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Weekly Media Report - March 29 - April 4, 2022

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EDUCATION:

Watts College Earns High Marks in US News Rankings

(ASU News 29 Mar 22)

Graduate programs at Arizona State University's Watts College of Public Service and Community Solutions are among the best in the nation, according to the latest U.S. News & World Report rankings, including a No. 1 designation for the emergency management and homeland security program, a No. 12 designation for the School of Public Affairs and a No. 28 designation for the School of Social Work... The emergency management homeland security (EMHS) ranking is up from No. 3 a year ago. ASU is tied with the **Naval Postgraduate School** for the top position, higher than rankings for programs at the University of Central Florida, University of Maryland and Harvard.

New Program Aims to Combine Industrial Engineering with Navy Engineering Analytics (Iowa State University 31 Mar 22) ... Nick Fetty

A group of IMSE researchers recently received a \$520,000 grant from the Office of Naval Research's STEM Education and Workforce Program to establish the Navy Engineering Analytics Program (NEAP), which they intend to eventually become a minor program administered through the IMSE department. NEAP is a unique education and training program that exposes talented undergraduate students at Iowa State University to technical coursework applicable to the Navy. The program will also provide opportunities for the students to work directly with professionals who are solving challenging Navy problems... Courses through this program will teach analytic skills applicable to a wide range of areas while incorporating Navy applications, problems and case studies. The program aims to prepare students for internships with Navy-related entities such as the Office of Naval Research, the Naval Postgraduate School and the Naval Air Systems Command as well as with Department of Defense (DoD)-related companies such as Collins Aerospace, Boeing Defense Systems and Northrup Grumman.

RESEARCH:

NPS Professor, Students Issued Provisional Patent for Liquid Air Energy Storage, Recovery System

(EurekAlert! 29 Mar 22) ... Javier Chagoya (AZO Clean Tech 30 Mar 22) ... Javier Chagoya

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Professor Partners With U.S. Navy, Researches All-Electric Ship

(Baylor Lariat 4 Apr 22) ... Audrey Patterson

Dr. Annette von Jouanne, professor of electrical and computer engineering, partnered with the U.S. Navy on the development of electric ships and how sustainable energy relates to transportation... Von Jouanne said her research













group at Oregon State attracted the attention of the U.S. Navy due to its high power lab, and her continuing work here at Baylor led to further contracts, including a collaboration with the **Naval Postgraduate School** in 2021.

Greenville County Had a School Shooting Thursday, Marking the 43rd in SC Since 1974

(The State 1 Apr 22) ... Patrick McCreless

A shooting at a Greenville County school on Thursday that left one student dead was the 43rd reported incident of gunfire at or near a campus in South Carolina since 1974, a national database shows.

Including the latest Greenville tragedy, there have been 43 types of school shootings in the state between 1974 and 2021, according to the K-12 School Shooting Database, maintained by the **Naval Postgraduate School's** Center for Homeland Defense and Security.

STUDENTS:

Policy Memo: A US Take on the Napoleonic Policing Model

(Small Wars Journal 30 Mar 22) ... Christjan Gaudio

It is time for the United States (US) to develop a land-oriented sister military service to the United States Coast Guard. This organization should combine the uniformed components of the Department of Homeland Security (DHS) with the military police components of the Department of Defense (DOD) and focus on force protection and security missions domestically and overseas. Similar to the Coast Guard, this new uniformed law enforcement organization should be a full-fledged member of the Joint Force, working within the DHS and seconded to the DOD depending on mission requirements. The US predilection for war is to fight nation state conflicts utilizing the Air-Land Battle construct. US adversaries are aware of, and plan to mitigate this preference by focusing on irregular conflicts that neutralizes US military strengths. Addressing these challenges, categorized as strategic competition, requires a force oriented to operate below the threshold of armed conflict, reinforcing the global rules-based order, ensuring and enabling allies and partners, and synchronizing stabilization and peace operations across the Joint Force and within the interagency. Utilizing the Napoleonic Policing Model as a starting point and incorporating lessons learned and modeled by the Coast Guard, this paper recommends the development of a uniformed military law enforcement organization, similar to the Italian Carabinieri, which seamlessly transitions from military operations in support of national objectives to domestic operations enabling civil authority and reinforcing the rule of law... CDR Christjan Gaudio works in the Coast Guard's Office of Counterterrorism and Defense Operations Policy as the Chief of the Counterterrorism Policy and Irregular Warfare Division. He is currently enrolled in the Naval Postgraduate School's Center for Homeland Defense and Security Studies. He is a 2018 graduate of the U.S. Army Command and General Staff College where he was an Art of War Scholar.

FACULTY:

Condemning Putin Will Make it Harder to End the Conflict with Russia

(Washington Post 31 Mar 22) ... Samuel Helfont

As many observers have noted, Russia's invasion of Ukraine parallels Iraq's 1990 invasion of Kuwait. So does the international response. Both then and now, a significant international coalition has united to impose punishing sanctions, accusing the invading country of flagrant violations of international law and basic human rights... Samuel Helfont is an assistant professor of strategy and policy in the Naval War College program at the **Naval Postgraduate School** and author of "Compulsion in Religion: Saddam Hussein, Islam, and the Roots of Insurgencies in Iraq" (Oxford, 2018). The ideas expressed here are personal and do not necessarily reflect the views of any part of the U.S. Government.

How Well-Being Predicts Outstanding Job Performance

(RNZ 3 Apr 22)

Which comes first – happiness or success? In other words, does success at work make you happy or does happiness make you more likely to succeed?... Professor Paul Lester is an associate professor of management at the **Naval Postgraduate School**.

The EU's Gas-Buying Cartel: 5 Reasons Why It's Going To Be Messy

(Politico 31 Mar 22) ... America Hernandez

Russia's invasion of Ukraine is reviving an old scheme — for the EU to form a powerful buyers' cartel and buy natural gas as a bloc..."I don't see any producer giving up profit and traditional supply relationships unless they get













a huge political benefit from it, which probably the EU can't give, it's something only the U.S. can do," said Brenda Shaffer, senior fellow at the Atlantic Council's Global Energy Center and energy professor at the U.S. **Naval Postgraduate School**.

ALUMNI:

ManTech's Justin Bristow on Navigating GovCon Sector, Finding Opportunities for Growth

(Executive Gov 29 Mar 22) ... Summer Myatt

Justin Bristow, executive director for ManTech, was featured recently in an Executive Spotlight interview with the Potomac Officers Club to talk about how his time working with the Border Patrol in Yuma, Arizona has shaped the way he approaches his work today in the private sector across the areas of national and homeland security... "It is important to stay focused on learning, continuously seek out new opportunities and take advantage of temporary promotions, training and opportunities for formal education that are offered. In the 22 years following the completion of my undergraduate degree at Rutgers and my Masters degree from the **Naval Postgraduate School**, I've had many new responsibilities, temporary details and assignments. That work experience helped me prepare for passing the PMP exam with ManTech, and I would strongly recommend the PMP for those entering our industry."

How Blockchain Can Protect Our Devices and Keep our Data Safe

(International Business Times 30 Mar 22) ... Daniel Lee

Revolutionary blockchain technology is transforming our society but for Kevin L. Jackson it's not just all about cryptocurrency and NFT's. Blockchain technology can also beef up our existing infrastructure, and make it fit for purpose in the age of cyberwarfare... Jackson began his career with a BS in Aerospace Engineering in 1979 from the U.S Naval Academy and then a MA in National Security & Strategic Studies followed by an MSEE in Computer Engineering from the **Naval Postgraduate School**. The combination of his Navy Space Technology and US Intelligence Community hybrid cloud computer engineering background has made Jackson an expert in spotting and responding to cyber threats with the military-style precision that is necessary for the post Russo-Ukrainian War era.

San Bernardino Makes Historic Appointment, Darren Goodman Selected The City's First Black Police Chief

(Black Voice News 2 Apr 22) ... S.E. Williams

On Friday, April 1 the City of San Bernardino announced the appointment of Darren Goodman to serve as the city's chief of police... In addition, he holds a master's degree in Public Administration and Doctor of Education in Organizational Change and Leadership from USC. Goodman has also completed law enforcement and leadership programs at Harvard's Kennedy School of Government, the **Naval Postgraduate School's** Center for Homeland Defense and Security, the POST Command College Program and serves as an Adjunct-Professor at California State University, San Bernardino.

Bakersfield, Calif. Native Serves Aboard USS Dewey (DDG 105)

(DVIDS 1 Apr 22) ... Petty Officer 1st Class Benjamin Lewis

Bakersfield, California native, Lt. Cmdr. Carolyne Vu, is assigned to the Arleigh Burke-class guided-missile destroyer USS Dewey (DDG 105). Dewey is forward-deployed to Fleet Activities Yokosuka, Japan, and currently conducting routine operations in the U.S. 7th Fleet area of responsibility...Vu commissioned from the Naval Academy in May, 2012. At sea she and served aboard the Destroyer USS Gravely (DDG 107) homeported in Norfolk, Virginia and on the staff of Commander, Destroyer Squadron (DESRON) 28. She also served ashore at the **Naval Postgraduate School**, earning her degree in Operations Analysis before checking onboard Dewey in May, 2020. Vu serves as Dewey's Combat Systems Officer (CSO), ensuring material readiness of all onboard Combat Systems equipment and that her Sailors are ready to accomplish any mission tasking.

