



OCTOBER 2019, ISSUE 4



The Brute Krulak Center for **Innovation and Creativity**

Quarterly Newsletter

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From the Director - Valerie Jackson

Autumn Greetings to you All -

I sincerely hope that all of you and your families are well. The Krulak Center has been hard at work the past few months with the start of the new academic year. We have had about a fifty percent staff turnover, including all of our Marine staff and three of our MCUF Bren Chairs. In some organizations, that may have slowed progress, but outstanding people replaced outstanding people, and we are pushing ahead full steam. I am very pleased that LtCol NaTasha Everly, Maj Ian Brown, Maj Jared Cooper, Maj Sara Wood, Dr. Yuval Weber, and Dr. Brandon Valeriano (in a new role) have joined us here at the Center.

We have stood up two new student-based programs to both augment University curricula and engage the greater Fleet as we all pull together to provide answers for the Corps' biggest challenges. These all-hands efforts leverage the collective brainpower of students, faculty, and staff, and are truly in keeping with the longstanding tradition of "Quantico Schools" working for our Commandant. As we focus this year on bringing the Krulak Center expertise to Marines, allies, and partners around the world, we will continue to leverage like organizations for the benefit of our students, especially in the area of wargaming in our new onsite lab. Stay tuned and plugged into our social media sites to participate in our events, contests, and happenings. We're grateful for your support!

Semper Fi, Valerie A. Jackson

Follow us: @TheKrulakCenter









MIDDLE EAST STUDIES



Evolving Security Challenges in Afghanistan





MES with the support of the Marine Corps University Foundation, hosted a panel of distinguished guest speakers to discuss the evolving security challenges and mission of the Marine Corps in Afghanistan on the 18th anniversary of the 9/11 terrorist attacks. The speakers included: LtGen Lawrence D. Nicholson (USMC ret), CG 2d Marine Expeditionary Brigade, Afghanistan, May 2009-April 2010; LtGen John A. Toolan (USMC, ret.), CG II MEF (Fwd), Afghanistan, March 2011-March 2012; MajGen Julian D. Alford, CG TF-SW Rotation 3, Afghanistan 2018-2019; BGen Benjamin T. Watson, CG TF-SW Rotation 2, Afghanistan, 2017-2018; and Dr. Amin Tarzi, Director of Middle East Studies, Brute Krulak Center, Marine Corps University.

MIDDLE EAST STUDIES OUTREACH





Director of Middle East Studies, Dr. Amin Tarzi recently traveled to the NATO Defense College in Rome, Italy.

At the invitation of the NATO Defense College, Dr. Tarzi traveled to Rome, Italy 9-13 October 2019 where he presented a lecture entitled: "NATO/US/Russia and Pakistan: Priorities, Strategies and Challenges in Afghanistan" for NATO DC's Regional Cooperation Course 22.



Engagement with NATO DC and its students has offered opportunities to extend MCU's reach into European and Middle East defense and academic communities, enhance both MES and Krulak Center's scholarship through collaboration, and broaden the resources available to MCU for future endeavors.

The Krulak Center: Hail and Farewell

The Krulak Center said goodbye to a number a essential members of the team this year to include Deputy Director LtCol Chambliss; Operations Officer Maj Tim Riemann; Donald Bren Chair of Creative Problem Solving, Dr. Jeb Nadaner; and Donald Bren Chair of Non-Western Strategic Thought, Dr. Christopher Yung (now serving as the Dean of MCWAR). The Center also welcomed new Deputy Director LtCol NaTasha Everly; Operations Officer Maj Ian Brown; Outreach Officer Maj Jared Cooper; Academics Officer Maj Sara Wood; and the Donald Bren Chair of Russian Military and Political Strategy, Dr. Yuval Weber.



Left to Right: Maj Tim Riemann receiving an award from former MCU President, Brigadier General William J. Bowers.



Left to Right: Ms. Valerie Jackson, Director, The Krulak Center and Dr. Jeb Nadaner.

KRULAK CENTER HIGHLIGHTS

ENGAGEMENTS, WORKSHOPS, AND PME



In June, 2019, the Krulak Center hosted the Belgium National Defence College and discussed ways to better integrated innovated teaching meathods into course instruction. The Krulak Center has also hosted the Australian Defence College and George Mason University in similar engagements.

