



## Executive Summary

As I write, the new National Defense Strategy (NDS) has been released. The NDS is important for its core (and timeless) elements: build a more lethal joint force, strengthen allies and attract new partners, and reform the Department of Defense (DOD) for greater performance and affordability. It would be difficult to argue with this lineup; we have been reading reports for years about the combined impact of sequestration cuts to the force, the continuous combat and supporting operations in every command resulting in reduced readiness, as well as the seemingly endless multiplication of threats from the ground to space and cyberspace. But what kind of force does the United States need in order to meet its mission of protecting the Nation?

As we set our course on being the best in the world and maintaining that position for years to come, how do we preserve our working relationships with allies and partners? One of the growing keys to security that has been a bit rocky in recent years is our North Atlantic Treaty Organization (NATO) family. With conflict both actual and virtual on NATO's European northern and southern flanks, how do we simultaneously field a more modern force and bring our alliance partners up to our standards? This has been a constant question since NATO was formed, but I believe this issue has never been more critical.

Moreover, what about the ongoing issue of readiness needs versus force modernization? We are embarking on an important set of new and replacement weapons systems including more than

\$1 trillion to replace virtually all of our nuclear force structure. At the same time, we continue to buy new ships, fighters such as the F-35, and land systems. One wonders if a DOD budget of \$700 billion per year or more, while well above sequestration levels, will be sufficient to field and maintain this force.

As I mentioned at the end of my summary in the last *JFQ*, this edition brings a range of important articles from the Joint Staff and U.S. Central Command (USCENTCOM). In the Forum, we provide an introduction to information as the seventh and newest joint function. Information joins command and control, intelligence, fires, movement and maneuver, protection, and sustainment per direction of the Secretary of Defense. Alexis Grynkewich, deputy director for Global Operations (J39) on the Joint

Staff (and I am proud to say one of my former Joint Advanced Warfighting School students), provides us with a basic understanding of how information qualifies as a joint function. A key aspect of any joint function, as many joint professional military education graduates know, is how the function fits into operational art. Scott Thomson and Christopher Paul suggest that adding information as a joint function marks a paradigm shift for operational practitioners. For those in the joint force who will ultimately have to figure out the utility of information from a practical, pragmatic, and warfighting perspective, Gregory Radabaugh helps decode the doctrine inherent in a joint function. Along with this new function and its implications, the Chairman and the joint community have been working hard to better integrate the joint force. By planning and executing globally integrated exercises, Stephen Gallotta, Timothy Lynch, and James Covington argue the results will enhance command and control across the joint force.

Continuing our growing dialogue on the role of drones in modern warfare, Mark Newell discusses the difficulties of developing doctrine to counter these threats, given that Moore's Law is applicable to the explosion of such platforms globally. Along with drones, we are still engaged in countering threat networks of many different kinds, which David Doran believes have the joint force "outmatched."

We have a Special Feature dedicated to USCENTCOM in place of our JPME Today section. I met with General Joseph Votel, USA, at his headquarters to talk with him and his staff about their "by, with, through" (BWT) concept and about getting his views on a number of ongoing operations in that theater. He had just returned from Afghanistan where a major terrorist attack, claimed by the Taliban, had occurred in Kabul, killing 95 and wounding scores. General Votel noted this tragedy was important to acknowledge, but he stressed that progress is being made there, in part due to the focus on the BWT operational approach that he and his lead staff officer, Eero Keravuori, detail in their accompanying article. Adding a Service

perspective on the approach, Michael Garrett, William Dunbar, Bryan Hilferty, and Robert Rodock describe how the U.S. Army intends to operate with it. As the lead U.S. tactical unit commander in the recent fight to retake Mosul in Iraq from the so-called Islamic State, J. Patrick Work tells us how by, with, and through made a difference in that victory. With the premise that great powers often get the ends and means of a strategy to assist host nations correct, John Richardson and John Bolton suggest the ways of carrying out such a strategy are often chosen poorly, resulting in failure to achieve success. They offer that recent successes in Iraq and Afghanistan are indications the United States is now getting this classic strategy element aligned correctly by applying the BWT approach. It is often said of military operations that logistics is key to success, and the BWT approach is no exception. Edward Dorman and Christopher Townsend lay out the case for achieving coalition logistics interoperability in a BWT operation.

Our Commentary section has a range of ideas from our friends on the Joint Staff and elsewhere, focusing on ideas of how to improve the joint force. After years of developing various approaches to helping partners with security needs, John Jakubowski believes the best way to permanently work these missions is through the establishment of a Joint Security Force Assistance Command. Next, Stephen Nowak offers us his thoughts on problem-solving. A team from J7, Gwendolyn DeFilippi, Stephen Nowak, and Bradford Baylor, has some interesting ideas on how best to use our lessons learned collection in order to develop the joint force.

This issue's Features section does not shy away from wrestling with controversial concepts, both old and new. Looking at the effects of climate and urbanization on security and stability challenges the joint force will face, Ronak Patel and David Polatty discuss how coordination between civilian and military authorities is key to finding workable solutions. Airpower is one of those commodities that everybody wants, but few can consistently agree on how it should be

delivered. Josh Wiitala and Alexander Wright suggest the issue is structural and have a few new ways to help land- and sea-based combat aviation work together. As we are beginning to see the contours of the power of big data in our lives, Paul Lester, Pedro Wolf, Christopher Nannini, Daniel Jensen, and Delores Davis team up to discuss how strategic leaders can best make use of it.

In Joint Doctrine, we have four important pieces from our friends at Joint Staff J7, both north and south, all focused on the future. Explaining the connections between joint concepts and future readiness, the deputy director for Future Joint Force Development, Andrew Loiselle, helps us to sort out the right balance between readiness and modernization. Jeffrey Becker and John DeFoor bring us insights on the world that the future joint force will operate in. Many recent JPME graduates will be familiar with the "Chairman's Challenges." Erik Schwarz helps us understand how the development of new joint concepts are being framed by them. George Katsos returns with another article on focusing on combatant commander campaign activities, this time discussing the challenges with environmental security. Along with our joint doctrine update, we bring you three fine book reviews by reviewers who will be instantly recognizable to most of our readers, and the books they discuss are as worthy of your attention as their reviews.

No matter how the future turns out, the United States and the joint force will continue to be central elements of how the world is shaped. Key to that success will be the people who are a part of that joint force, as they are what really matters when the hard problems come calling. Help them be ready. Write us when you think you have some ideas that will. JFQ

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