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NATIONAL DEFENSE UNIVERSITY

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Carrier Enabled Power Projection:

Delivering for Britain or Papering over the Cracks?

Exerting Influence in an Age of Austerity

by

T J Salberg MBE RE

Lieutenant Colonel, British Army

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Carrier Enabled Power Projection:

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by

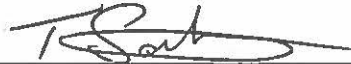
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A paper submitted to the Faculty of the Joint Advanced Warfighting School in partial satisfaction of the requirements of a Master of Science Degree in Joint Campaign Planning and Strategy. The contents of this paper reflect my own personal views and are not necessarily endorsed by the Joint Forces Staff College, the Department of Defense or the UK Ministry of Defence.

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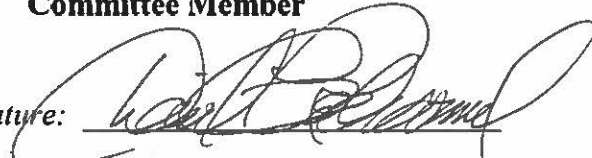
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Abstract

At the end of the decade the UK will realize a new carrier strike capability with the arrival into service of the first of two Queen Elizabeth Class aircraft carriers and the Joint Strike Fighter, the F35B. As the largest ships ever built in Britain for the Royal Navy, the future carriers are at the heart of the British Government's aspirations for power projection and to exert influence strategically, while tackling threats at distance and upstream. Delivered through a concept known as Carrier Enabled Power Projection (CEPP), the UK seeks to put the future carriers at the heart of a comprehensive air, sea, and land capability to meet the national aims. But, in a severely resource constrained environment, is too much emphasis being placed on the carriers to the detriment of the other capabilities that come together to make CEPP? Are the carriers being seen as a panacea for Defence's contribution to UK influence?

CEPP, and specifically the future carriers, will never realize their full potential if the UK lacks the ability to effectively deliver ground forces and transition to land operations. The escalatory utility of carrier strike within the CEPP concept is lost if the threat of force to win the clash of wills on the land lacks credibility. The UK must ensure sufficient investment is made in the amphibious navy and not rely solely on the carrier to be able to deliver all the elements of the CEPP concept sub-optimally rather than its specialist role well. Done correctly, the CEPP concept will deliver for Britain, offer a just return on the investment, and be a true statement of British power and influence.

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One: Introduction

“Gentlemen, we have run out of money; now we must think.”

- Sir Winston Churchill.

While Britain may no longer rule the waves, as an island nation of significant wealth and influence, she remains a maritime power. For centuries the Royal Navy (RN) brought fortune to British shores and allowed the Crown to project power globally. Since Britain handed off the mantle of ‘world super-power’, the RN has been managing a steady reduction in the size and scale of its fleet. Today Britain is, for the first time since 1916, without a carrier strike capability. Risk is being taken in balancing the books in the aftermath of the global financial crisis. But, at the end of this decade Britain will realize a new era in carrier strike capability with the two Queen Elizabeth Class (QEC) carriers entering service. The largest ships ever built in the UK for the RN, they demonstrate Britain’s resurgence and are, rightly, key to securing Britain’s future. But as this capability is realized, the UK can ill afford to neglect the elements that fit around the carriers, which add the joint capability for true power projection to protect the UK’s interests in an uncertain world.

This thesis examines one element of how the British military will meet the challenge of projecting power and contributing to the UK’s influence around the world. Britain is seeking to use the new carriers to exert influence and project power through a concept known as Carrier Enabled Power Projection (CEPP). This thesis considers the CEPP concept and examines whether, in the current resource-constrained environment, delivering carrier strike and the realities of CEPP adequately address a comprehensive approach to power projection as aspired to in UK foreign policy, or whether the

investment is failing to meet Her Majesty's Government's aspirations. It asks whether the realization of carrier strike is being seen as a panacea for power projection rather than just part of the solution, and if sufficient consideration is being given to other capabilities, specifically the transition to the land environment. Can CEPP actually deliver the task Defence has been given?