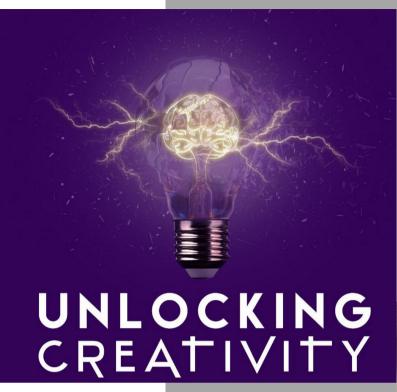
On 15 July, 2019 the Krulak Center hosted Mr. Jason Healey, Senior Research Scholar at Columbia University's School of International and Public Affairs. He discussed the ongoing debate around USCYBERCOM's new concept of persistent engagement, and its role in the wider dynamics of great power competition.





On 30 July, 2019, the Krulak Center hosted Dan Ward, the author of "FIRE: How Fast, Inexpensive, Restrained, and Elegant Methods Ignite Innovation". The Innovation Toolkit (ITK) workshop was a collection of methods and techniques to promote structured, systemic creative thinking and problem solving to make better decisions faster.

INNOVATION BOUND



Team Innovation Bound led a two-day creativity workshop for MCU faculty in The Krulak Center. The IB team cultivated creative thinking amongst the faculty and staff, leading to changes in curriculum design and implementation to further enhance the learning environment.





Faculty learned new ways of expressing ideas and engaging students that resulted in modified evaluation metrics and lecture methods. The event was a great success and left the participants with a new perspective in 21st century educational techniques.

KRULAK CENTER

WARGAMING INITIATIVES

Facilitation and Collaboration

In June of 2019, the Krulak Center with support from the Marine Corps
University Foundation (MCUF), stood up the Collaboration and Wargaming
Center. The Wargaming Center provides students and faculty a chance to visualize new concepts and wargame various scenarios with commercial and unclassified systems.





SEA DRAGON

Sea Dragon is an annual MCU wide annual Wargame designed to promote student's planning capabilities with near term future scenarios. The winner is awarded the Spartan Shield and bragging rights for the year. This year Command and Staff College reclaimed the Spartan Shield from SAW.

For Sea Dragon this year, the Krulak Center and Dr. Ben Jensen (SAW) partnered with DARPA in order to utilize and help refine their DARPA PROTEUS and Mosaic concepts for maneuver. These concepts, in the tradition of maneuver warfare, treat war as a complex, non-linear system. They try to find ways of using novel task organization including low-cost, unmanned systems with multi-domain effects to achieve disproportionate warfighting capabilities. The concepts were presented to the students in a prototype multi-domain wargaming and simulation capability.

The Wargame has three purposes: experimentation, judgment, and development.

Experimentation. Sea Dragon gives the participants a chance to fight in a near-future scenario and think through important topics like electromagnetic spectrum operations (EMSO) and manned-unmanned teaming (MUMT) as they relate to maneuver warfare. The addition of the EMSO planning and execution "Wizard" support tool and 3D display capabilities in the DARPA-provided wargaming system this year allowed the teams to experiment with direction finding, jamming and deception operations that either enhanced or deteriorated their capabilities based on their ability to appropriately plan for these capabilities.

Judgment. Sea Dragon enhances operational judgment by providing a real-time feedback loop and challenging the players to make adjustments to their original plan. Players on the team must make on the spot decisions as opposed to turn based decisions in many table top wargames.

Development. The ability to have 20 separate teams made up of experienced servicemembers and government employees directly supports concept and capability development for DARPA (in support of the U.S. Marine Corps). Players provide immediate feedback on how to improve the program while the capability provider can watch the players plan and make adjustments or try to utilize the program in ways they may not have thought to implement.

The Sea Dragon wargame will return to the Krulak Center in the Spring with the schools once again competing for the coveted Spartan Shield.

Brigadier General
Bargeron presenting
the Spartan Shiled to
the winning team from
Command and Staff
College: Majors Justin
Roberts, Kevin Schuler,
and Aaron Chonko and
Captain Zach Johnson





Students from Command and Staff College (CSC) and the School of Advanced Warfighting (SAW) rehearsing their plan prior executing Sea Dragon



CSC and Expeditionary Warfare School (EWS) students competing as Blue and Red Teams against each other



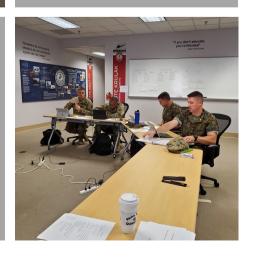




Students from across MCU's five schools competed in teams of 2 to 4



End of day discussions and preparation for the next day's tournament



B R U



Have an idea you would like to share to make the Marine Corps stronger and help solve current and future issues? Then join The Krulak Center for a BruteTalk!