UPCOMING NEWS & EVENTS:

Apr 4-8: Center for Executive Education NSLS Workshop

Apr 19-21: Naval Research Working Group

Apr 26: Center for Executive Education SCW Workshop













EDUCATION:

Watts College Earns High Marks in US News Rankings

(ASU News 29 Mar 22)

Graduate programs at Arizona State University's Watts College of Public Service and Community Solutions are among the best in the nation, according to the latest U.S. News & World Report rankings, including a No. 1 designation for the emergency management and homeland security program, a No. 12 designation for the School of Public Affairs and a No. 28 designation for the School of Social Work.

Seven out of the 12 ASU degree programs in the national top 10 are at Watts College, the nation's largest comprehensive public service college, according to the magazine's rankings in public affairs and social work released today.

The School of Public Affairs' overall ranking rose to No. 12 from No. 13 the previous year. The new ranking outpaces those for Ohio State University, University of North Carolina, Columbia University and Duke University.

The emergency mangagement homeland security (EMHS) ranking is up from No. 3 a year ago. ASU is tied with the **Naval Postgraduate School** for the top position, higher than rankings for programs at the University of Central Florida, University of Maryland and Harvard.

Demonstrating the benefit of the interdisciplinary nature of these degrees, the nonprofit management program was ranked No. 4, higher than the University of Washington, University of Southern California, American University, New York University, Ohio State University and Rutgers University, with courses supported by SPA and the School of Community Resources and Development.

In addition, the School of Social Work is ranked No. 28, maintaining its position in the top 10% of 298 such programs at U.S. colleges and universities, and placing it higher than Bryn Mawr University, Michigan State University, the University of Connecticut and University of Kansas.

"I am so pleased to see our School of Public Affairs is again ranked in the top 15 and our School of Social Work remains in the top 10%," said Watts College Dean Cynthia Lietz, a President's Professor of social work. "And, our concentration in emergency management is recognized as the top program in the nation, a significant achievement! Our faculty have without a doubt earned this distinction."

The School of Public Affairs ranking places it among and above several private institutions, said Donald Siegel, Foundation Professor and School of Public Affairs director.

"The School of Public Affairs' No. 12 ranking places us in a tie with Princeton University, Carnegie-Mellon University and New York University, and ahead of Columbia University and Duke University. These are all elite, private universities that charge more than double our tuition," Siegel said. "(The school) had more top 10 U.S. rankings than any university, except Syracuse and Indiana, which were tied for No. 1 in the nation."

Siegel said he is especially excited that ASU and the School of Public Affairs lead the nation in the growing field of emergency management and homeland security.

"It is clear that (the school) is extremely adept at training emergency managers to help communities prepare for, mitigate and recover from natural and man-made disasters," Siegel said. "Our No. 1 ranking is especially timely, given ASU's strong involvement in the pandemic response and because we are launching a new undergraduate program in EMHS (along with the School of Criminology and Criminal Justice) beginning in 2023.

"The message from the U.S. News rankings is clear: (the school) is one of the leading schools in the nation, thanks to our world-class faculty, innovative academic programs and cutting-edge research centers."

School of Public Affairs Associate Professor Brian Gerber, who is co-director of the Watts- and school-based Center for Emergency Management and Homeland Security, said he appreciates peers' continued recognition of the program's quality.

"The program really excels in part because we emphasize a forward-thinking approach to the complex world we face today for hazards and disasters," Gerber said. "Our students are absolutely













outstanding and contribute so much to program excellence. And we make a very concerted effort to engage with government agencies at all levels, as well as with private and nonprofit stakeholders."

The other School of Public Affairs programs in the top 10 are:

- Information technology, ranked No. 4, higher than the University at Albany-SUNY.
- Local government management, ranked No. 4, higher than University of Georgia, Syracuse University, Indiana University, University of Southern California, New York University and Ohio State University.
- Public management and leadership, ranked No. 4, higher than Harvard, USC, George Washington University, Ohio State, University of Kansas, University of Washington, North Carolina, Rutgers, Georgetown University and NYU.
- Urban policy, ranked No. 6, higher than Rutgers University, University of California-Los Angeles, University of Chicago, University of Michigan, Harvard and Syracuse.
- Environmental policy, ranked No. 8, higher than University of Texas-Austin, Columbia University and Harvard.
- Three other School of Public Affairs programs were ranked in the top 25 nationwide:
- Public finance, ranked No. 12, higher than Maryland, Harvard, American University, Rutgers and Chicago.
- Public policy analysis, ranked No. 19, higher than Ohio State, University of Wisconsin, North Carolina, Cornell University, George Mason University, Brown University, University of Virginia and Johns Hopkins University.
- Social policy, ranked No. 22, higher than Brown and George Mason.

Watts College earns high marks in US News rankings | ASU News
US News ranks 13 ASU graduate programs in top 10 nationwide, 39 in the top 20 | ASU News

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New Program Aims to Combine Industrial Engineering with Navy Engineering Analytics (Iowa State University 31 Mar 22) ... Nick Fetty

A group of IMSE researchers recently received a \$520,000 grant from the Office of Naval Research's STEM Education and Workforce Program to establish the Navy Engineering Analytics Program (NEAP), which they intend to eventually become a minor program administered through the IMSE department. NEAP is a unique education and training program that exposes talented undergraduate students at Iowa State University to technical coursework applicable to the Navy. The program will also provide opportunities for the students to work directly with professionals who are solving challenging Navy problems.

"NEAP will help students develop analytical skills with naval applications and relevance by offering courses in crisis decision making and mitigation, modeling simulation and forecasting, design and evaluation in human-computer interaction, and a capstone course with projects relevant to the Department of Defense," said Cameron MacKenzie, an assistant professor in IMSE who is also serving as the project's principal investigator (PI).

Courses through this program will teach analytic skills applicable to a wide range of areas while incorporating Navy applications, problems and case studies. The program aims to prepare students for internships with Navy-related entities such as the Office of Naval Research, the **Naval Postgraduate School** and the Naval Air Systems Command as well as with Department of Defense (DoD)-related companies such as Collins Aerospace, Boeing Defense Systems and Northrup Grumman.

The program will build upon the IMSE foundation in areas like operations research, human factors and systems engineering. Student will develop skills in decision making, risk mitigation, designing and evaluating human-computer interaction (HCI) systems, modeling and forecasting with uncertainty and data science.













"These skills are applicable to many different industries but the program will focus on how to apply these skills specifically to tackle Navy and defense problems," MacKenzie said.

MacKenzie will be supported by a team of co-PIs, all of whom are on the IMSE faculty, who will each teach different courses and modules. Michael Helwig and Brendan Devine both have military experience and understand how this knowledge is applied in real-world situations. Michael Dorneich is an expert in HCI and teaches a course on designing and evaluating HCI systems. Qing Li and Sarah Ryan are experts in mathematical models, statistics, and dealing with uncertainty in data. MacKenzie will focus on decision analysis and risk management.

"My goal is to give students exposure to analysis methods, specialized organizations, and complex systems that they may not otherwise have access to with traditional internships. This is a world-class networking opportunity as well as a multi-faceted introduction to the intersection of government, military, academia and corporate players," Devine said.

Devine, who served in the U.S. Air Force, said that having DoD experience will be beneficial when teaching the students about the practical application of the skills and knowledge they develop through the program.

"Many DoD employers put new hires in test and evaluation positions for a first assignment," said Devine. "It leverages the enthusiasm of a younger, more junior engineer while exposing them to the functionalities of the system they will be working on. It's truly a choice job; you get to play with a new system before anyone else and therefore you will be the default subject matter expert. Then, a lot of attention and opportunities will come your way."

NEAP is open to any undergraduate student at ISU, and particular emphasis will be placed on recruiting female undergraduate students and veterans. The program is mainly aimed at engineering and business students, and program organizers hope that scholarships will eventually be available for select students. They plan to offer the first course for the program in Fall 2022. Devine thinks that this program can fill a void that is currently vacant.

"I believe there's a real need for this type of course in engineering," said Devine. "Not all engineering roles in society revolve around production, design, or mathematical models. Some are more of an operational role that doesn't tie to a specific discipline, but engineers can play a critical role in the planning and execution of large-scale policy."

