Army Project Manager Tactical Network works to find solutions that enable larger numbers of smaller satellites to orbit closer to Earth, April 11, 2019 (Courtesy International Space Station)

Executive Summary

n the inaugural issue of *Joint Force Quarterly*, space was a part of the discussion when then–Air Force Chief of Staff General Merrill McPeak wrote his "Ideas Count" article. General McPeak stated, "I believe the Air Force should consolidate all U.S. military operations in space." A generation later, we have picked up on his suggestion. The joint force has expanded at the strategic and operational levels in a historic move to create a new combatant command: the United States Space Command. The new command will give this initiative its tactical workforce once the details are finalized. What will it mean to the joint force and to joint warfighting? I suspect a great deal after the administrative actions are worked out.

In the past decade, we have seen the addition of the National Guard to the Joint Chiefs of Staff, and now the Chief of Space Operations joins them as a new Service chief. While General Jay Raymond, U.S. Space Force, will have the smallest force at the table and report to the Secretary of the Air Force, as Air Force Chief of Staff General David Goldfein does, his team has arguably the biggest domain to work in. For the joint force, U.S. Space Command has returned to the combatant commanders' table in its second life, having first appeared from 1985 to 2002. In addition, General Raymond will be dual-hatted as U.S. Space Command's commander.

To readers of JFQ, space as a warfighting domain—or the desire to have a separate Service—is not a new idea. However, the idea of a separate Service is one that had to overcome a great deal of opposition and bureaucratic inertia. Will this separation allow for a better focus on this warfighting domain? Will acquisition decisionmaking and management of space programs be better? The most important issues that have arisen in recent years should be at the top of the operations and planning staffs' agendas. How to better "control" space in ways that might be useful to the other concepts of domain control; what responsibilities the force will have in space; and what the tactical, operational, and strategic relationships will be between space warfighters and their counterparts are just a few of the issues. A persistent problem will be the still-unresolved issue of how to allocate airpower to the land component commander's preferences when other domains compete for those limited assets. And the international treaty obligations for space cannot be ignored without affecting our relations with other space-faring nations as well. We look forward to seeing how U.S. Space Force and U.S. Space Command develop.

In the Forum, we offer a variety of discussions that center on the emerging technologies of today and tomorrow's battlespace. As a recent briefing by a U.S. commander engaged in the fight against the so-called Islamic State acknowledged, our defenses against unmanned aircraft systems are limited and deserve attention, especially around our fixed infrastructure and bases in forward areas. Edward Guelfi, Buddhika Jayamaha, and Travis Robison discuss the immediate requirement for the development of a strategy to counter these threats. Equally prominent in security debates has been the antiaccess/area-denial (A2/AD) challenges to our joint force. Alex Vershinin posits that technology is shifting the advantage back to defense. And as reports of more than 50,000 satellites will be in orbit in the coming years, Matthew

Hallex and Travis Cottom discuss how the rapid increase in commercial satellites will affect our national security. Another important, yet sometimes neglected, issue is electronic warfare. *JFQ* alumnus Jan Kallberg, Stephen Hamilton, and Matthew Sherburne discuss how to identify advances in Russian capabilities that the joint force needs to counter.

In JPME Today, Larry Miller and Laura Wackwitz discuss how to conduct research to support the education of strategic leadership in our staff and war colleges. With the 75th anniversary of the liberation of the Nazi death camps fresh in our minds, David Wigmore provides us with a solid roadmap on how to educate our future national security leaders to prevent atrocities in the future battlespace. Frank Hoffman returns to JFQ with his views on the missing part of our national strategy—a theory for success. After nearly two decades of war with seemingly no obvious prospect of victory in a classic sense, his ideas cannot be more welcomed.

Gregory Tomlin leads off our Commentary section by suggesting that the development of a global engagement cycle is critical to the success of global integration. In addition, having recently served as the Deputy Commander at Guantánamo Bay detention camp, John Hussey reviews the history and lessons to be learned from detainee operations.

In Features, Douglas Creviston discusses the urgent need to change and adapt the joint force command and control structure through a transformation of the Defense Department. Scott Harr, in an article written before the recent killing of Iranian General Qasem Soleimani, offers insights on how lethality can be an important part of dealing with Iran as a rival nation-state. Hassan Kamara discusses how the U.S. Army and the joint force can address A2/AD threats in the U.S. Indo-Pacific Command region.

Harry Laver, in our Recall article, takes us back to the Civil War to see how General Ulysses S. Grant and Andrew Foote, a naval officer, learned to work together successfully. We also bring you three excellent book reviews that will help you learn about a range of important joint and strategic issues.

This issue's Joint Doctrine section offers two important articles that speak directly to the seams in joint operations, instruments of power, and the pursuit of strategy's ends. As reliance on using forward-deployed airpower to back up local forces in combat operations grows, one question Joseph Buontempo and Joseph Ringer address is who will provide airbase defense. And in an effort to raise awareness within the joint force of the financial, intelligence, and law enforcement aspects of how we employ the instruments of national power to fulfill national security strategy, Cesar Rodriguez, Timothy Walton, and Hyong Chu suggest that only looking at diplomatic, informational, military, and economic options often lead to less than optimal strategic results. Finally, with many important changes to Joint Doctrine coming every month, all of them can be tracked in our update.

JFQ has been involved in the discussion of space since our inception in 1993. The debates on how best to be joint, fight joint, and help our partners integrate with us has been our bread and butter from the start. I look forward to an increased discussion on the way ahead for the joint force on land, sea, air, space, cyberspace, and anywhere else our freedoms need defending. JFQ

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