

BOOK REVIEW

**Leveraging High Technology Developments in
Chinese Military and Maritime Domains:
Impact on the Indian Ocean Regional Security**

Author: Kamlesh Kumar Agnihotri

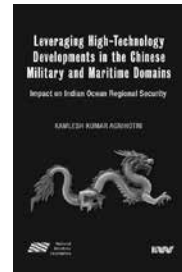
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The biggest elephant—no pun intended—in any geostrategic space discussion today is an all-consuming dragon, which seems to be relentlessly marching towards its own brand of hegemony. It also seems to be leaving no stone unturned in its quest to become *numero uno* or World No. 1 in the fields of agrarian, economic, scientific, military and technology developments. The world is sitting up to take notice and is striving to garner deep, actionable and verified knowledge about this turn of events. Ironically, it would not be amiss to quote from a Chinese philosopher/strategic guru, Sun

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Tzu, here, *If you know the enemy and know yourself, you need not fear the result of a hundred battles*. And this is exactly that moment of time and space which defines this book. Authored by Captain Kamlesh Kumar Agnihotri (Retd.), *Leveraging High-Technology Developments in the Chinese Military and Maritime Domains: Impact on the Indian Ocean Regional Security*, under the aegis of the National Maritime Foundation, delves into the realm of high-technology events that have characterised Chinese military developments in the recent past.

China has often been accused of following the tenet of ‘Cut, Copy and Paste’ to produce equipment and results. A modern-day manager or CEO, however, may take a contrarian view to support this principle of ‘working smart’ to ‘keep pace with the world’ while concentrating on fresh R&D in newer fields—to boldly go where no one has gone before—and to outpace the world simultaneously. Kamlesh Agnihotri, consequently, has taken on the onerous task of taking a good, hard look at the Chinese People’s Liberation Army (PLA) modernisation plan in conjunction with the stated political aims of the country, and comparing it with Chinese operational effectiveness in combat to produce a cornucopia of information on China’s military developments of Janesque proportions.

The book has focused primarily on high-technology developments in the military arena, but has also stepped into geostrategic concerns by looking at their implications for India, which is *de rigueur* and par for the course. The most unique feature of the book, however, emerges from the fact that the author, with a largely non-scientific background, has written so truthfully and accurately about China’s high-speed technological progress and achievements. This rare attribute has resulted in a down-to-earth and simple semantic construction and presentation of facts, wherein the author has been able to explain the finer nuances of high-technology lexicon in a language understood by the common man. High-technology equations and diagrams do tend to ‘topple the gyro’—a nautical term meaning ‘destabilise the mind somewhat’—more often than not. However, *Leveraging High-Technology Developments in the Chinese Military and Maritime Domains* reads like a dream with no dilution of understanding the import of cognitive reasoning and the seriousness of the situation. That the author has managed to attain this level of comprehension and

perception while using open source information in a world ruled by half-truths, unverifiable assertions, one-sided historical claims, biased narratives, propaganda and hype, is a singular achievement by itself.

The painstaking research undertaken by the author is sharp, incisive and to the point. Data has been meticulously collated over a long period of time, ruminated at leisure and then presented in the book duly garnished with the author's own experience in the Indian Navy during his various appointments. Key areas of technological concern consequent to the technological advances made by the PLA, for both, India and the world, have been adequately addressed.

In the introductory chapter itself the author brings out China's quest for technological expertise as the base from which the country has furthered its national rejuvenation agenda over the past few decades. The author also posits that by concurrently developing a strong industrial base, China became the largest industrialised country in the world in 2010. Reluctant admiration aside, the author has shrewdly assessed China's efforts to leverage its Science and Technology advancements, and innovative aptitude towards bolstering its armed forces. While the 'cut-copy-paste' paradigm has been successful to a certain extent with regard to Chinese aircraft, ships and unmanned systems' designs, indigenous Chinese technology and innovation still has miles to go before its platforms and weapon systems can prove themselves as reliable and battleworthy.

The author has, therefore, structured his book layout quite logically; covering China's industrial base first, then moving on to their dual-purpose science and technology prowess before commenting upon the reality of PLA modernisation. Thereafter, the author has critically looked at the overall PLA reform process, its synergistic jointmanship and prominent high-technology developments in China's maritime domain also. The book concludes with an Indian Ocean Region security scenario vis-à-vis the PLA while discussing China's future intentions in the region. A deep analysis and comparison with the Indian Navy has reiterated the—well known and documented—disparity in numbers and technology between the Indian Navy and the PLA Navy. But the clarion call for renewed efforts in R&D by the Indian Navy cannot be ignored and the author emphatically makes

this point with his double-edged figure and tables, which tell their own tale in stark perspective.

Had the book gone down to the technical training institutions and cradles of leadership in the various colleges and academies established and run by the PLA, the impact of tracing high-technology development in the PLA would have been even more forceful. Identification of talent; progress monitoring of the chosen and select few; state sponsorship for development of cyber capabilities; Directed Energy Weapon (DEW) development and the nuclear dimension are some additional factors which merit more attention—to my mind—to complete the whole picture. But the author has perhaps restricted himself only to the maritime domain as brought out in the book title.

The book, however, is a stellar example of how little we know about our enemy and how exhaustive research can help us cover the gaps in our knowledge. The author has put in tremendous amount of effort to bring out Chinese high-technology prowess in the fields of Artificial Intelligence, Quantum Communications, Hypersonic Glide Vehicles, Anti-Ship Ballistic Missiles (to a limited extent), Unmanned Aerial Vehicles, Unmanned Surface Vessels, Unmanned-Manned Submersibles, Underwater Acoustic Systems akin to the SOSUS, Special Purpose Ships, Electro-Magnetic Rail Gun and Electro-Magnetic Aircraft Launch Systems. And as Admiral Sunil Lanba (Retd.), former Chief of the Indian Navy, so eloquently says in his Foreword, “the book (will be) a very useful resource for all China-watchers and the maritime community at large—whether beginners, moderately interested ones, or experts.”

Informed discourse on China amongst Mandarin Panda and Dragon watchers will certainly benefit from this exhaustive, high calibre work.