New program aims to combine industrial engineering with navy engineering analytics - College of Engineering News (iastate.edu)

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RESEARCH:

NPS Professor, Students Issued Provisional Patent for Liquid Air Energy Storage, Recovery System

(EurekAlert! 29 Mar 22) ... Javier Chagoya (AZO Clean Tech 30 Mar 22) ... Javier Chagoya

A provisional patent has been issued for this prototype Stirling dual-engine apparatus constructed by NPS Systems Engineering students Lts. Christopher Girouard and Nicholas Bailey, with the support of advisor Dr. Anthony Pollman. The students' theses led to this novel approach, using a dual-Stirling engine charge and recovery method for liquid air energy storage (LAES) systems.

Naval Postgraduate School (NPS) Department of Systems Engineering Assistant Professor Tony Pollman, along with university graduates U.S. Navy Lts. Nicholas Bailey and Christopher Girouard, were issued a provisional patent by the U.S. Patent and Trademark Office, Feb. 10, for a novel apparatus using a dual-Stirling engine charge and recovery method for liquid air energy storage (LAES) systems.

"This is a technology that has the potential to shape things we do in life," said Pollman.













Put simply, the dual-Stirling engine is capable of utilizing stored excess energy generated by renewable sources like solar and wind, so it can be utilized when and where it's needed most. Unlike other systems using compressed air energy storage, the NPS team's discovery would not require large tanks for storage, or the geographical constraints that hydro-electric recovery systems require.

"The greatest benefit of this type of energy storage system using liquid air, is that the resource is all around us. It's free, and has no carbon footprint. And it can be built anywhere. And the Stirling engine is also scalable," Pollman said.

The history of the Stirling engine began as a competitor to steam engines in the early 1800s. Unfortunately, inefficiencies in the engine's work cycle could not keep up with a sustained and heavy workload, so its practical use was largely confined to low-power domestic applications.

But, as Pollman quickly noted, the Stirling "is a system that would be used in a micro-grid environment," he said.

This type of engine would augment renewable energy systems which encounter curtailment periods, like wind, hydro-electric and solar panel farms. Curtailment is the reduction of output of a renewable resource below what it is capable of producing.

The two NPS students included on the patent are a couple of years removed from completing their NPS studies. Bailey and Girouard are now working at Naval Shipyards on opposite coasts, and are getting ready to transfer to new jobs following their two-year Engineering Duty Officer qualification tours at Puget Sound and Portsmouth, respectively.

The news about the team's patent award was a pleasant surprise, as they didn't hear about its issuance until a technology reporter published a piece about it from information he gathered from the USPTO Gazette for Patents publication.

"Wow! This news was out of the blue," said Bailey. "To learn that our theses have advanced liquidair technology a little further is very cool. My mom was very proud of me when she found out."

Girouard was just as surprised to discover the possibility of a patent for his contributing thesis in the Stirling engine research.

"I had to ask, is this really going to work? And as we went along, I was really pumped to see how this was going to turn out in our search for an energy storage solution for liquid air," said Girouard.

"The experience that we had in designing and building the prototype was interesting," said Girouard. "Most of the time these [engines] are used to keep highly-sensitive electronic equipment cool rather than generating a phase change for energy storage."

While Girouard worked on the charging and containment of the system, Bailey worked on the recovery of the heat exchanger to minimize loss. Another key benefit of this type of energy generation is the low maintenance power requirements for the system itself.

Bailey said it was an incredible feeling to have the initial prototype work.

"Chris and I worked for over a year using modeling tools that proved that the system could work, but until we saw it actually turn the engine for the first time, we couldn't be sure," said Bailey. "While the initial prototype was inefficient due to design and manufacturing tradeoffs for time, we were able to prove that such an idea had merit and even potential use cases.

"As for scalability, I believe that for [limited] building size, isolated microgrids, this LAES system could solve resiliency troubles seen with renewable sources like wind or solar energy sources," Bailey continued. "Such use cases even have some applicability inside the Department of the Navy like small Marine detachments forward deployed away from infrastructure."

Currently, Bailey is anticipating a new set of orders following his two-years at Puget Sound Naval Shipyard. Girouard is now heading to Naval Surface Warfare Center Philadelphia to be the Program Managers Representative (PMR) for the FFG-62 Land Based Engineering Site, where the team is building the propulsion plant for the Constellation Class Frigate to test prior to the operation of the full vessel.

NPS professor, students issued provisional pa | EurekAlert!

Patent for an Innovative Liquid Air Energy Storage Platform (azocleantech.com)

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Professor Partners With U.S. Navy, Researches All-Electric Ship

(Baylor Lariat 4 Apr 22) ... Audrey Patterson

Dr. Annette von Jouanne, professor of electrical and computer engineering, partnered with the U.S. Navy on the development of electric ships and how sustainable energy relates to transportation.

Von Jouanne said that her life is driven by her Christian faith and that she sees energy as a means of helping people, especially in a sustainable way that provides for our current needs without compromising the needs of future generations.

"As we see in Genesis 2:15, we're called to be a good steward, and God has provided copious amounts of energy in the Earth; He calls us to activate that energy in a responsible way and use it for man's good and God's glory," von Jouanne said. "That's what sustainable energy is really looking at, and sustainable transportation falls along those lines. How can we not only generate power very efficiently for utilization, but also for transportation? How can we generate and utilize that energy efficiently?"

Von Jouanne said her research group at Oregon State attracted the attention of the U.S. Navy due to its high power lab, and her continuing work here at Baylor led to further contracts, including a collaboration with the **Naval Postgraduate School** in 2021.

"Overall, what we are helping the Navy do is to advance their motor drive technology," von Jouanne said. "When you think of the fact that motors consume about 50% of the electric energy that's generated in the U.S. — and that's in industrial applications, commercial and home applications, largely because all of our [heating, ventilation and air conditioning] systems are using electric motors. And so when we can use an efficient controller or drive for that motor, we can save up to 35% in energy costs."

Von Jouanne said electric motors are wise to pursue instead of internal combustion engines in transportation applications because they are very efficient over their entire speed range, from start to full speed.

"[Electric ships] use their energy more efficiently because electricity in the ship is easier to direct into different parts of your system," Ph.D. candidate in electrical engineering Caleb Li said. "[For example] you can use all your energy generated by the gas turbine to be in the propulsion system, so it can move faster or for weaponry. So flexibility, more efficiency and the energy's controllability are the benefits."

Li said his role in the project is to work on the motor drive system. He said the technology has advanced from motor drives using silicon semiconductor technology to advanced semiconductor technologies.

"My project is to advance the silicon technology to wide-bandgap technology, which has higher power density," Li said. "It can make the power electronics components smaller, faster and more efficient"

Von Jouanne said for their primary U.S. Navy contract, they are looking to ensure the motor bearings can handle the operation with advanced wide-bandgap semiconductor switch technology.

"[The project] has now progressed to developing these advanced bearings and really understanding what this new advanced switch technology means for the Navy's advanced motor drive systems," von Jouanne said.

Von Jouanne said for their second U.S. Navy contract, the **Naval Postgraduate School** has developed other low power solutions to solve the adverse effects of the advanced switch technology.

"Namely, to eliminate the common-mode voltage that causes damaging bearing currents, and so we are working to advance that approach to higher power levels that the Navy would use for their motor drive systems," von Jouanne said.

Von Jouanne said while they aren't finished with the projects, their preliminary results include advanced bearings with a conducting grease to ensure no bearing damage.

Li's project for the **Naval Postgraduate School** contract is moving forward, with advances on a four-leg inverter that prevents bearing damage and has never been used in motor drive applications until now.

As this project relates to sustainable transportation, von Jouanne said she sees these motor drive developments used in transportation applications in a much more sustainable way.

"We're talking about electrified aircraft, we're talking about renewable energy applications such as wind turbines, etc." von Joanne said. "This same type of advanced motor drive technology would also really advance the sustainability of many applications."













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Greenville County Had a School Shooting Thursday, Marking the 43rd in SC Since 1974 (The State 1 Apr 22) ... Patrick McCreless

A shooting at a Greenville County school on Thursday that left one student dead was the 43rd reported incident of gunfire at or near a campus in South Carolina since 1974, a national database shows.

Including the latest Greenville tragedy, there have been 43 types of school shootings in the state between 1974 and 2021, according to the K-12 School Shooting Database, maintained by the **Naval Postgraduate School's** Center for Homeland Defense and Security.

The research project documents each time a gun is fired at a school or a bullet hits school property. The project collects data from multiple sources, including the U.S. Secret Service, FBI, Department of Education, the media and multiple advocacy groups.

Most of the shooting incidents listed for South Carolina did not involve deaths like what happened in Greenville County.

Jamari Cortez Bonaparte Jackson, 12, was pronounced dead at a hospital on Thursday after he was shot by a fellow student at Tanglewood Middle School earlier in the day. According to Greenville County Sheriff Hobart Lewis, the suspect was found hiding near the school.

The suspect was not identified since he is a juvenile. Also, nobody else was injured during the shooting.

The database lists eight reported shootings at or near schools in South Carolina last year.

