Executive Summary

A colleague of mine who teaches at the National War College recently returned from his annual visit to Afghanistan. This trip was different however as he was traveling with his seminar students. Before they departed, I wondered just what would become of them given the fluid situation there, at least from what we read in the press. Of course, given my own brief but instructive tour in Kabul in 2008, I knew that often the facts on the ground are hidden here at home because the lenses of the media are never able to capture the full scope of events anywhere.

While there is no doubt that danger of different kinds exists both in Afghanistan and here at home, nothing replaces the value of seeing the situation with one's own eyes. Many question the expense of sending professional military education (PME) students on foreign or even domestic travel. Given the chance to see more with one's classmates than what one experienced in the past—even if it means covering the same ground as before—is without doubt an invaluable experience for which no other means can substitute. Even with a combined number of over a dozen tours in Iraq and Afghanistan among this seminar, there were some who had experienced neither. The value of this new and shared experience was, as the commercial says, priceless. I have encouraged my colleague to urge these students to write about their experiences so that others may benefit, even if only to debate the issues of where we go next in Afghanistan or the world of 2020, which the Chairman is now seeking to understand. Experiences not evaluated and shared are lost. Many of those in PME classrooms today will soon be in positions to guide civilian leadership to achieve successful decisionmaking on strategy, policy, and even crisis management. Whether in the War College classroom or elsewhere, we continue to receive many insightful submissions that continue both to inform and discuss the ever-changing nature of jointness, the joint force, and the global challenges we face.

I was also recently reminded of how far we have traveled in the past few decades and how far we have to go as I attended an event where one of my Academy classmates—the first female graduate of any U.S. military academy to reach the rank of general—was promoted. In the summer of 1976, just 150 women entered the Air Force Academy with 10 times that many men. More than half of these women went on to graduate, with one achieving the highest rank possible some 32 years later. The U.S. military has two such women academy graduates at that rank, and as far as I am aware, we are the only nation that does. These women represent the best in all of us as Americans, confident in manner and able to achieve a path to success regardless of the challenges they face. The sniper in the photograph in this column is a person of similar character and achievement. As of this writing, the media are reporting on a lawsuit to remove the remaining restrictions on women in combat, and the Marines are evaluating women's fitness for combat duty. I suspect we will all learn that our national defense is based on capability to get the mission done regardless of other concerns.

In his From the Chairman column, General Martin Dempsey discusses the process and outcome of our national leaders' development of the new strategic defense guidance, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. The Chairman offers a valuable set of insights into the changing nature of strategy at the national level and what it will take to effectively execute it. Continuing to speak for the enlisted force within the joint force, Sergeant Major Brian Battaglia presents the commentary of Chief Master Sergeant Curtis L. Brownhill, the former Command Senior Enlisted Advisor, U.S. Central Command, on the need to provide better joint education for our enlisted leaders.

This edition's Forum brings us the thoughts of an experienced National Defense University researcher, a brand new officer, and a joint professional military education team, all focused on the growing area of cyber. From the Center for Strategic Research in the Institute for National Strategic Studies at the National Defense University, Vincent Manzo suggests that the U.S. Government needs to focus on an integrated effort to seek strategies to better defend and use the similar domains of space and cyber. Recent Air Force Academy graduate Second Lieutenant Soren Olson suggests our cyber defense efforts to protect our national infrastructure need substantial review and attention to prevent what he believes will be a likely massive attack in the near future. Rosemary Carter, Brent Feick, and Roy Undersander outline the requirement and suggest specific ways to integrate cyber operations below the joint force commander level, building on the argument offered by Brett Williams in *JFQ* in 2011. Cyber and space discussions continue to be among the most active topic areas based on *JFQ* submissions and reader feedback.

With the increasingly important and needed focus on the overall health of military members, veterans, and their families, especially those affected by our recent conflicts, the Special Feature section provides two substantial articles that reinforce the Chairman's efforts to effectively address this issue. While a specific Service program, the approach on resilience discussed by the USA Comprehensive Soldier Fitness leadership team of Rhonda Cornum, Thomas Vail, and Paul Lester offers extensively researched findings and commonsense recommendations for how senior leaders can dramatically improve the lives of the people they lead. Discussing a specific component of individual fitness, Patrick Sweeney, Jeffrey Rhodes, and Bruce Boling offer insights on the role religion plays in the overall health of military personnel.

In the Commentary section, we welcome back four *JFQ* veterans with their insights on several important and continuing themes in joint warfare that will likely be catalysts for others to respond with their views. First, from Australia, Carlo Kopp provides a guide to developing effective strategies during the era of exponential growth of new systems that characterizes the current information age. Next, Benjamin Lambeth provides an in-depth analysis of recent Israeli combined arms campaigns with enduring lessons for students of jointness. As the discussion over budgets and the Services continues to heat up, Lee Wright

U.S. Air Force (Daniel Hughes)

Staff Sergeant Alyssa Gomez, the ninth female sniper in the Air Force, demonstrates how a camouflaged ghillie suit blends into surroundings at Nevada Test and Training Range

compares the relative costs of recent conflicts and suggests airpower has not always been given its appropriate due. Finally, adding to his already rich offerings to the journal on strategy, operational planning, and thinking about doctrine, Milan Vego discusses the ancient but constant tension between science and art in the profession of war.

Having received a number of excellent submissions on specific technology, our Features section brings them together for review and comment. Now beginning to appear in significant numbers in combat and stability environments, nonlethal weapons still have a long way to go to convince many of their utility. Tracy Tafolla, David Trachtenberg, and John Aho discuss the background and current state of development and employment of this growing family of options for joint operations. After a turbulent and controversial development period, the current state of play with the CV-22 Osprey tilt-rotor aircraft is discussed by Eric Braganca. As with many defense acquisition programs, only when fielded will the true value of a capability be known. Another system still experiencing similar rough air, the Joint Strike Fighter F-35 aircraft is now beginning to be received by operational squadrons. Robbin Laird and Edward Timperlake discuss the operational and tactical significance this system will have for the future battlespace. As several states continue to field ballistic missile systems with the potential to attack other nations, the ability of missile defense systems to counter these emerging threats has been a major focus of U.S. national military strategy.

As always, we have our regular joint doctrine update, which in this issue completes the three-part series on multinational command by George Katsos; and to close out the issueof *JFQ*, we present three insightful book reviews.

We have just completed the annual Secretary of Defense and Chairman of the Joint Chiefs of Staff Strategy Essay Competitions, and the winning essays will appear in the October edition. The judges, many of whom are longtime veterans of this contest, believed as a group that this year's submissions from PME students were among the best they have seen. The key to these students' success is the fact that they wanted to compete. In the end, everyone who reads *JFQ* benefits from their efforts. These future senior leaders took the time and effort to write about issues they thought were important. I firmly believe there are even more authors interested in topics related to jointness waiting for their moment to do the same.

As an editor of a military journal, I frequently have the opportunity to work with both experienced and novice authors who want to get their ideas and experiences to our audience. I am always asked, "What should I write about for *JFQ*? What issues do you want to publish?" My answer is always the same: Write about what you know and what you think you need to have others understand. Ask questions and offer answers. Talk about your experiences and what you have learned directly as well as what you have learned from others. Frequently, when I am in the classroom, I ask students what our military world would be like if someone other than Carl von Clausewitz had taken the time and effort to write about war. Suddenly, writing a short essay for a military journal doesn't seem too difficult a task by comparison. **JFQ**

—William T. Eliason, Editor