TALKS

E

#BruteTalks is a Krulak Center program to reach a larger USMC and DoD audience with a 10-15 minute monologue where ideas beneficial to the Marine Corps can be heard. The first Talk was launched this year and will continue on a bi-weekly basis. The topics are varied, but so far the Center has covered: Investment Strategies, The Strategic Corporal, Decision-Making Games, and Artificial Intelligence. All video and audio recordings are conducted in the Krulak Center and facilitated by our very own MCU College of Distant Education and Training (CDET). If you have an idea you like to get heard, contact the Krulak Center to conduct a Talk!



- One idea can change everything!
- TED style talk
- Professionally filmed, edited, and posted to social media

We launched our first BruteTalk in September!

- 1. Go to YouTube
- 2. Search Krulak Center



General Robert H. Barrow Fellowship

The Barrow Fellowship is a Krulak Center pilot program designed to enhance academic understanding of critical areas in national security. In its inaugural year, the fellowship seeks to answer the question: "In addition to military matters, what aspects of US-China great power competition should US service members strive to understand?" Members of the fellowship are from various schools within MCU and also groups such as MCWL and DCI. On 18 September 2019, Dr. Daniel Green, Deputy Assistant Secretary of Defense for Strategy and Force Development from the Office of the Secretary of Defense, visited the Krulak Center at Marine Corps University in Quantico, VA. Dr. Green spoke to the membership of the General Robert H. Barrow Fellowship for Strategic Competition, discussing great power competition as it relates to the National Defense Strategy, US-China relations, and the current outlook of the Department of Defense (DoD). Topics discussed included gray zone activities, expanding the competitive arena, and strategies the US military can employ to improve relations with allies and partners. In the coming months, the Barrow Fellowship will invite an array of academics, policy makers, and government officials to help its fellows answer this important question.





Lieutenant General Victor H. Krulak Scholars



The Krulak Scholars are a pilot program aimed at studying the Marine Corps' organization and ability to win future wars. It draws its inspiration from two documents that laid out the challenges the Marine Corps faces on that future battlefield: LtGen Michael Dana's article "Future War: Not Back to the Future," and the 38th Commandant of the Marine Corps' Planning Guidance. The Krulak Scholars will study the history of war, the changing character of war, and the expected capabilities and capacities of adversaries in order to develop recommendations for the organization of the Marines Corps and Joint Force. Students are drawn from Expeditionary Warfare School, Command and Staff College, and the Marine Corps War College. The program is supported by Bren Chair for Military Innovation, Dr. Brandon Valeriano.





Krulak Center Outreach



The World Innovation Network (TWIN)

Krulak Center liaison with Think Tanks and Industry

Left: ADM Mike Rogers (ret.), Director, US Cyber Command (2014-2018) Director, National Security Agency (2014-2018) Right: Rob Wolcott, Co-

Founder & Chairman, TWIN





The Brute Krulak Center for Innovation and Creativity was invited by the Marine Corps Warfighting Lab (MCWL) to attend The World Innovation Network (TWIN) in Chicago, IL. This conference brought together leaders from over six continents with expertise in business, government, non-profit sector, arts, academia, and defense. TWIN is a phenomenal network that celebrates interdisciplinary thinking and creative collaboration. While there, Krulak Center staff engaged participants on a myriad of topics to broaden perspectives on business, tech, geopolitics and world affairs, exploring emerging technologies and education that will benefit our students and shape the future.

Defense Entrepreneurs Forum



DEF 2019

The Defense Entrepreneurs Forum was hosted this year in Washington, D.C. The conference's aim is to promote a culture of innovation in the National Security Community. The Krulak Center hosted students from MCU's Command and Staff College (CSC), Expeditionary Warfare School (EWS), and Major Adam Yang from the Commandant of the Marine Corps Strategist Program.

Topics Included: Emerging technology, fostering innovation, organizational change, rapid acquisitions, talent management, artificial intelligence, design thinking, national security, data aggregation, alternative fuel sources, government / inter-agency collaboration, additive manufacturing, integrating the joint force, contracting / consulting firms, and diversity.