Among the more recent was in Columbia on Dec. 16, when a 15-year-old student at Eau Claire High School fired a gun from the parking lot toward a moving car. There were no injuries and the suspect was arrested. Other students were present at the time and were taken to a safe zone.

Another recent shooting happened on Aug. 14, 2021, when three students at Orangeburg-Wilkinson High School in Orangeburg County were injured in a drive-by shooting.

Earlier in the year on March 8, a person was shot during a domestic dispute in the parking lot of Edwards Elementary School in Chesterfield County while classes were underway.

Below is a full list of school shooting incidents in South Carolina between 1974 and 2021 from most recent to oldest, according to the K-12 School Shooting Database.

Greenville County school shooting 1 of many in SC over years | The State

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STUDENTS:

Policy Memo: A US Take on the Napoleonic Policing Model

(Small Wars Journal 30 Mar 22) ... Christjan Gaudio

Executive Summary

It is time for the United States (US) to develop a land-oriented sister military service to the United States Coast Guard. This organization should combine the uniformed components of the Department of Homeland Security (DHS) with the military police components of the Department of Defense (DOD) and focus on force protection and security missions domestically and overseas. Similar to the Coast Guard, this new uniformed law enforcement organization should be a full-fledged member of the Joint Force, working within the DHS and seconded to the DOD depending on mission requirements. The US predilection for war is to fight nation state conflicts utilizing the Air-Land Battle construct. US adversaries are aware of, and plan to mitigate this preference by focusing on irregular conflicts that neutralizes US military strengths. Addressing these challenges, categorized as strategic competition,













requires a force oriented to operate below the threshold of armed conflict, reinforcing the global rules-based order, ensuring and enabling allies and partners, and synchronizing stabilization and peace operations across the Joint Force and within the interagency. Utilizing the Napoleonic Policing Model as a starting point and incorporating lessons learned and modeled by the Coast Guard, this paper recommends the development of a uniformed military law enforcement organization, similar to the Italian Carabinieri, which seamlessly transitions from military operations in support of national objectives to domestic operations enabling civil authority and reinforcing the rule of law.

A US Take on the Napoleonic Policing Model

There is often a recommendation and discussion of the need for a reorganization of the Department of Homeland Security. This paper will attempt to discuss one organizational change that could be part of a larger reorganization of the greater Homeland Security enterprise. The specific organizational change outlined in this paper is based on the Napoleonic Model of Policing idealized by the Italian Carabinieri and French Gendarmerie and similar, domestically, to the US Coast Guard. The recommendation is to produce an organization that has both law enforcement authorities and military responsibilities through a combination of the uniformed components of the Department of Homeland Security and the military and civilian police units of the Department of Defense focusing on force protection duties and responsibilities spanning the border responsibilities of Border Patrol, building security of the Federal Protective Service, airport security of Transportation Security Administration (TSA) and the combat support responsibilities of the Army's Military Police. This organization would fall outside of the DOD but be a member of the Joint Force and a military service by law (just as with the Coast Guard and Title 14).

The past twenty years of conflict saw the DOD focus on irregular warfare and attempting to stabilize the operating environment in Iraq and Afghanistan. This was done with the military as the lead. Traditionally, the military prefers conventional conflict focused on the binary system of peace and war. The current operating environment shows that geopolitical competitors are exploiting seams between peace and war to neutralize US military strengths. This is illustrated by their contribution and support to adversaries in Iraq and Afghanistan and adaptions made to modernize adversarial military services following observations of US adaptations to meet irregular conflict. Over twenty years the US Army has altered its training models to create lighter forces that can meet irregular enemies on their own ground. The army is now trying to reorient to nation-state conflict and meet challenges posed by Russian aggression and Chinese challenges to the global rules-based order. The lessons learned from adapting to irregular conflict risk being lost as the services seek to transition back to peer state conflict. The development of a uniformed law enforcement organization, focused on enabling civil authority, on border security, and force protection could serve as a repository for such lessons. This would ensure that future learning curves are flattened as the Joint Force meets future challenges in the conventional and irregular warfare arenas. Establishment of such an organization creates efficiency within the Joint Force by providing a complementary capability through its law enforcement and force protection focus while enabling DOD military services to focus on combat arms development and combined arms warfare. The development of a uniformed law enforcement organization within the Joint Force likewise creates budgetary efficiencies by eliminating redundant capabilities across the DOD and DHS. Organization, budgetary, and mission efficiencies could lead to a Joint Force more capable at addressing irregular warfare, better at stabilization, strategic competition, peacekeeping, and conventional warfighting. A Joint Force better able to complement existing instruments of national power while reinforcing national security roles and diplomatic/political efforts.

The Napoleonic policing model is one that combines domestic and military law enforcement responsibilities within one entity. "In Napoleonic systems, such as those of France, Italy, and Spain, military and civilian policing systems exist side by side (with the military policing system primarily designed to police civilians and both systems designed to counterbalance each other). This system creates a uniformed service that bridges understanding between military staffs and civilian governments. An organization that is focused on humanitarian duties while still operating in the environment backed by the threat of force from conventional military capabilities. This complementary nature creates broader capabilities within the Joint Force to bolster US objectives in strategic competition by furthering













relationships with allies and partners in the competitive space. At its most basic level, the creation of this uniformed law enforcement organization achieves ends (US goals) by combining ways (strategic competition) with means (a more capable and balanced Joint Force) and could potentially change the strategic reach of the nation while also improving its ability to operate at a level below armed conflict.

The US focus on strategic competition requires a robust, whole of government approach that balances national instruments of power to compete with adversaries below the threshold of armed conflict while retaining the ability to fight and win in war. These wars could be conflicts of US choice or one thrust upon the nation and range across the continuum of military operations from irregular conflict requiring light role forces supporting diplomatic and humanitarian organizations to high-end conventional warfare requiring a fully integrated and synchronized Joint Force prosecuting Air-Land Battle. Strategic competition encompasses the entire operating environment and requires a nimble Joint Force capable of operating across that environment. Furthermore, an argument could be made that strategic competition requires a DHS able of operating across the continuum of military operations to complement diplomatic, economic, and information efforts. Strategic competition does not differentiate between national instruments of power – it seeks to synchronize them to enable accomplishment of US strategic objectives.

Currently, the US solution to difficult problems is to have the military solve it. This led to military forces taking the lead in diplomatic efforts to build and secure nations in turmoil. Domestically, law enforcement is centered at the local level distributed amongst state and local entities to counterbalance federal investigative authorities. This system is designed to protect the democratic system from centralized, federal tyranny. As a result of this, uniformed federal law enforcement entities are focused on force protection with limited authorities directly focused on specific mission sets. The Uniformed Division of the Secret Service provides security to the President and Vice President, Customs and Border Protection mans border entry control points, Border Patrol provides uniformed presence and security at the US border and TSA provides security at airports. Military services control their own force protection concerns through the development of redundant security personnel. This process is inefficient as it duplicates efforts, creates redundant budgets and rather than a single organization focused capable of complementing military forces in irregular conflict, there are several disparate and competing agencies that do not have the ability to integrate within the Joint Force construct.

It is the ability for forces to integrate and synchronize within the Joint Force construct that makes this uniformed law enforcement organization so compelling. Integration into the force provides representation on planning staffs which accounts for law enforcement equities that address challenges associated with irregular conflict and strategic competition. Liaison officers from non-military services are not a working solution. It takes them time to learn the military system and find areas to assert equities. Integrated uniformed members that work collaboratively with combat arms units providing combat support/force protection functions, tempered by service domestically on border entry control points, force protection security missions, and regularly interacting with the American public provides balance to the military's traditional focus on full-spectrum nation state warfare.

This paper proposes the creation of a Carabinieri type organization within the Department of Homeland Security that fulfills both civil and military police function. It recommends accomplishing this by combining the uniformed components within the DHS; Border Patrol, Customs Border Protection, Uniformed Division of the Secret Service, Federal Protective Service, and Transportation Security Administration; with Department of Defense military police from the Army, Air Force, Marine Corps, and Navy.

"The majority of Carabinieri units are responsible for law enforcement missions and the maintenance of public order and also focus on specialized law enforcement activities such as fighting organized crime and the drug trade. The Carabinieri also conduct military duties such as military police and security tasks as well as overseas policing deployments. They have a hybrid command in that they report to the Minister of the Interior with respect to their law enforcement and public security tasks and to the military chain of command in the context of their military duties."

The combination of DHS components and military police entities creates a land-based force within the DHS similar to the United States Coast Guard - an organization that fulfills federal policing duties and military policing functions complementing national efforts in the strategic competition space.













This new uniformed law enforcement organization, straddling military and civilian responsibilities and a member of the Joint Force, could be labeled as a Special Branch and model on the UK system in addition to its focus on force protection, and combat support. This function complements current DHS intelligence efforts and could provide a vehicle to better integrate it into the larger J2 (intelligence) staffs at combatant commands and on the Joint Staff. Special Branch is a model used to success in the United Kingdom, seen in operations prosecuting terrorism, reinforcing civil authority, and supporting tactical level operations focused on maintaining established rules of law. Incorporation of such a model provides enhanced capabilities while maintaining an emphasis on domestic intelligence constraints, rule of law, and the need to support at the tactical level.

