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Information Technology and Military Power

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The theme coursing through *Nimitz at War* is what CINCPAC called “the principle of calculated risk,” articulated in his instructions to task-force commanders Frank Jack Fletcher and Raymond A. Spruance on the eve of the June 1942 Battle of Midway (pp. 110–11). By this he meant that U.S. naval commanders—who were woefully short on aircraft carriers in particular—should refrain from striking at the superior Imperial Japanese Navy carrier striking force, or Kidō Butai, unless they believed they stood to inflict worse punishment on Kidō Butai than the Japanese stood to inflict on them. Then he left Fletcher and Spruance to put the principle into action—and it worked. Abjuring micromanagement set the pattern for his handling of theater command for the rest of the war.

Calm reckoning of costs and rewards, risks, and dangers helped Nimitz navigate the dark eighteen months following December 7. It also helped him discern when to attempt the transition from a strategically defensive posture vis-à-vis Japan—a posture adopted out of necessity when the Pacific Fleet lay in ruins—to the strategic offensive.

Nimitz’s temperament also fitted him for a productive if fraught relationship with Chief of Naval Operations (CNO) Ernest J. King. Admiral King incessantly pushed CINCPAC to go on offense, long before Nimitz believed that U.S. forces had the capability or capacity to do so. Symonds’s account of their interactions evokes Theodore Roosevelt’s maxim (in his 1908 message to Congress) that “wise radicalism and wise conservatism go hand in hand, one bent on progress, the other bent on seeing that no change is made unless in the right direction.” King was the wise radical, Nimitz the

wise conservative whose prudence tempered the CNO’s thirst for offense.

By 1943, the arrival of new-construction warships in the Pacific helped the two reconcile their perspectives on strategy—and to launch the fleet on an offensive it never would relinquish. Through productive discord they charted a judicious way forward. This account of their shared history is must reading.

JAMES R. HOLMES



Information Technology and Military Power, by Jon R. Lindsay. Ithaca, NY: Cornell Univ. Press, 2020. 306 pages. \$42.95.

Most textbooks designed for mid-to-senior-level undergraduate courses in information systems (IS) and information technology (IT) are designed foundationally around the use of IT in organizations—specifically nonmilitary organizations. In contrast, *Information Technology and Military Power* highlights the use of IT in the military while also introducing and discussing theories of information practice, processes, and technologies within an explicitly military context.

Jon Lindsay is a Navy veteran and a graduate of Stanford University and the Massachusetts Institute of Technology. *Information Technology and Military Power* is his first book-length publication. It begins with acknowledgments, and next it offers a list of abbreviations that will prove essential. Then it engages readers in the book’s core content—which is laden with eighty-five of those abbreviations and acronyms over the course of the book. Perusing the list of abbreviations in advance would be most helpful to a

nonmilitary reader. The core content begins with an introduction entitled “Shifting the Fog of War,” followed by seven well-supported chapters.

The introduction aligns the enabling role of IT performance with organizational strategies and processes. Three foundational concepts—information practice, information friction, and quality practice—are introduced to help describe the relationship between IT and military power, especially when considering the alignment (or the lack thereof) between problems and solutions. The theory of information practice (the primary theoretical basis of the book) elevates the significance of the interrelationships between the strategic problems facing organizations and the existing and prospective internal organizational solutions. Within a theoretical model, the author describes four types of information practice: managed, insulated, problematic, and adaptive. Each type is supported further with detailed examples in chapters 1 through 6.

Lindsay’s first full chapter then explains how the conceptual use of technologies (past, present, and future) builds on technological innovation, increasing complexities, and repetitive use in a military operational context. In considering the problems encountered in actual practice, Lindsay lays out four possible theoretical frames for responding: “fog of war, contingent doctrine, organizational culture, and user innovation” (p. 27).

Lindsay then provides a framework for understanding how information is used within military processes. Even while he refines the concept of information itself within this context, sources of information friction are highlighted.

Moreover, he highlights how information itself can enable the supporting processes of the military operational art. Control mechanisms in information handling are discussed to understand better the various approaches to organizational information handling.

The book’s third chapter discusses the ideas of internal and external strategic solutions, problems, and specific challenges to overcome in the successful application of information theory. Supporting this practice are the text’s multiple examples related to managed practice, adaptive practice, and insulated practice. Also, control mechanisms and related functions involved in information practice are amplified.

Chapters 4 through 6 cover a range of topics, including user innovation and the limitations and challenges imposed in managing systems during military operations. Three waves of user innovation, focusing on aviation-mission-planning software and their institutional implications, are addressed explicitly. Throughout, Lindsay illuminates a range of theoretical perspectives of information practice with a variety of more-specific examples of managed practice, adaptive practice, and insulated practice. Lindsay also considers classic counterinsurgency techniques as a theoretical lens for further understanding information practice in a military context. From there he turns his attention to the use of military drones—noting the growing complexities involving IS and other technologies in the strategic deployment of drones.

Information Technology and Military Power concludes by emphasizing how information technology can be used to leverage military power. While reflecting on the threads woven

throughout the book, Lindsay offers his practical suggestions for deriving an overarching way to consider the strategic implications of information practice in military operations.

Overall, Lindsay's book is a welcome text for any student of IS and IT in this nontraditional organizational setting—the military. *Information Technology and Military Power* is a welcome contribution toward a better understanding of the theories and uses of IT within that military organizational context.

ANGELA JACKSON-SUMMERS



Developing the Naval Mind, by Benjamin F. Armstrong and John Freymann. Annapolis, MD: Naval Institute Press, 2021. 248 pages. \$24.95.

U.S. Naval Academy professors Benjamin F. Armstrong and John Freymann's *Developing the Naval Mind* is an ambitious handbook for inculcating not only knowledge of naval thought but also the skills necessary for lifelong engagement with the field. From the outset, Armstrong and Freymann argue that constant learning and discussion long have been integral to the American sea services, but need of them perhaps has never been greater than in today's ever-evolving world. Thus, they announce their intention to "provide resources to officers, Sailors, and Marines who desire to learn in the fleet" (pp. 3–4). While this reviewer is currently none of these things, recently they have embarked on their professional navalist journey. That is sufficient to state confidently that *Developing the Naval Mind* is among the finest available starting points for those

beginning their intellectual relationship with naval affairs, leadership, and strategic ideas. Not only do Armstrong and Freymann offer a tightly packaged introduction to some of the most essential modern naval thinkers; they also endeavor to teach readers *how* they can develop intellectually, by introducing concepts such as "how to read" and "how to publish"—the latter a worthwhile but seldom-considered effort aimed at empowering junior scholars, young professionals, and servicemembers themselves.

As a resource for emerging navalists, *Developing the Naval Mind* is divided helpfully into two sections: part 1, "The Seminar," and part 2, "The Readings." Part 1 dives into how readers ought to engage with scholarly material and debate, explaining how one should go about reading, writing, and critically engaging in discussions professionally. While articulating how to read may seem to some to be a trivial function, reading professionally and for academic purposes is indeed a skill that often needs to be taught; graduate students from civilian university programs in the social sciences or humanities will recognize this truth at once. Likewise, graybeards frequently take for granted access to the world of academic and professional writing, but the barrier to entry can be high. Armstrong and Freymann not only provide a guide to getting started (i.e., how to write); they also direct readers to quality venues where they can seek to join the literary debates of the day (i.e., where to write). In a mere seven pages of their appendix, the authors provide a publishing crash course for would-be authors not found in similar introductory texts, truly equipping readers to cross