Arms and Innovation: Entrepreneurship and Alliances in the Twenty-First-Century Defense Industry

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which defeat helped lead China to modernize its navy; defeat in both opium wars forced China to bring new ideas to the forefront. Bernard Cole’s assessment of the Cold War reveals a Chinese naval service viewed by its military and civilian masters as an organization whose primary mission was to support army forces. Defensive concerns gained priority, and a new engagement with naval power had to await the end of the Cold War.

Current Chinese developments underline the folly of the Western military posture, with its planning largely focused on Afghanistan and Iran. There is a serious risk that crucial long-term capability will be sacrificed to the exigencies of campaigning in Afghanistan. While the development of Chinese capability has led to responses by such regional powers as Japan, Taiwan, Australia, Malaysia, Singapore, and South Korea, there has not been a sufficient move from awareness to action on the part of other powers. The Chinese naval challenge is apparent as an aspect of an increasingly far-flung Chinese defense system that has serious implications for Western interests in the Middle East and South Asia—implications that are not addressed by counter-insurgency capability.

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For decades, analysts have understood the nonmarket conditions of defense development and procurement. First, government-as-buyer and ultimate legal authority are atypical market constraints and, second, military weapons systems often have no commercial equivalents and may also have several unique component or material requirements—for example a one-off electronic component architecture.

The recent trend of fewer systems required, or at least procured, in the roughly synchronous post–Cold War and precision-munitions eras has more often than not exaggerated the already anomalous defense-systems market. The Department of Defense (DoD) generally buys or intends to buy smaller numbers of more capable and complicated ships, manned aircraft, tanks, munitions, etc., than it has in the past. Advancing technological sophistication and relatively smaller unit buys, in turn, pressure defense-systems suppliers’ business models, alliances and acquisitions, systems integration competencies, and subassembly, component, and material supply chains.

James Hasik is a defense industry analyst and former naval officer with degrees in history, physics, and business. His first book (coauthored with Michael Rip in 2002) was a well received, comprehensive examination of GPS and its implications in modern warfare. With this book, Hasik continues his insightful analysis of the DoD toolbox via a set of six case studies covering disparate defense-system development projects woven into a succinct but overarching analysis of the current international arms industry. The cases examined are air, land, sea, and space.
systems, each a precision-guided weapon project and a mission-planning system.

The book’s foremost merit is its sober analysis, grounded in business economics. Each case covers technological, economic, and operational trade-offs and frames each project within a relevant and timely international business context. For example, Hasik’s space-system case emphasizes the competencies and alliances of the few firms competing in the satellite business. He explores the credible competition for the Space-Based Infrared System Low (SBIRS Low) satellite contract by the five-hundred-employee Spectrum Astro Corporation against the established and significantly larger firm TRW Inc. Hasik’s land-vehicle case demonstrates how the DoD benefited from decades of prior research and development in South Africa on blast-resistant vehicle design, greatly accelerating the Army’s and Marine Corps’s adaptations for our current wars. As a bonus, Hasik adroitly presents the academically rigorous clearly, and for a reader accustomed to plowing through the arcane prose of technical reports and academic papers, this is no small gift.

The Department of Defense is constantly looking for innovative technologies through its service labs and several science and technology development programs. The enduring challenge is in managing the underlying risk and in the integration into a complex system-of-systems life cycle amid competing priorities, operational commitments, and assessments of the future strategic environment. Although this book could be more comprehensive, it need not be. Through his case-study selection and opening and closing synthesizing chapters, Hasik provides a cogent and instructive assessment of innovative technology development and procurement approaches across defense system sectors. Arms and Innovation suggests opportunities for more nimble defense systems innovation in the future, opportunities that do not require comprehensive acquisition reforms or reiterations of revolutions in military affairs.

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John Yoo’s most recent book is far more than a defense of the George W. Bush administration, which he served, as some of his many critics may find it. In fact, Crisis and Command is a carefully documented study of the exercise of presidential power from George Washington to President Obama. This is the last book in a trilogy by Yoo, the first two being The Powers of War and Peace (2005), which explains the founders’ original understanding of the foreign-affairs power within the Constitution, and War by Other Means (2006), which discusses the law and logic behind the Bush administration’s counterterrorism policies. This study extends well beyond the Bush administration, focusing mainly on Presidents Washington, Jefferson, Jackson, Lincoln, and Franklin Roosevelt. In each of these respected leaders Yoo finds bold presidents who changed the existing political order and transformed it into