The Department of Homeland Security components earmarked to merge into this new uniformed law enforcement organization all focus on force protection and security. This visible deterrence complements other potential roles, like Special Branch, and military police responsibilities. It is this complementary nature that creates efficiency across the federal government and within the Joint Force. Creating an organization that eliminates budgetary waste while also honing a potent tool to support diplomatic policies globally and domestic policies internally. Combat support functions focus on force protection and security in support of combat arms efforts on the battlefield. Military police units are regularly used at a threshold below armed conflict to provide a visible presence that is seen as less aggressive than that posed by front-line infantry units. The incorporation of these missions into this newly created uniformed law enforcement organization professionalizes the law enforcement credentials on the battlefield, provides ready forces to deploy in support of strategic competition, and creates an entity focused on irregular conflict, specifically stabilization and peace operations.

It is the unique construct of combining peace and war authorities, using the Napoleonic Policing Model, which provides greater utility to the nation. US Code would need to model on Coast Guard authorities (Title 14) to create a similar land-oriented force while also addressing challenges posed by opponents concerned with the potential for such an organization to undermine democratic processes. The main difference to be implemented, different from the Napoleonic Policing Model is that whereas the Italian Carabinieri/ French Gendarmerie Model is Ministry of Defense seconded to Ministry of Interior; the US model, as currently illustrated by the Coast Guard, is Department of Homeland Security seconded to Department of Defense through the Joint Force. This US model aligns with civilian/federal law enforcement controls that are conducive with limiting tyrannical reach in a representative democracy while also providing the military with complementary capabilities in the strategic competition space.

Individual federal, state, and local organizations will resist this policy recommendation. They have vested interests in the way the system works now be they budgetary or managerial/span of control. There are viable public concerns related to tyranny and the perception that the federal government is getting too strong that will need to be addressed and protected in US Code. These concerns can be mitigated by reinforcing the focus on force protection and security responsibilities both domestically and overseas and not enhancing the authorities of the original organizations (i.e., think twice about establishing a Special Branch). Furthermore, discussions of military overreach and threats to US democracy do not account for the ingrained, rigorous training program that Joint Force personnel undergo throughout their career emphasizing the primacy of civilian elected leaders over the instruments of state power. It is easy to whitewash this as window dressing; however, experience shows that officers and enlisted personnel take these obligations and concerns to heart and conduct themselves in a fashion that ensures primacy of civilian leaders over the military instrument of national power.

Creation of a uniformed law enforcement organization, similar to the Carabinieri, and modeled on US Coast Guard authorities fills an existing gap within the Joint Force structure and enables the United States to better address challenges posed by strategic competition. Development of this organization creates efficiencies within the federal government by combining redundant capabilities while also expanding the experiences and capabilities of units in combat support roles supporting military operations. A uniformed law enforcement organization that combines force protection and security functions across the federal government, including military roles, provides a cadre of subject matter experts focused on operations below the level of armed conflict and capable of addressing challenges posed by stabilization missions while storing and incorporating lessons learned from past experiences in irregular conflicts. This













uniformed law enforcement organization would be a military service, making it a member of the Joint Force, with domestic law enforcement responsibilities focused on force protection and security. As a military service, its officers and enlisted personnel would undergo the same standards of training that the other service complete, including rigorous courses on the role military services play in the US democratic system and the supremacy of civilian elected leaders. A unit constrained by ideals and policies, focused on strategic competition below the level of armed conflict, and operating across the continuum of military operations in both domestic and forward deployed roles provides an awesome addition to the Joint Force and enables the United States to better address military contingencies, foreign training and enablement of allies and partners, and an improved means of reinforcing model behavior and the accepted global rules-based order.

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FACULTY:

Condemning Putin Will Make it Harder to End the Conflict with Russia

(Washington Post 31 Mar 22) ... Samuel Helfont

As many observers have noted, Russia's invasion of Ukraine parallels Iraq's 1990 invasion of Kuwait. So does the international response. Both then and now, a significant international coalition has united to impose punishing sanctions, accusing the invading country of flagrant violations of international law and basic human rights.

So far, the U.S.-led response seems to be bringing together allies and hitting Russia hard. Sanctions have crippled the Russian economy. Similarly, three decades ago during the Gulf crisis, President George H.W. Bush received high marks for bringing the world together to impose unprecedented sanctions on Iraq. The robust international response ignited hopes for what Bush called a "new world order," much as today's headlines suggest a newly reunited West.

My research on Iraq under sanctions suggests that building the coalition and imposing sanctions will be the easy part. Bush ended the first Gulf War by uniting a military coalition that expelled Saddam Hussein's forces from Kuwait — but that didn't end the conflict with Iraq. Russia's nuclear weapons make NATO involvement in the conflict unlikely — and the rhetoric and sanctions will make ending the conflict with Russia quite difficult.

Sanctions tend to take on a life of their own, causing intense suffering among the general population without significantly harming the ruling elite. Indeed, sanctions can strengthen the leader's hold on power. International unity forged during crisis can be difficult to sustain over time as national interests diverge. And once the invading leader has been demonized to arouse support for sanctions, it becomes difficult to lift the sanctions or accept a political compromise.

How do you negotiate after you've said, as President Biden recently said about Russian President Vladimir Putin, that someone "cannot remain in power"?

Biden called Putin a 'war criminal.' That's risky.













The political expediency of harsh rhetoric

Biden recently called Putin a "war criminal." The International Court of Justice has ordered Russia to leave Ukraine, and the International Criminal Court is investigating possible Russian war crimes, for which Putin could be held accountable.

Given the bombing of hospitals, "war criminal" may be accurate. Such a term is certainly politically useful in building support for policies that raise fuel prices and may escalate the war.

Bush used similar rhetoric. He argued, "We're dealing with Hitler revisited, a totalitarianism and a brutality that is naked and unprecedented in modern times, and that must not stand!" After the Gulf War, Bush's secretary of state, James Baker, told his European counterparts that Hussein was "a murderer, and a thug, and a criminal. No one — I repeat no one — should conduct any normal business with an Iraqi government headed by Saddam."

The Clinton administration continued this approach. When asked if he would moderate U.S. policy on Iraq in 1994, President Bill Clinton responded that Hussein was guilty of "crimes against humanity, including genocide," and that Clinton would "see that Saddam Hussein and his regime are held fully responsible for the bloodshed in Kuwait and Iraq." But until President George W. Bush's administration, the United States lacked the means or the will to hold Hussein accountable or remove him from power.

George H.W. Bush's descriptions of Hussein's "brutality against innocent citizens" were often accurate. However, they made ending the conflict politically untenable.

Perpetual sanctions, no regime change

Sanctions have a poor track record for inducing regime change. Crippling sanctions in Iraq increased food prices by 4,000 percent between 1990 and 1995. News media reported that ordinary Iraqis were selling their gold and furniture and that poor families were forced to send their children to orphanages. But Saddam continued to build palaces; people close to the regime emerged as a newly wealthy class. In 1996, an oil-for-food scheme further enriched regime officials while doing little for ordinary Iraqis.

The sanctions on Iraq, designed to undermine Hussein's support, made Iraqis more dependent on his regime. As the Iraqi economy collapsed, the government rationed food, which in practice meant that the regime decided who ate and how much. After a decade of sanctions the regime still had a strong grip on power.

Hussein eventually realized that the United States was unwilling to lift sanctions and ceased cooperating with the United Nations, suspending weapons inspections in Iraq. If Putin comes to a similar conclusion, he may be less likely to leave Ukraine. That would increase the likelihood of a bloody stalemate.

Diplomatic costs of a stalemate

In the 1990s, Bush's coalition was torn apart by the desire for Iraqi oil, the aversion to Iraqi suffering and the United States' refusal to compromise.

Moscow had supported Washington in the Gulf crisis, and U.S. leaders hoped it would be a pillar of the new post-Cold War order. But in 1994, Russian Foreign Minister Andrei Kozyrev argued that if Iraq began to cooperate, the United States and the U.N. Security Council "must be ready to take 'Yes' for an answer." France and then most of Western Europe soon joined Moscow in criticizing U.S. inflexibility. France stopped helping to enforce no-fly zones over Iraq. The humanitarian crisis eroded support for a strategy of containment. In 1998, these disagreements led Russia to recall its ambassador to Washington for the first time since World War II.

But even if the Clinton administration had wanted to change course, anti-Hussein rhetoric in the U.S. had created domestic constraints that were hard to overcome. In 1998, the Senate passed the Iraq Liberation Act by unanimous consent, codifying an uncompromising policy of regime change in Baghdad. That position increasingly isolated the United States from its allies, undermined its moral standing and hurt its interests. One result was the 2003 Iraq War, which irreparably damaged U.S. foreign policy and was catastrophic for Iraqis.