Naval Post Graduate School (NPS)

Littoral Operation in a Contested Environment (LOCE)









From 23-26 September 2019, NPS hosted the annual Warfare Innovation Continuum. The focus of the WIC workshop is "Logistics in Contested Environments." The WIC Workshop is the kickoff for the theme that will continue throughout the year in class projects for Joint Campaign Analysis, Analytical Wargaming, and Systems Engineering. It is a key event for leveraging student work that includes Navy and Marine participants over the coming academic year. The WIC Workshop is a superb opportunity for the Marine Corps to invest in naval integration and rethink our contribution to naval expeditionary forces.





ROADSHOW

Bringing the Krulak Center to the Fleet, and Beyond

One of the Krulak Center's main efforts this year is reaching out to those Marine Corps University entities located around the country (and world!), as well as units of the operating forces. This roadshow tells them who we are and how they can utilize the many resources offered by the Krulak Center as enhancements to their own PME curricula or professional development programs. It also lets us see what innovations - in educational technology, different learning practices, and other things - those engaged in teaching are using, and which we can bring back to Quantico for the benefit of our students and faculty. So far this year, we've visited the SNCO Academy and CDET faculty at Camp Lejeune; instructor staff at Parris Island: and the MAGTF Comm Planners' Course, 2d LAR, and MCTOG at 29 Palms, Nonmilitary roadshow stops also included Norwich University in Vermont, and several entities in Austin, TX. I we haven't visited you yet, we will!



Top left: Mr. Don Bishop, Bren Chair for Strategic Communication, lectures at the MAGTF Comm Planners' Course, MCAGCC 29 Palms.

Top right: Maj Ian Brown discusses military writing with cadets at Norwich University

Middle left: explaining the Krulak Center's mission and available resources to CDET faculty at Camp Lejeune, NC Bottom right: exploring VR/immersive 4D scenarios as potential educational technology with the "War Remains" team, Austin, TX

Bren Chair Writings

Complex Terrain

Megacities and Changing Nature of Urban Combat

By: Dr. Brandon Valeriano, Bren Chair for Military Innovation, Dr. Benjamin Jensen, Associate Professor of International Relations, School of Advanced Warfighting, & Dr. Henric Breitenbauch

The profession of arms is the most physically and intellectually demanding profession that exists today. The main reason for this is that we rarely get the opportunity to actually practice our profession, but we need to be ready in an instant to do so. When you combine these challenges with the realization that we are not good at predicting where the next fight will occur, or the character of that fight, it makes for a pretty steep learning curve, all while we and the people we lead are in harm's way. This is a very daunting proposition and the only reasonable response is to continuously study our profession as closely as possible, with particular attention to the changing character of warfare. This situation is directly related to technological changes, and as we have all seen, the pace of those changes has increased dramatically. The price of falling behind or ignoring key aspects of the changing character of warfare can be as dramatic as the British experience at the Battle of the Somme on 1 July 1916. Because they did not adequately understand the combined impact of the technological changes that developed prior to World War I, they had the worst day in the history of the British armed forces after suffering almost 60,000 casualties, with close to 20,000 of them killed on the first day of the battle.

The key to success in the profession of arms is continuously honing judgment through warfighting, training, and education. War-fighting refers to the conduct of war against thinking adversaries who counter your moves and decisions, as well as incorporating all the things we anticipate we will have to deal with in the future operating environment.

Read the full version and additional articles by clicking HERE.



Mr. Donald Bishop

Bren Chair for Strategic Communication

"Revisiting the Four Freedoms," *The Foundation: Marine Corps University Foundation Magazine*, Summer 2019. President Franklin Roosevelt's Four Freedoms became shorthand for the aims of the allies in World War II. Their influence continues.

"Xi Jinping on Art and Culture," *Public Diplomacy Council Blog*, July 1, 2019. A speech by the Chairman of the Chinese Communist Party, Xi Jinping, confirmed the Party's traditional controls on expression, echoing the precedents of Chairman Mao and Vladimir Lenin.

"Muhammad Ali's 1980 Visit to Africa," *Public Diplomacy Council Blog*, July 7, 2019. President Jimmy Carter asked The Champ to visit several countries in Africa to encourage them to boycott the 1980 Olympic Games. There were pluses and minuses to this exercise in sports diplomacy.

"A USIA Legend: Douglas Pike, Vietnam, and Counterinsurgency," *Public Diplomacy Council Blog*, July 14, 2019. Douglas Pike of the U.S. Information Agency was assigned to the American Embassy in Saigon for more than a decade, developing insights into the Viet Cong and the North Vietnamese.

