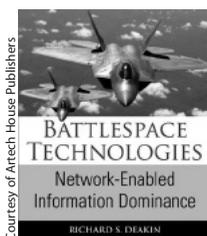


extremist and intolerant versions of Islam. In the final chapter, Terrill has advice for US policy makers. A pro-democracy agenda must be tempered with the desire for stability. He states free elections in Jordan will not necessarily produce pro-American, pro-Israeli governments. It is here that perhaps Terrill's advocacy of the *Realpolitik* view may be out of step with recent events. The January 2011 riots in Tunis show us that overdependence on autocratic regimes to maintain stability can backfire. The United States will continue to depend on Jordan for stability, but needs to be aware of growing frustration among its overwhelmingly young population facing increasing unemployment and higher costs of living. The Hashemite family has shown an amazing ability to counter threats to its rule—the increasing frustration of the population is just the latest challenge to stability in Jordan. Some reform is inevitable if the Hashemite Kingdom is to survive.

At the end of the book are several useful appendixes including biographies of Jordanian leaders, the full transcript of the Amman Message, and an address by King Abdullah II to a joint session of the US Congress.

This very readable book is strongly recommended for those in uniform and civilians with Middle East-related assignments.



Boston: Artech House Publishers, 2010

510 pages

\$125.10

Battlespace Technologies: Network-Enabled Information Dominance

by Richard S. Deakin

Reviewed by Dr. Jeffrey L. Groh, Professor, Information and Technology in Warfare, US Army War College

It is a challenge to stay current on information systems and communications technologies in 21st century warfare. The understanding of information-age technologies can be intimidating to senior warfighters and their staffs. Trade journals, internet resources, and technical white papers can heighten the angst to gain an appreciation for the available technologies to prosecute information-age warfare. Richard S. Deakin in his book *Battlespace Technologies: Network-Enabled Information Dominance* provides a valuable service putting the most important networking concepts, information systems, and communications equipment in one reference. Deakin argues, early in the book, that information-age technologies have significant implications for command and control within the operational environment. This thesis should grab the attention of senior warfighters and their staffs as a guide to the concepts and tools required to successfully operate in a network-enabled environment.

The central theme advances the concept of Network-Enabled Capability (NEC). The author describes NEC as an “integrated force approach to modern warfare enabled by the cohesion of communications and computer networks, sensors, intelligence-gathering assets, and databases integrated with the

necessary command and control (C2) processes.” The book begins with a brief introduction outlining the significant changes to warfare in the 21st century. He examines the myths and realities of network warfare as well as how militaries gain information superiority on the modern battlefield. In the next two chapters, the author examines the principles and evolution of Network-Enabled Warfare as well as essential NEC concepts. The reader gains an appreciation for the value added by collaborative sensing, tracking, targeting, and engagement to achieve desired effects in today’s operational environment. The following chapter provides the reader a detailed examination of the most current NEC techniques and technologies. This part of the book is an extremely technical analysis that may be difficult for those who find network theory, hardware, and software discussion intimidating. Over 400 colored photographs and illustrations clearly demonstrate concepts and equipment for those who do not have a background in information technology or communications. The author writes in language that most will understand and clearly explains central concepts. The final chapter is a brief presentation of future trends in NEC. The future will continue to see advances in networking and sensors. There will be an integration of systems assisting planners to harness even more data and information facilitating situational understanding.

The author provides value on many levels when contemplating the complexities of warfare today. He advances the notion of Network Centric Warfare beyond the ideas proffered by John Garstka, Frederick P. Stein, and Dr. David S. Alberts in their book (*Network Centric Warfare: Developing and leveraging Information Superiority*, 2nd Revised Edition, Washington, DC: CCRP, 1999). The term “Network Centric Warfare” has acquired a great deal of conceptual baggage over the years. Through the book, Deakin works to demonstrate that the network is an enabler to the warfighter in 21st century warfare. “To refer to network technologies as network-centric is therefore misleading. Network technologies have created quite the opposite effect of delivering decision making right across the network rather than centralizing it as the term would suggest.” Deakin stresses that network-enabled capabilities are more about networking than the network. This important distinction places information systems and communications in the proper context of information-age warfare. He also clearly articulates throughout the book that NEC is not a “panacea” to address all the challenges facing military leaders. The vulnerabilities of military forces tied to robust information systems and communications play a central role. Deakin covers in considerable detail the problems of information overload, over dependency on data, cyber attacks, and the basic complexity of today’s systems. He goes beyond technological buzzwords to examine concepts in depth.

One should not expect to read this book like a novel. Deakin provides a reference (dare I say encyclopedia) of current information systems and communications technologies along with the associated network theory. This should not dissuade senior leaders from making this a part of their professional reading. Leaders at all levels require understanding of the command and control theories and equipment that enable 21st century warfare. Deakin leverages an

impressive array of the most current scholarly and technical publications as well as military doctrine adding validity and rigor to the book.

The one minor shortcoming is the book's focus on major combat operations. There is little coverage on how information systems and communications can enable operations in hybrid and irregular warfare environments. The author offers almost no analysis on the challenges to command and control in an interagency and intergovernmental operational environment. The book focuses mostly on UK, US, and NATO doctrine in major combat operations; the reader must extrapolate these lessons learned to an irregular operational environment characteristic of many of today's conflicts.

This book is worthy of the attention of senior military leaders and their staffs responsible for planning and executing 21st century warfare at the operational and strategic levels of war. This work offers value to more than information systems and communications specialists. It is relevant to commanders and operations planners (i.e., J-3 and J-5s). The technologies described in this extensive work will continue to remain a central element of military information systems for years to come. It helps the reader understand the complexity of the hardware and software in today's military networks. The author clearly outlines the relationships between sensor, shooter, and decisionmaker in the context of the "kill chain" on today's modern battlefield.