Unsatisfying outcomes

Iraq never fully met its Gulf War's cease-fire agreement obligations. Hussein also continued violating his citizens' human rights. Yet at several points in the 1990s, Baghdad sought to reset its relationship with Washington and the West.

When Iraq showed a willingness to cooperate, Washington could not reciprocate. How can one negotiate with Hitler?

Regardless of what happens in Ukraine, it's unlikely that sanctions will topple Putin's regime. Over time, the coalition will likely fray, as the need for peace in Eastern Europe and access to Russian energy leads much of the world to come to terms with Putin.

Samuel Helfont is an assistant professor of strategy and policy in the Naval War College program at the **Naval Postgraduate School** and author of "Compulsion in Religion: Saddam Hussein, Islam, and the Roots of Insurgencies in Iraq" (Oxford, 2018). The ideas expressed here are personal and do not necessarily reflect the views of any part of the U.S. Government.

What can Saddam's invasion of Kuwait teach us about Putin's invasion of Ukraine? - The Washington Post

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How Well-Being Predicts Outstanding Job Performance

(RNZ 3 Apr 22)

Which comes first – happiness or success? In other words, does success at work make you happy or does happiness make you more likely to succeed?

Professor Lester Paul Lester and his colleagues spent five years trying to find out the answer to this confounding chicken-and-the-egg question.

They discovered happiness is a superpower when it comes to job performance.

For five years, Professor Lester and his research team followed nearly 1 million US Department of Defense employees, measuring their happiness and optimism.

They found that people with the highest rates of positive well-being had almost four times as much awards recognition as those in the group with the lowest well-being scores.

The results of their study indicate a "modest, but practically significant relationship between well-being in receiving an award for job performance," Lester tells Jim Mora.

"That's after we even controlled for 11 other factors, including age, gender, education, and a host of other stuff that were in some of the statistical models that we were building."

Relatively unhappy people and pessimistic people still received awards for their job performance, the researchers found, but a difference emerged when they compared happy individuals with those who were unhappy.

"Those who were happy were about four times more likely to actually receive an award for their performance than those who were unhappy."

The US Defense Department is one of the largest employers in the world with a very diverse workforce, Lester says.

"If you look at most of the studies that have been done on wellbeing and happiness, they tend to be focused on white-collar workers or those who aspire to be white-collar workers, by that, I mean college students. That's not what our study was.

"Our study ran the gamut across white-collar and blue-collar type fields."

If employers paid more attention to looking after their people they would reap dollar dividends, Lester says.

"I think organisations are just too concerned with their quarterly earnings statements and not concerned enough about the well-being of their workers."

People are the platform for a company's success, he says.













"We know based on a lot of research that when happier employees are healthier, they come to work more often. So, there's lower rates of absenteeism, they're highly motivated to succeed, they're creative, they have better relationships with their peers, and they're less likely to leave the company and all of those things affect the bottom line of your company.

"While your company might invest in the next technology to keep their edge over competitors, and that's understandable, perhaps consider investing in your employees' well-being, because you don't want your biggest asset to just walk out the door."

There are three exercises Lester and his researchers developed to increase the happiness of workers.

"The first we call the Gratitude Visit; people prepare and then present a 300-word testimony of gratitude to someone who changed their life for the better."

The second exercise they call Three Good Things.

"People write down three things that went well for them each day, and what caused those things to go well for them. And they do so each day over the course of about a week."

The third exercise is based on an individual's "signature strengths".

"It calls on people to fill out a free online survey, they get the feedback, and then they use their top strengths. So, the survey measures character strengths and then they use that top strength in a new way each day for about a week.

"The research showed that the Three Good Things and the Signature Strengths exercise increased happiness and decreased depression over about a six month period, while the Gratitude Visit did the same for about a month. So we know that these things work."

Leaders at any level of an organisation can start doing these exercises with their workers, Lester says.

"I always recommend that the leaders actually sit down right alongside their workers and do this, so they can role model, the effort of becoming happier over time."

Professor Paul Lester is an associate professor of management at the **Naval Postgraduate School**. How well-being predicts outstanding job performance | RNZ

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The EU's Gas-Buying Cartel: 5 Reasons Why It's Going To Be Messy

(Politico 31 Mar 22) ... America Hernandez

Russia's invasion of Ukraine is reviving an old scheme — for the EU to form a powerful buyers' cartel and buy natural gas as a bloc.

If it works, the idea would be for the EU to play a key role in global gas markets — and to boost its geopolitical heft — while slashing its reliance on Russian energy imports.

The framing seems simple. In a 52-word paragraph, EU leaders last week agreed to "work together on voluntary common purchase" of gas and other fuels "making optimal use of the collective political and market weight of the European Union and its Member States to dampen prices in negotiations."

The model is the bloc's success in jointly buying vaccines, "where EU-wide action was crucial to guarantee sufficient supplies of vaccines for all," the Commission said in a communication.

But gas is much more problematic than medicines.

There's a reason why past efforts to set up a common gas buying system fizzled. A buyers' cartel raises potential problems with EU competition law, could see countries squabbling among themselves for access to supplies, creates potential clashes between energy companies and governments and may blow up the current global gas market.

One cautionary example is nuclear fuel, where past efforts at voluntary joint purchases have failed, said Leigh Hancher, senior adviser in the antitrust and competition law practice at Baker Botts in Brussels.

"From the very early days member states, especially France, always opposed it, clipped its wings and made sure it wouldn't work," she said. "I really wonder why we think we won't have these problems for gas supply."











Here are five reasons why an EU gas buyers' club will be very difficult to set up.

1. It only works if everyone's in

Purchasing power works best if you're buying a lot — and right now it's not clear what percentage of the bloc's gas would fall under the proposed joint procurement program.

Under the scheme, the Commission sees itself setting up a contracting platform for interested countries, "collecting gas orders and matching supplies" through "bilateral negotiations with major gas producers." Representatives of EU countries would sit on a steering board for the Brussels-led task force.

But many EU countries are already tied into long-term gas contracts. If the joint platform is only buying the equivalent of an extra top-up, it's less attractive.

2. Getting the gas is going to need political muscle

The current global gas crunch means producers command record-high prices for their limited supply—and would need serious sweeteners to consider selling to the EU at lower rates, especially if that means jilting long-standing customers.

"I don't see any producer giving up profit and traditional supply relationships unless they get a huge political benefit from it, which probably the EU can't give, it's something only the U.S. can do," said Brenda Shaffer, senior fellow at the Atlantic Council's Global Energy Center and energy professor at the U.S. Naval Postgraduate School.

Georg Zachmann, senior fellow at the Bruegel think tank in Brussels, agreed.

"There's a lot of money involved, and if the Commission is going to be signing deals worth dozens of billions of euros with state companies in difficult countries, there are political considerations that might get into the decision on who to buy from and how much to pay them," Zachmann said.

But, he added: "We need it. It does not make sense for all these different [national] ministers going to all these different places offering whatever they can offer in terms of side deals so that their companies can get the gas."

3. It could break EU competition rules

Ganging up to force prices down could be seen as an illegal cartel, depending on who's doing the buying and how much confidential price information is being shared.

The Commission was vague on who the official purchaser would be, while French President Emmanuel Macron said: "It is not the governments but companies that [would] sign these contracts."

But having the EU negotiate favorable deals for private or partially state-owned energy companies on a special platform raises antitrust alarm bells.

"All these companies that would participate in the buying cartel — or if you're nice, the joint buyers' club — would be very large in the member state they come from, most likely government-owned, so then one question is, who gets to decide who joins it and what are the conditions for joining?" said Kim Talus, energy law professor at Tulane University in Louisiana and at the University of Eastern Finland Law School.

Hancher agreed. "If you're [French gas firm] Engie, let's say, and you were in there, you'd be quite happy, and if you're BP and you're not, you'd be less happy," she said.

The other problem is that to ensure you're getting a better deal, "you have to share relatively sensitive commercial information which might lead to tacit collusion, because everybody knows everybody's price, which is normally not disclosed to competitors," Talus added.

There are ways around that: Companies could confidentially share information with the Commission. EU competition law also allows for exemptions, like proof the agreement resulted in improved distribution of goods and a more fair sharing of benefits among consumers.

Joint buying could see companies that normally compete against each other sharing information on consumption levels, pricing and market share. "You're not supposed to have corporate agreements that involve pricing," said Lena Sandberg, partner in the antitrust and competition practice group at Gibson, Dunn & Crutcher in Brussels.













4. Divvying up the gas will be a headache

EU countries have different levels of gas reliance on Russia, and not every member has storage facilities or direct access to an import terminal for cargoes arriving via ship.

That creates problems when apportioning volumes and factoring in final prices, which will differ once fees are added in for re-liquefying LNG cargoes and paying transit costs to reach the destination country via pipeline.

Creating a club that would buy, liquefy and transit gas could raise even more antitrust concerns, Talus said.

