



IPS

Carnegie Mellon University
Journal of Politics and Strategy



Spring 2022

Volume 6, Issue 2

Featuring interviews with the 2021-2022 IPS Military
Fellows and the Master's Thesis Corner

TABLE OF CONTENTS

07 **Letter from the Editor-in-Chief** *Abby W. Schachter*

Articles

09 **BTS, Pop Culture, and Soft Power**
Millie Zhang

15 **Why Washington Needs to Get Serious About Semiconductors**
Jeffrey Yohan Ko

18 **Risks of Allocating Academic Resources Based on Socioeconomic Status**
Keilani Barba

21 **How Political Engagement Can Overcome Our Downswing**
Evelyn DiSalvo

24 **Feminist IR Theory and the Covid-19 Pandemic**
Marissa Baldauf Pekular

Interviews

27 **Five questions for Army War College Fellow LTC Steve Curtis:**
The Civil-Military Relationship and the Future of Warfare
Alexandre Ganten

31 **Five Questions for Naval Fellow CDR Kimberly Manuel:**
Military service from one generation to another
Hailey McDonald

36 **Five questions for Coast Guard Fellow CDR Fred Bertsch**
Maritime supply chain is not just a problem due to the
pandemic response
James Wong

Master's Thesis Corner

40 **Treaties and Conflict: Effective Mechanisms for Compliance with
Treaties Regulating Emerging Technologies**
Gabriella C. Bettino

Five questions for Coast Guard Fellow CDR Fred Bertsch: Maritime supply chain is not just a problem due to the pandemic response

JAMES WONG

Commander Fred Bertsch, the 2021-22 Coast Guard Fellow, assumed the duties as Commanding Officer, Coast Guard Cutter VIGILANT (WMEC-617) in June 2019. As Commanding Officer, he led the officer's and crew of VIGILANT through one alien migration interdiction patrol supporting District Seven, and five counter-drug patrols under the control of Joint Interagency Task Force South. Commander Bertsch is married to Jessica Burger. They have three children.



Question 1: Your role in the United States Coast Guard puts you in a unique position relative to our other fellows. Since the Coast Guard normally operates under the Department of Homeland Security (DHS), what perspectives do you bring to conversations about national security that our other fellows might not?

CDR Bertsch: I was pleased and eager to be the first Coast Guard Fellow here at Carnegie Mellon University and join the team. I think the Military Fellows Program here offers a mutually beneficial opportunity for both the school and for the fellows and military services. Each fellow comes in with some shared perspectives from the joint nature of service within the military, but each also has their own unique views based on the individual services they are representing, their experience and service within their organization, as well as their own backgrounds outside of the military.

I do not view myself as an exception in that regard; however, I do think being a Coast Guard officer and part of DHS gives me some interesting and different perspectives and experience to draw from. For instance, the Coast Guard has a broad set of authorities and missions that the services within the Department of Defense do not, ranging from law enforcement to regulatory. This has given me opportunities to be involved in a wide range of activities and apply a diverse set of solutions to challenges and problems that some of the other fellows may not have had. Similarly, as the Coast Guard is one of the component agencies within DHS, it has opened a plethora of opportunities for coordination and partnership on issues in a variety of ways that is not always available for the other military branches.

To an extent, because of the Coast Guard's size and budget constraints as well, the Service has



James Wong is studying mechanical engineering, focusing primarily on robotics and mechatronic applications. He is also pursuing a minor in Cybersecurity and International Conflict and Computer Science. At the Biorobotics Lab in Carnegie Mellon's Robotics Institute he worked on DARPA projects as well as modular robotics. He also worked in the Neuromechanics Lab developing mechanical testing interfaces. He is pursuing a commission in the USAF through Air Force ROTC.

had to become adept at efficiently and effectively solving challenges with limited resources through policy, partnerships, and unique applications of the Service's roles and authorities. These types of experience have helped shape my views and perspectives in slightly different ways than my counterparts so that I have some distinct insights to offer regarding national security, interagency coordination, and policy.