"The Value of a U.S. Speaker," *Public Diplomacy Council Blog*, July 25, 2019. The visit of Professor Wilfred McClay to the U.S. Embassy in Ankara provides a case study of the State Department's U.S. Speaker program – this time addressing religious values.

"Ayaan Hirsi Ali on the War of Ideas," *Public Diplomacy Council Blog*, August 4, 2019. The Somali-born Ali discussed key decisions made by the Bush administration that bounded the effectiveness of Public Diplomacy after 9/11.

"Leo Lemay's Great American Reader," *Public Diplomacy Council Blog*, September 18, 2019. Leo Lemay of the University of Delaware prepared a reader on colonial and early national America to help foreign scholars better understand the character of the United States.

Mr. JD Work

Bren Chair for Cyber Conflict and Security

"The American way of cyber warfare and the case of ISIS". NewAtlanticist. 17 September 2019.

"In wolf's clothing: Complications of threat emulation incontemporary cyber intelligence practice". IEEE InternationalConference on Cyber Incident Response, Coordination, Containment &Control [Cyber Incident 2019], Oxford University. 3 June 2019.

John Watts, Ben Jensen, JD Work, Chris Whyte, Nina Kollars. "ALTERNATECYBERSECURITY FUTURES". Cyber Statecraft Initiative and EmergentFutures Lab, Scowcroft Center for Strategy and Security, AtlanticCouncil. September 2019.

Forthcoming:

"Taking stock: Cyber Conflict and Elements of NationalPower." Intelligence, Diplomacy, Multi-Domain Integration, andLow-Intensity Conflict. Proceedings of the Cyber Conflict StudiesAssociation State of the Field Conference, Columbia University. 11June 2019.

Max Smeets and JD Work. "Operational decision-making for cyberoperations: In Search of a Model". CYCON US, NATO Cooperative CyberDefence Centre of Excellence and Army Cyber Institute.

Previous Works:

Jason Healey, JD Work, Neil Jenkins. "Operational Framework for Understanding Disruption of Adversary Cyber Operations". Columbia University School of International and Public Affairs. 30 September 2019.

JD Work. "Sanctions action targeting hostile state cryptocurrency assets through offensive cyber operations". Financial Intelligence Information Sharing Working Group Symposium. Manhattan, New York. 20 September 2019.

"Future cyber conflict & competition by the light of a hundred fires". USMC Cyber Range. 29 July 2019.

"Educating practitioners for cyber operations in support of expeditionary and national mission priorities". Cyber Professional Military Education (PME) Workshop, College of Information and Cyberspace at National Defense University. 16 July 2019.

"(Dis)organization weapons: Russian offensive cyber operations in information confrontation". Strategic Competition in Cyberspace: Challenges and Implications. Center for Global Security Research, Lawrence Livermore National Laboratory. 10-11 July 2019.

"The diverging tradecraft circuit: Identifying and addressing emerging gaps in the theory and practice of the cyber intelligence discipline". 15th Annual Conference of the International Association for Intelligence Education. 10 June 2019.





Coming Soon

ONGOING October 2019 **EVENTS:**

General Ulysses Grant by Dr. Brooks Simpson - Oct 24th

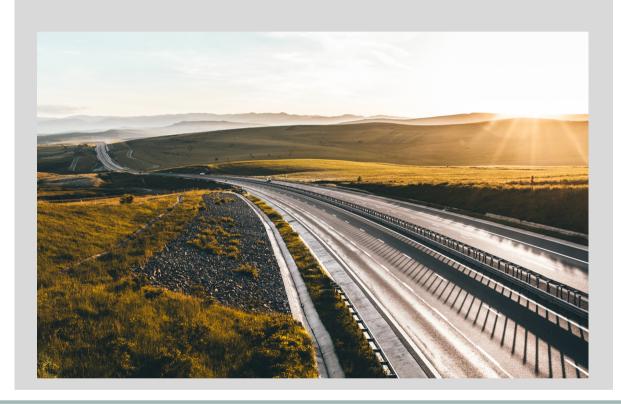
FICINT & Future of War Workshop with August Cole and

Mark Sable - Oct 30th

FUTURE November 2019

Cynefin & The OODA Loop - Nov 13th **EVENTS:** 12th Marines Wargame - Nov 20th-21st

> December 2019 Maoism 20/20





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