"The main challenge is distributional in nature," said Zachmann. "Finding a way to ensure the risk sharing is done in a way that is acceptable to all ... there are a few countries that are more responsible than others for the current situation, and finding a nice way out for them by letting others pay is not going to fly easily."

There's also no guarantee that countries holding the gas in storage will send it to a neighbor as promised if faced with a cold snap or supply emergency.

EU countries are notorious for squabbling among themselves, and once the moment for international unity around the war in Ukraine fades, these tendencies are certain to return.

Sandberg played out future scraps over gas allocation. "Yes, I get more than you; no, this was not our agreement. Why does Germany get priority? How come Spain can have price caps on gas and at the same time get access to priority gas? Who decided on this allocation? Based on new figures or old figures? ... I can keep going," she said.

5. It's already boosting gas prices

The Commission wants the buying cartel to be in place by this summer so that the EU can fill up its storage before the winter heating season.

But the EU is such a behemoth on the gas market that every utterance out of Brussels affects prices. In March, the Commission proposed mandating that countries fill up their storage to 90 percent by October 1, which sent prices soaring from about ϵ 70 per megawatt-hour in January to a record ϵ 210 in early March. The Commission quickly retreated and said it wants storage filled to 80 percent by November 1, causing prices to drop back to ϵ 108.

"Just by saying what they wanted to do, they made it harder to actually do it," said Tom Marzec-Manser, head of gas analytics at ICIS.

That's an example of unexpected consequences of a market intervention, and a buyers' bloc could have similar impacts.

"Market intervention will continue to distort future gas pricing," said James Huckstepp, a gas analyst with S&P Global Platts.

The EU's gas-buying cartel: 5 reasons why it's going to be messy – POLITICO

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ALUMNI:

ManTech's Justin Bristow on Navigating GovCon Sector, Finding Opportunities for Growth

(Executive Gov 29 Mar 22) ... Summer Myatt

Justin Bristow, executive director for ManTech, was featured recently in an Executive Spotlight interview with the Potomac Officers Club to talk about how his time working with the Border Patrol in Yuma, Arizona has shaped the way he approaches his work today in the private sector across the areas of national and homeland security.

Bristow began as a Border Patrol agent over two decades ago, and he climbed the ranks to chief strategy officer in 2014. In this capacity, Bristow led the technical assistance, regulation development and













implementation of the Border Patrol Agent Pay Reform Act of 2014. In 2017, Bristow became the second uniformed border patrol agent in the Border Patrol's history with his appointment as a Director at the National Security Council.

In this excerpt from the interview, Bristow shares his advice for professionals looking to tap into the government contracting industry:

"It is important to stay focused on learning, continuously seek out new opportunities and take advantage of temporary promotions, training and opportunities for formal education that are offered. In the 22 years following the completion of my undergraduate degree at Rutgers and my Masters degree from the **Naval Postgraduate School**, I've had many new responsibilities, temporary details and assignments. That work experience helped me prepare for passing the PMP exam with ManTech, and I would strongly recommend the PMP for those entering our industry."

<u>ManTech's Justin Bristow on Navigating GovCon Sector, Finding Opportunities for Growth</u> (executivegov.com)

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How Blockchain Can Protect Our Devices and Keep our Data Safe

(International Business Times 30 Mar 22) ... Daniel Lee

Revolutionary blockchain technology is transforming our society but for Kevin L. Jackson it's not just all about cryptocurrency and NFT's. Blockchain technology can also beef up our existing infrastructure, and make it fit for purpose in the age of cyberwarfare.

In 2021 over 65 million Amazon Alexa speakers were sold. As well as streaming music and setting alarms, they are the gateway to the internet of things (IoT), a revolutionary technology that allows users to close their curtains, boil a kettle, or turn off their lights with the flick of a button on their phone or through a voice command. The speaker or your phone acts as a hub through which smart household devices communicate.

Interconnectivity, however, is problematic from a security point of view. Thousands of security cameras and baby monitors using WiFi have been hacked with little effort as described by Brian Lam, a security engineer at M&A security.

As the pace of Russia's invasion against Ukraine steps up and the West responds with crippling sanctions, we are on the verge of entering all-out cyber warfare on a scale never before seen.

On a national level, we've already seen the damage a hacked supply chain can bring to the country when the Colonial Pipeline was hacked. The ransomware attack left drivers stuck in queues for hours waiting for gas. Pipeline operations were brought to a standstill in a bid to contain the attack which resulted in the hackers being paid off.

On an individual level, the damage that can be wreaked by hacked CCTV and even hacked smart cars - which also link up to the Internet of Things through services like Apple's Carplay - will be immense.

Yet devices are vulnerable to this kind of exploitation largely because we don't have enough information about how data is passed between these devices. We don't have an overarching cybersecurity law that standardizes the security precautions a company, its suppliers, and software vendors must make for it to be sold on the market.

Instead, ordinary users have no idea how vulnerable a device they are using is to outside hacking. Jackson, Senior Vice President at Total Network Solutions Inc. believes blockchain technology goes some way to solving this.

Jackson and his team at TNS, have developed a Universal Communication Identifier which is the world's first blockchain-enabled service for supply chain security, device management, software licensing, and equipment tracking. By tokenizing all connected devices onto a blockchain, users will have improved visibility on when and where a hack has occurred, across all of our connected devices. Users will also have a record of information transactions associated with that device.













This transparency will allow users to determine any suspicious devices on the platform and decide if they want to cut them out of the network.

Jackson began his career with a BS in Aerospace Engineering in 1979 from the U.S Naval Academy and then a MA in National Security & Strategic Studies followed by an MSEE in Computer Engineering from the **Naval Postgraduate School**. The combination of his Navy Space Technology and US Intelligence Community hybrid cloud computer engineering background has made Jackson an expert in spotting and responding to cyber threats with the military-style precision that is necessary for the post Russo-Ukrainian War era.

Jackson, a former executive for IBM and JP Morgan Chase, has been an expert on advanced technology and cyber security since the late 1990s. He is a USA Today and WSJ-bestselling author whose books include "Click to Transform" (2020) and "Architecting Cloud Computing Solutions" (2018), both of which have since become well respected guides for cloud computing and digital transformation implementations. Kevin is also the host of "Digital Transformers", a video blog that highlights the companies and executives leading global industries into the digital future.

As Jackson has progressed in his career his career has become almost unimaginable to what it was when he first started, something a throwaway remark made in Speech Technology Magazine 1999 confirms: 'For the first time in the nearly 40–year history of "wearable" computers, reality can meet society's expectations.' Today, millions of people use Apple Watches to measure their heartbeats and daily exercise and we can say those expectations have been met.

Now Jackson's position as a thought leader and consultant through GovCloud Network is undergoing a revolution with the acceleration of Web 3.0 and blockchain technologies. Whilst the cloud-enabled people ditch traditional server-based computing for security and storage reasons, decentralization through the blockchain will soon see companies and users reconsidering the way they think about security once again.

With over 300,000 followers on social media, Jackson has a host of accolades to his name. He is the host of the "Digital Transformers" video podcast, been recognized as a "Top 5G Influencer" (Onalytica 2019, Radar 2020) and a "Top 50 Global Digital Transformation Thought Leader" (Thinkers 360 2019), a "Top 100 Cybersecurity Influencer and Brand" by Onalytica (2015), a Huffington Post "Top 100 Cloud Computing Experts on Twitter" (2013), a "Top 50 Cloud Computing Blogger for IT Integrators" by CRN (2015) and a "Top 5 Must-Read Cloud Blog" by BMC Software (2015).

With threats to supply chains and individual data at every corner today in a post-Covid and post-Ukraine world, Jackson's ideas on cybersecurity have never been more necessary. He is someone to watch in 2022

How Blockchain Can Protect Our Devices and Keep our Data Safe (ibtimes.com)

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San Bernardino Makes Historic Appointment, Darren Goodman Selected The City's First Black Police Chief

(Black Voice News 2 Apr 22) ... S.E. Williams

On Friday, April 1 the City of San Bernardino announced the appointment of Darren Goodman to serve as the city's chief of police.

The nationwide search for the right candidate seemed exorbitantly long—the search took nearly three years—and in the interim, many in the community called for transparency and the fair consideration of Black candidates in the selection. Goodman will be the first African-American police chief to lead the San Bernardino Police Department in its 116-year history.

Community leader and among the strongest advocates for inclusion and opportunities for qualified Blacks to be considered to lead the city's police agency, Chair of the San Bernardino NAACP Legal Redress Committee Hardy Brown Sr. responded to the announcement stating, "I am overjoyed with the











selection of Darren Goodman as Police Chief. . . I am looking forward to seeing him serve in this capacity."

In an exclusive interview with the Black Voice News Chief Goodman acknowledged what that represents. "[I] know how meaningful it is to people who look like me. I know how meaningful it would be—even to my mother—if she were alive."

