

**‘British strategy and outer space: A missing link?’, *British Journal of Politics and International Relations* 20:2, 2018, <http://journals.sagepub.com/doi/abs/10.1177/1369148118758238>**

Britain is classed as a secondary spacepower compared to the USA, China, and Russia. Whilst debate on British defence and security policy continues apace, especially in light of its semi-regular defence and security reviews, the role of spacepower in British defence and security continues to escape scrutiny and discussion. In recent years, Whitehall has increased its activity in space policy and space security through the publication of the first National Space Policy, National Space Security Policy, reviewed UK military space doctrine, set up the UK Space Agency, and supported the release of educational materials within the MoD. This article argues that, in space, Britain cannot escape the two giants of spacepower on its doorstep. It has integrated with the USA for military and intelligence needs – mostly outsourcing capabilities with a few exceptions – and has been very active in scientific and commercial integration in European spacepower. Brexit challenges this traditional balance of space policy, and raises important questions for British investment and spending on sovereign space capabilities that directly enable terrestrial combat platforms. It is argued that an area for investment in UK military/intelligence space capabilities, particularly in the wake of Brexit, would be multispectral imaging platforms and increasing the pool of IMINT analysts and space specialists to better process the data already provided by allies.

**‘The RAF and Space Doctrine: A Second Century, a Second Space Age’, *RUSI Journal*, forthcoming 2018.**

This article examines the RAF’s space doctrine, which was reviewed in late 2017 in JDP 0-30 ‘Air and Space Power’ doctrine document. The Ministry of Defence (MoD) and Whitehall have explicitly and unambiguously brought British space security policy and military doctrine into line with American doctrine regarding the command of space. This normalises British attitudes towards space as just another strategic geography like the air and sea, and a place that must be defended and exploited in a time of war. Despite their terminological differences, American and British concepts of spacepower revolve around the necessity of commanding space to varying degrees, through a mix of controlling space assets and denying the adversary the use of their own, as well as exploiting that command. All space roles envisioned in these doctrines either help achieve that command or exploit it. Despite capability and numerical intellectual limitations, JDP 0-30 has captured the essential strategic truth of spacepower and demonstrates the increasing intellectual capacity and official comprehension of the RAF and MoD in spacepower. Although the business case is yet to be made in the public domain, a British polar and sun-synchronous orbit launch spaceport, coupled with its booming small satellite manufacturing and service sector could transform the hardware and staffing options available to the RAF and MoD in spacepower in the decades ahead. The seeds are present in JDP 0-30 to consider how small satellite manufacturers and lighter launch capabilities may generate brand new sovereign capabilities and doctrinal possibilities for London as a secondary space power. An RAF or MoD interested in developing its own small satellite constellations, with a British small satellite manufacturing capability and a launch site on British soil could be transformational for British strategic culture and military, economic, and diplomatic power in the 21st century.

**‘From the sea to outer space: The command of space as the foundation of spacepower theory’, *Journal of Strategic Studies*, First Online, 2017, <https://www.tandfonline.com/doi/abs/10.1080/01402390.2017.1293531>**

There is a high degree of coalescence within the spacepower literature as to the core of the concept of commanding space, which means the control and denial of outer space during a time of war. Unfortunately this also means they share similar problematic readings of seapower theory. The unity of Corbett and Mahan forms a stable conceptual core which focuses thinking of spacepower on commanding that medium and its communications. Mahanian and Corbettian seapower theories should be understood as complementary, not dichotomous, in both their educational intent and conceptual content, particularly in how they stress that the command of a medium is not inherently decisive by itself. The command of space is only relevant in how it allows spacepower to influence a wider war on Earth, and its strategic significance is not set in stone. Destroying or disrupting space infrastructure is not an end in itself; the command of space stresses the subordination of such means towards strategic ends on Earth. Similarly, seeking battle in space should never be an end in itself. Seapower theory proposes that space battle will not necessarily be any more or less decisive than naval clashes in the context of seapower and grand strategy. Rather than portraying space infrastructure as a centre of gravity, judgement is needed from the individual to identify it, if one exists, and strike. Space may be a centre of gravity for some political actors, but not all, and some may prepare alternatives and redundancies.

Summary of recent research by Dr Bleddyn E. Bowen, University of Leicester, [bb215@leicester.ac.uk](mailto:bb215@leicester.ac.uk)

Bio:

Dr Bleddyn E. Bowen is a Lecturer in International Relations at the University of Leicester. Before lecturing at Leicester in January 2018, he was a Lecturer in Defence Studies at the Defence Studies Department, King's College London, which is embedded at the Joint Services Command and Staff College, Shrivenham. Prior to that, he was a Teaching Fellow at the Department of International Politics, Aberystwyth University, where he also worked for his various degrees. During his PhD at Aberystwyth University he was a Visiting Scholar at the Space Policy Institute in Washington, D.C. in Spring 2014. Bleddyn's primary research interests concern warfare, politics, and security in outer space. Bleddyn has published in several academic journals and has written numerous op-eds for various outlets, provided evidence for the UK's House of Commons Exiting the EU Select Committee on Brexit and UK space policy, and has appeared in the media several times in outlets such as BBC Radio 4, 5, Wales, Cymru, the Financial Times, The Times (London), and Wired. Bleddyn is currently working on his research monograph, about spacepower theory.