they are comfortable ceding to Russia, which is eager to assert its influence further abroad.

Additionally, with increased Russian counter-irregular deployments abroad come increased opportunities to apply pressure against Moscow in multiple regions, and with combinations of hard and soft power. The consistent violation of human rights by both the military, with its indiscriminate use of fires, and unaccountable private military contractors opens the regime to scrutiny in the information space. The web of private and state actors enabling the expanding Russian footprint abroad also provides potential vulnerabilities for exploitation via cyber or economic levers. Any direct involvement of uniformed Russian military personnel in small wars abroad presents a significant risk to the Kremlin, with its well-documented aversion to Russian casualties. Exploitation of these potential vulnerabilities requires a coherent international strategy between the United States and its allies. The more expansive the Russian efforts abroad, the more pressure points become available to U.S. policymakers seeking to influence behavior in Moscow.

Maj. Benjamin Arbitter and Maj. Kurt Carlson are Army Special Forces officers with operational and combat experience in the European Command and Central Command areas of responsibility. Both are from 10th Special Forces Group and have recently completed master's degrees in defense analysis at the **Naval Postgraduate School** in Monterey. These views do not represent those of the 10th Special Forces Group, the U.S. Army, the Department of Defense, or any part of the U.S. government.

The Changing Face of Russian Counter-Irregular Warfare - War on the Rocks

Return to Index

COMMUNITY:

Monterey Recreation Trail

(Monterey County Now 23 Dec 21)

If you've been on the Rec Trail in Monterey near the **Naval Postgraduate School** lately, you've probably noticed a new, wooden staircase climbing up the dunes toward the beach: That project is being built by the U.S. Navy, which owns the land seaward of its **NPS** campus, to provide better access to the beach and, importantly, to protect two endangered species, Monterey spineflower and Monterey gilia. Both species have a shrinking habitat generally, but a thriving habitat on the Navy's dunes. The seeds for those plants lay dormant until conditions are optimal (springtime), and the staircase will allow those seeds to lay undisturbed until then. The project was in planning from 2013-2020, and is expected to be













completed in June 2022. John Hoellwarth, a spokesperson for Naval Support Activity Monterey, which houses NPS, does not yet know when it will be open to the public.

The Buzz 12.23.31 | The Buzz | montereycountyweekly.com

Return to Index

Volunteering As Long As Possible

(Swift Headline 26 Dec 21) ... Aaron Sittig

For nearly eight years, Larry Boberg would drive from Monterey to Paso Robles, delivering brochures to hotels up and down the coast. Hour after hour, the route became familiar. Boberg grew to expect his surroundings – including a small group from the Salvation Army he'd see deliver meals on Del Monte Avenue every week.

Fascinated by the team of volunteers, who would station themselves outside the **Naval Postgraduate School** and hand out hot meals to the homeless, Boberg began to picture himself alongside them, a sight that soon became a reality.

In October 2020, when the time came for Boberg to retire, he made the switch. Once again, Boberg found himself at Del Monte Avenue, only this time on foot with meals in hand, watching cars pass him by.

"I always knew that when I retired, I wasn't going to ride off into the sunset," said Boberg. "I wanted to give back to the community."

For the past eight months, Boberg has spent 20 hours a week working at the Salvation Army's Sabu Shake Sr. Good Samaritan Center in Sand City. From 8:30 a.m.-12:30 p.m. every weekday, Boberg helps prepare two hot meals for the center's clients and anyone in need of a little extra support.

At 10:30 a.m., the first hot meal is served right at the center, leaving Boberg and his fellow volunteers a tight window to pack up and deliver lunches near the Naval Postgraduate School. Between the two meals, the Salvation Army feeds around 45-55 people a day. The work, Boberg explained, is even more gratifying than he imagined.

"The other day, someone came up to me and just thanked me for being me," he said. "That was everything. I knew right there I made the right decision coming to the Salvation Army."

While Boberg wasn't born in Monterey, he would say he has grown up on the Central Coast. Stationed at Fort Ord in 1975, Boberg has stayed in the area ever since. In fact, Monterey County is really where the roots of Boberg's eventual interest and affinity for the Salvation Army began.

Prior to taking on brochure delivery, Boberg worked as a front desk supervisor at a halfway house in Salinas. For 21 years, he oversaw the comings and goings of clients, a daily responsibility that prepared him for the diverse interactions and needs common to the Salvation Army.

"I worked with a variety of people from a variety of backgrounds with different pasts and different upbringings," said Boberg. "Having that kind of experience and knowing how to communicate was essential for me. It's like second nature."

A natural progression of how his career started, Boberg hopes to see his post-retirement plans last for as long as possible.

"I don't plan on stopping anytime soon," he said. "I enjoy it that much. Volunteering is part of my day now. I look forward to going to the shelter."

Apart from the duties themselves, Boberg's anticipation to return to the Good Samaritan Center day in and day out in part lies in the Salvation Army's commitment to giving back, something he's now grateful to know firsthand, rather than just from afar.

"All of my coworkers come to the shelter 100% dedicated every day," said Boberg. "They care and all have compassion for what they do... For the clients to have someone to converse with and care for them is priceless. And for us, too. A smile goes both ways."

Volunteering as long as possible – Monterey Herald - swiftheadline

Return to Index