Even as Goodman embraces the honor of being the 'first' he also embraces the importance of being the 'next'. "I am here to be a good police chief. I am here to be the police chief for everybody," he assured, acknowledging how his job will not be evaluated by his pigmentation but by his performance.

Background and qualifications

With a law enforcement career that spans more than 31 years, Goodman comes to San Bernardino from the City of Upland, where he spent the last four years as its chief of police.

In addition, he holds a master's degree in Public Administration and Doctor of Education in Organizational Change and Leadership from USC. Goodman has also completed law enforcement and leadership programs at Harvard's Kennedy School of Government, the **Naval Postgraduate School's** Center for Homeland Defense and Security, the POST Command College Program and serves as an Adjunct-Professor at California State University, San Bernardino.

When Goodman assumes his San Bernardino post on June 1, he will join a department with 262 sworn officers and 150 civilian staff.

Coming home

In many ways accepting the position in San Bernardino is like coming home for Goodman. "During the early years of my career, several of my assignments were in San Bernardino. I am very familiar with the city, many community members, and the high caliber of police officers that work at the San Bernardino Police Department. I am not oblivious to the challenges the city has had in the past, but I believe in the potential of San Bernardino."

Prior to serving as chief in Upland, he was a captain with the San Bernardino Sheriff's Department. During his 27 years with the department, Goodman's roles included serving as the police chief for the Chino Hills Police Department and commander of the Frank Bland Regional Training Center. He also worked in Corrections, Patrol, Narcotics, Emergency Operations, Regional Gang Enforcement, Fugitive Apprehension, and SWAT.

"Chief Goodman brings to San Bernardino a wealth of experience, leadership, and knowledge of this region," said San Bernardino City Manager Robert D. Field. "We are very pleased that he will be joining us."

Looking ahead

As chief, one of the first things Goodman plans to do to help build bridges between the police department and the community is to facilitate a listening tour. "You have to be able to hear people in order to build bridges," he stressed. "My goal is to listen to my officers, to hear their perspectives regarding what they believe we need to do to better serve the needs of the community. As important, he continued, will be his outreach to community leaders and different community groups to "find out how they feel about the service they are receiving from the police department, as well as how safe they feel or don't feel in their respective communities."

His next steps, he explained, will be to complete an informal gap analysis to figure out what the department can do better while also determining strategies to achieve the desired improvements.

When discussing his methods Goodman advised, "My leadership style is that it is not about me, it is about us." He defines us as the community, the police, and the city council. "I must operate off a shared vision that encompasses all of these different groups."

What comes with his experience

Beyond his strategic approach to solutions, Goodman discussed personal attributes he feels will enable him to best serve the community and the department in his new role especially in respect to













tensions that often haunt relationships between police and Black communities. "When it comes to issues of race, I understand the dynamics on both sides," he offered highlighting how "understanding" is one of the personal attributes he will bring to the job along with his experience and commitment.

"I understand how some of the experiences people have had, frames how they feel and I would be sensitive to that. I also understand that people doing the job of law enforcement will have experiences and they also have a job to do, and I understand that as well."

Goodman added, "I think I would be able to communicate effectively with any group based on the experiences that they've had and bring an understanding of that experience and my commitment to the table to help solve problems."

Policing those experiencing a mental health crisis

Among the many issues related to policing that gained traction in recent years involves public calls for police to respond differently when responding to a mental health crisis as a way to reduce the potential for negative outcomes by engaging mental health experts as part of the police response on such calls.

Goodman considers this a great idea that comes with some challenges that have to be worked out.

"The clear and obvious point of agreement is that police—by themselves—should not be responsible for handling mental health issues."

There is a mix of the mentally ill and those who abuse drugs who can experience a crisis and often it can be difficult to separate the two, he explained while also acknowledging how drug addiction and mental illness are almost synonymous.

In addition, there is also the issue of capacity that needs to be developed and supported at the state and county levels, explaining how we do not have enough places to accommodate those in crisis. "Clearly, we cannot arrest our way out of this problem. It has to be a more comprehensive approach."

A message to the community

In accepting the position as San Bernardino's new police chief, Goodman is clear-eyed. He acknowledges the city has had its challenges. "I know that there are a lot of people who expect great things, and they deserve them. They deserve to have their communities safe. They deserve not to be victimized by crime. My job is public safety. I want them to know that I am going to be committed to ensuring that the quality of their lives improves.

Goodman also recognizes the important role support will play in his ability to successfully realize his commitment. "It will not happen without the support of the community, without the support of the city council," and of course, his team.

"I can't do it all by myself, but I am committed to doing everything I can to improve the quality of life for the residents and business owners of San Bernardino.

San Bernardino Appoints Its First Black Police Chief (blackvoicenews.com)

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Bakersfield, Calif. Native Serves Aboard USS Dewey (DDG 105)

(DVIDS 1 Apr 22) ... Petty Officer 1st Class Benjamin Lewis

Bakersfield, California native, Lt. Cmdr. Carolyne Vu, is assigned to the Arleigh Burke-class guided-missile destroyer USS Dewey (DDG 105). Dewey is forward-deployed to Fleet Activities Yokosuka, Japan, and currently conducting routine operations in the U.S. 7th Fleet area of responsibility.

"Growing up, I learned service over self and had a strong desire to have an impact on the world," said Vu. "My interest in the Navy specifically followed after my interest developed for attending the United States Naval Academy (USNA)."

Vu commissioned from the Naval Academy in May, 2012. At sea she and served aboard the Destroyer USS Gravely (DDG 107) homeported in Norfolk, Virginia and on the staff of Commander, Destroyer Squadron (DESRON) 28. She also served ashore at the **Naval Postgraduate School**, earning













her degree in Operations Analysis before checking onboard Dewey in May, 2020. Vu serves as Dewey's Combat Systems Officer (CSO), ensuring material readiness of all onboard Combat Systems equipment and that her Sailors are ready to accomplish any mission tasking.

"Our mission is continual combat readiness and she is integral to that effort," said Cmdr. Jermaine Brooms, commanding officer of Dewey. "Her equipment is the lynch pin of all combat that this ship can wage; we cannot operate, navigate, nor communicate without her team's efforts."

Vu is also the Senior Watch Officer, supporting the professional development of the crew for both in port and underway qualifications.

"Without her encouragement and mentorship, our team cannot reach its full potential of being effective and efficient warfighters," said Brooms. "Her best quality is her empathetic approach to her teams. She applies compassion in situations when most would apply frustration, and concern when most would apply callousness. This approach has made her the sought-out mentor for countless senior and junior personnel in the Wardroom and on the deck plates."

Vu added that she takes her position aboard Dewey very seriously because of the impact she can have while mentoring young Division Officers as they progress in their Surface Warfare Officer (SWO) qualification process.

"I chose to become a SWO after my Midshipman summer cruise in 2009," added Vu. "I met amazing leaders and Sailors that showed me what an adventure life at sea could be. I was drawn to the immediate impact a young Division Officer could make upon commissioning. Plus, who doesn't want to drive a high-speed warship out at sea!"

Vu says that her family is still in Bakersfield and have been supportive of her career, visiting her at duty stations and sending care packages with "special Bakersfield snacks" to remind her of home. She added that while Bakersfield has developed into a big city, in her mind it remains a patriotic place with a small town vibe. Vu's parents were teenage refugees following the Vietnam War, and she developed a love for the Constitution while studying the Revolutionary War in her 8th grade Social Studies class.

"What better way to repay this country that gave [my parents] the opportunity to share in this American dream than by dedicating myself to supporting and defending the Constitution that grants this way of life," added Vu. "Honor and respect were ingrained in my upbringing. It's important to me that I serve in a manner that will always reflect honorably upon my family, my ship, and the Navy. Also, I strive to include respect in all aspects; respect for others, regardless of rank or rate, and respect for the mission tasking we are asked to execute."

At home Vu has a passion home cooking, and the opportunities she's had to travel around the world and interact with people of diverse backgrounds has greatly enriched her culinary interests. She added that her and her wife have accumulated cookbooks from all over the world from her personal and Navy travels. Vu emphasizes that for those seeking opportunities for travel and personal growth, the Navy may be the right fit.

"The Navy continues to be an amazing adventure; more than I ever imagined as a young girl in Bakersfield," said Vu. "My favorite part is connecting with other people and sharing in a common team goal. Specifically at sea, there is this sensation that is always my favorite – standing topside with the wind blowing, the salt of the sea in the air, and vast blue ocean all around – I can feel the beautiful magnitude of what it takes to serve on a warship. A solidarity and ability to operate together to move us through the sea with purpose. There's no other feeling like it."

Dewey is assigned to DESRON 15 and is underway supporting a free and open Indo-Pacific. Commander, Task Force 71/DESRON 15 is the Navy's largest forward-deployed DESRON and the U.S. 7th Fleet's principal surface force.

DVIDS - News - Bakersfield, Calif. Native Serves Aboard USS Dewey (DDG 105)" (dvidshub.net)

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