Question 2: Our definition of war has been evolving rapidly in recent years. Our adversaries continue to try to engage us in the gray zone and formally declared 'war' feels like less of a possibility (although in the case of Ukraine, we have seen that conventional war is still a concern). Where does the Coast Guard fit in terms of these challenges in the 'competitive' environment?

CDR Bertsch: It is an interesting time that we are living in with many diverse trials. I think it will take time and careful analysis to really flush out whether we are changing the definition of war or simply recognizing different degrees or levels of challenges on a broader spectrum of conflict. Regardless, I do think there are significant trends that indicate we are entering or have already begun a period which will be an ever present 'competitive' environment with challenges in gray zones where hostilities or conflict occur on subdued levels below the threshold of declared 'war' more frequently.

I think this represents an area where the Coast Guard provides exceptional value. The broad range of missions, roles, and authorities inherent within the Service allows the Service to engage in wide variety of methods beyond those available to the other services. This is one of the strengths for the Coast Guard as the Service is able to engage other actors without the same risk of escalation. This is possible for numerous reasons. One of the main reasons this is possible is because we can engage in alternative capacities besides simply as a military service. Our humanitarian missions, law enforcement roles, and regulatory authorities opens up opportunities for us to engage other nations and organizations in a wide variety of shared topics and interest in a less threatening manner.

For instance, the Coast Guard frequently engages and works with other nations addressing issues like illegal, unreported and unregulated (IUU) fishing, narcotics smuggling, and safety of life at sea. Additionally, because this type of work is constantly ongoing, the Service remains engaged with leaders from around the world, continually building relationships, trust, and partnerships that enable the Service and the nation to take action with reduced threat of provocation or escalation. For instance, the Coast Guard routinely engages in forums like the Arctic Council and the North Pacific Coast Guard Forum and with key maritime stakeholders like the International Maritime Organization. Additionally, the U.S. Coast Guard is often a better counterpart and contemporary service to other nation's navies and coast guard organizations so there are numerous opportunities for training and professional exchanges.

Question 3: I read your article focusing on improving the resiliency of the maritime supply chain. As a native of Los Angeles, I've been tracking conversations on how the ports have been. One bottleneck we're seeing is not having enough infrastructure to get containers onto trucks or trains. Do you see there being the political appetite to invest in the reform necessary to improve our infrastructure at that scale?

CDR Bertsch: It's tough to speculate about political appetite and what the political environment is going to support at any given point, but I do think there is broad and growing recognition

that more can and should be done to address our ports and supply chain infrastructure. We have already seen some action with the passage of the bipartisan infrastructure bill which provided additional funding for port security, cybersecurity, and investments in ports. These efforts will take some time to help alleviate our current issues but they will help. Beyond just that though, I think there are many aspects of this issues that will continue to be addressed to help permanently relieve the congestion and build resiliency within our ports and supply chain systems to avoid future issues.

This does not and will not simply rely on political outcomes at the federal level though either as addressing these problems will involve stakeholders and decision makers throughout all the entities involved in these networks and operations. Everyone from political officials at federal, state, local, territorial and tribal levels to private industry and consumers will all need to be involved and help determine the path forward and where priorities should be. I think the current situation highlighted some of the flaws and weaknesses in the system as it currently operates, so hopefully we will all collectively use that as an eye-opening experience to help facilitate action in addressing the issue. The maritime transportation system is critical to our nation, as evidenced by the past two years, and the recognition of that provides us a great opportunity to improve it and establish resiliency to prevent future issues. Hopefully, the current situation generates continued action and efforts to improve the situation over the long-term as even small disruptions can have significant impacts within the interconnected global economy.

Question 4: I'd also like to hear your thoughts on supply lines, particularly in and around the Indian Ocean. With India potentially moving towards a blue water navy, China seeking to expand control in its surrounding oceans and needing to provide security to maintain connections to Africa for Belt and Road Initiative, how do you see the role of the U.S. maritime power developing in this region?

