Chinese Aerospace Power: Evolving Maritime Roles

Edited by A S Erickson and L J Goldstein


In 2011, the People’s Republic of China completed the maiden flight of the J-20, its first stealth fighter aircraft, and sailed its first aircraft carrier for initial sea trials. These two events mark major milestones in the continuing evolution of China’s defence capabilities. However, whereas the development of China’s air, space, and naval capabilities has attracted considerable attention among journalistic, scholarly and policy-making communities, comprehensive analyses that connect Chinese aerospace developments and naval issues, especially with regards to the Asia-Pacific region, are far and between.

It is in this context that Chinese Aerospace Power: Evolving Maritime Roles, edited by US Naval War College associate professors Andrew S Erickson and Lyle J Goldstein, is a highly welcome addition to the literature. This is the fifth volume in the ‘Studies in Chinese Maritime Development’ series that is published jointly by the China Maritime Studies Institute (CMSI) at the US Naval War College and the Naval Institute Press. Most of its chapters originate from papers that were presented at a 2008 CMSI conference and that were subsequently revised significantly. This hardcover volume consists of a foreword by retired United States Air Force Lieutenant General Daniel P Leaf, a brief yet comprehensive introduction by Lyle J Goldstein, and six thematic sections each of which consists of multiple chapters. It also features a very helpful list of acronyms and nicely done cartographic appendices. All chapters are based exclusively on a broad range of public domain, non-classified primary and secondary sources, mostly available in Chinese language only and rarely as thoroughly utilised in other published studies.

The first section sets the stage by discussing China’s rapid aerospace development and its relevance for maritime issues in the Asia-Pacific region. The second section explores Chinese aerospace capabilities with regards to ISR (intelligence, surveillance, and reconnaissance) and counter-ISR and resulting maritime implications. The third section elucidates potential implications for naval missions due to the development of specific platforms and capabilities such as helicopters, airborne antisubmarine warfare, aerial refuelling, and carrier-based aviation. The fourth section investigates China’s rapidly evolving cruise missile technology and corresponding implications for naval capabilities. Similarly, the fifth section examines recent Chinese anti-ship ballistic missile developments. The sixth and final section offers concluding chapters that develop a more comprehensive assessment of China’s aerospace power and the resulting impact especially on US military operations in the Asia-Pacific region and a call for engagement and trust and confidence building.

This volume proposes that the rapid development of China’s aerospace capabilities is about to have, or arguably has had already, a significant impact on the military balance of power in parts of the Asia-Pacific region. Air, space, and naval power have been highly asymmetric in favour of the USA throughout most of the post-WW2 period. This volume suggests, however, that Chinese aerospace developments have reduced the degree of this asymmetry significantly and are possibly about to even the playing field in the western Pacific, if not shift the balance of power — on the basis of China’s anti-area/access denial strategy — in China’s favour.

As suggested by the brief overview of the six thematic sections above, the strengths of this volume lie in a) the multi-dimensional nature of its analyses that address technological issues as much as matters of military doctrine and strategy, b) its holistic conceptual framework that views air and space power as an integral whole; c) the comprehensiveness of its coverage that includes a broad range of air and space technologies such as fixed-wing, land-based combat and support aircraft, fixed-wing carrier aviation, helicopters, UAVs, cruise missiles, ballistic missiles, and satellites; and d) its measured analytical approach that does not fall victim to hyperbole by clearly differentiating between existing and aspirational capabilities.

Given the multi-faceted nature of the subject matter at hand, some of the chapters overlap and, as is the case in many edited volumes, quality across chapters is not entirely uniform. Notwithstanding this rather minor unevenness, Chinese Aerospace Power: Evolving Maritime Roles is a balanced, insightful, thought-provoking, well researched, and timely analysis of an immensely important topic and an absolute must-read! The editors and contributors are to be congratulated for having put together such a wide-ranging volume that is eminently readable for China aerospace and defence experts and non-specialists alike.

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British Aircraft Corporation: a History

By S Skinner


Thirty-one years from Charles Gardner’s original first-hand and fully-authoritative perspective (London: B T Batsford Ltd. 1981) — recounting the hugely demanding influences and outcomes that beset the management of the politically-directed merger of the aviation interests of the Vickers, English Electric, Bristol and Hunting industrial groups into British Aircraft Corporation (BAC) in the wholesale consolation of the British aviation industry in 1960 — this identically titled book provides a complementary encyclopedic retrospective of BAC’s full range of civil and military aircraft, guided weapons and space programmes. This it does from its formation to nationalisation in 1977, alongside the enlarged Hawker Siddeley Group to include de Havilland, when both groups were subsumed into British Aerospace. Together these two books now provide a definitive chronicle of what constituted a defining ordinate in the transformation of both the British and European aerospace industries towards their powerful global status of today.

Presented in the now familiar Crowood Aviation Series format by an accomplished modern-day aviation historian, in 13 well-structured and illustrated chapters of linked themes and product groupings, this new work is prodigiously researched and detailed contextual description of the all-embracing BAC portfolio — many examples of which remain in service today. Implicitly, it also records the triumphs, traumas, cancellations and worldload-balancing and export winning challenges with ‘old’ and ‘new’ account products encountered in navigating through first the UK domestic industrial integration and then in the key role of laying the foundations of large-scale pan-European collaboration — notably with Concorde, Jaguar and Tornado — and in initiating the massive, and still continuing, Saudi Arabia contract, which so characterised the BAC years and thereby set the template for the multilateral collaborative ethos that now pervades almost every major aerospace programme un the world today.

The opening paragraph of the dustjacket of Charles Gardener’s book succinctly stated:

“Even by the modest standards of aviation history, British Aircraft Corporation set no records for longevity. Its true importance, however, lay in the fact that it encompassed within its lifespan of 17 years all the political, economic and technological upheavals which transformed the aerospace industry worldwide.”

This new treatise not only validates this epithet in large measure but also emphasises the exceptional value and legacy that BAC bequeathed to British Aerospace and ultimately inherited by BAE Systems. Summarily, it commendably portrays a microcosm of the history of the vital world industrial and social dynamic that Aerospace, and its inseparable sibling Defence, now represent — and in both domains of which BAC established lasting benchmarks in both technology and process.

Three related points that need clarification for Society readers. On p 31 Charles Gardner is listed as Technical Director when, in fact, he was Vickers and then BAC’s Publicity Manager and a Special Director. Then, in the bibliography (p 157), the authorised biography of the great architect and leader Sir George Edwards entitled From Bouncing Bombs to Concorde (Sutton Publishing. 2006) — which essentially formed the second of what is now comprises a comprehensive trilogy of the overall affairs of BAC — is not identified as such. It is also attributed to Richard Gardner, the former editor of Aerospace International and still a frequent contributor, instead of Robert Gardner (son of Charles and a company executive).

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