CDR Bertsch: Obviously there has been increasing focus and emphasis placed on the Indo-Pacific region, particularly in the maritime domain, over the past few years. There is no doubt that China draws a lot of attention in the region with their activity and claims, but it is important to recognize that there are a lot of other significant actors and action occurring there are will with India being a major one. As the largest democracy and with a strategic location and significant maritime vector, India plays a major role in the region. This is likely to continue and probably grow as India seeks to expand their capabilities and capacity. This could create the possibility for more international incidents and misunderstanding as interactions increase, but it also presents potential opportunities for positive involvement of U.S. maritime power. While U.S. maritime forces have already been very active in the region, these developments provide additional opportunities to establish and expand our partnerships.

Building partnerships and conducting joint operations in the region is an area where I see positive options for U.S. maritime forces. This can be in the form of international military training and exercises, professional exchanges, or partnering to conduct multi-national missions against shared threats like piracy or illegal, unreported, and unregulated (IUU) fishing. We have seen efforts like these grow over the past few years in the Indo-Pacific region with examples like the creation of a joint maritime training center with the Indonesian Coast Guard or U.S. Coast Guard patrols hosting ship-riders from Oceania nations to assist in protecting their Economic Exclusive Zones from IUU fishing. Sometimes building our partnerships even involves the transfer of resources to help build their capacity, which has occurred recently with

decommissioned U.S. Coast Guard cutters being sold and transferred to Vietnam. These types of opportunities and engagements by U.S. maritime forces will help strengthen our partnerships, build trust, create solutions to unique challenges, and garner shared commitments within the Indo-Pacific region. The growth of India's capability will provide similar opportunities and all of this helps promote professional interactions that prevent potential conflicts, help diffuse tensions, and avoid miscalculations and escalation.

Question 5: What strategic objectives do you think the next generation of leaders in the military should be thinking about?

CDR Bertsch: Predicting the future is tough and it's difficult to know what to focus on for the future but I think there are two general areas I would offer that provide some structure in looking out to what's next.

The first aspect I would assess is emerging technology. Clearly items like cyber warfare, cybersecurity, artificial intelligence, unmanned vehicles, autonomous machines, and data all fall into that category currently and are going to be instrumental in the coming future of the military over the next decade. Obviously it is important to assess these items and see how they are going to change the nature of military operations, weaponry, how we fight wars and the like, but even beyond that it is important to ask and address questions like: How will these change the requirements for personnel? What policy changes are needed to implement these technologies? What limits or constraints do these or should these technologies have? What are the ethical considerations for their use? These are the same types of issues that have been faced with other technological advancements like aircraft, bombs, and biological, chemical, and nuclear weapons. The current emerging technology and that of the future will face similar challenges and questions so it is important for leaders to be continually watching and learning about how technology is advancing, what it is capable of, and how it can be employed.

The second aspect of issues that I think senior leaders are always looking at and dealing with for future military generations is more about leadership and attempting to determine what issues need to be addressed to improve military service for the future force. Often this is based on societal changes and progress. In the current environment this involves rooting out and eliminating things like sexual harassment, sexual assault, discrimination, hazing, and the like, but also promoting inclusion, improving connectivity and communications, and offering alternative career paths and progression to service members. These issues and how they impact our workforce represent the strategic leadership objectives of the future just as issues like integration of communities based on race, gender, and sexual orientation as well as shifting from conscription through the draft to an all-volunteer force were a few of the past challenges. These strategic issues are constantly under assessment and focused on with an eye to improving our military organizations and addressing issues that impact service members. Senior leaders must constantly question how things can be improved through questions like: What are the needs of our personnel in the future? How do these social factors change interactions? How do these technologies impact our personnel and their lives? How can we have more equitable outcomes? Continually tackling these problems and looking forward to improve the lives and service of military members is an ongoing challenge for senior leadership, but a vital role for which they have been selected.