The UK's 2010 Strategic Defence and Security Review (SDSR) gave the British Military the task of "defending our interests by projecting power strategically..."¹ At first glance the CEPP concept and associated capability programs appear to meet the requirement. Arising in the aftermath of the SDSR, CEPP expanded the role of the UK's future carrier strike to a broader capability that combines amphibious and special forces operations, and allied interoperability. Associated programs deliver specific components: the future carriers; F35B Joint Strike Fighter (JSF); maritime intelligence, surveillance, and reconnaissance (ISR); and logistics. The CEPP concept combines the existing amphibious capability of the Response Force Task Group (RFTG) with these future programs to deliver a power projection capability across the sea, land, and air domains. However, with the last helicopter landing platform, HMS Ocean, due to be retired once both QEC carriers are in service and no replacement in sight, questions begin to arise as to whether too much is being staked on the carriers. If CEPP is to be fully realized as a means to project power and meet the UK's foreign policy aspirations set out in the 2010 National Security Strategy (NSS) and SDSR, then greater consideration needs to be given towards a number of complementing capabilities.

¹ HM Government, *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review* (London: The Stationery Office, 2010), 18.

This study will analyze the CEPP concept, the role of power projection in international relations theory, and Britain's aspiration for influence, specifically that provided by the military instrument of state power. It seeks to identify the shortfall between national aspiration, as outlined in the NSS, and the ability of the military to realize it. Theory will act as the guide to identify whether investment is consistent with ambition. In doing so, the study should determine whether CEPP can deliver on its claims and, if not, will make recommendations as to where further investment is required to realize the concept as a true military instrument of state power.

UK Defence Doctrine describes the characteristics of the military instrument of state through fighting power. Defining the ability to fight, fighting power comprises three components: the moral—why we fight; the conceptual—how we fight; and the physical—the means to fight.² Fighting power enables credibility and utility of the military instrument. The three components of fighting power are in tension between one another, when the components are balanced the fighting power has credibility and utility. Yet when they are not balanced, when there is insufficient means to realize the concept or aspiration, or there is no justification for the approach, then the military instrument is found wanting for fighting power.

Consider this idea of fighting power as a model for examining UK military power projection and influence. The SDSR provided the justification, giving Defence the specific task of projecting power and influence to protect the national interest—the why. CEPP is the conceptual component, how the military will accomplish the task. The new aircraft carriers, the F35s, the service personnel, and the other programs within the CEPP

² Chief of the Defence Staff, *UK Defence Doctrine*, Joint Doctrine Publication 0-01 (5th Edition) (Swindon: Development, Concepts and Doctrine Centre, November 2014), 25.

concept are the means—the physical component. However, this triad of fighting power: the moral, the conceptual, and the physical components, may be out of balance. There does not appear to be sufficient means for Defence to deliver comprehensively; the military does not have the resources to achieve the task in the way conceived. This thesis suggests that investment in CEPP, both physical and conceptual, is lacking and is threatening to undermine both the credibility and the utility of the concept for UK power projection. It asks if a lack of investment is undermining Britain's ability to exert influence on the world stage?

Two: British Psyche – Influence in the Modern World

“Parliamentary institutions, with their free speech and respect for the rights of minorities, and the inspiration of a broad tolerance in thought and expression - all this we conceive to be a precious part of our way of life and outlook...I ask you now to cherish them - and practise them too; then we can go forward together in peace, seeking justice and freedom for all men.”

- HM Queen Elizabeth II¹

Strategy and Influence

Shortly after coming to power in 2010, the Coalition Government of Conservatives and Liberal Democrats, under the leadership of Prime Minister David Cameron, released their NSS. It is a strategy that sets a course to deliver Britain’s interests and security. At the very heart of the strategy is maintaining Britain’s influence in the world, specifically challenging Britain to “reject any notion of shrinkage of our influence.”² Three years on, in December of 2013, Prime Minister Cameron went further and called for an expansion of British Influence.³ Articulating the intent to remain a key actor on a global stage, the NSS places “[e]xert influence...”⁴ third on the list of National Security Tasks. Britain’s NSS recognizes influence and the projection of power as inherent in providing security ‘upstream,’ of tackling “risks at source.”⁵ Britain is, at least within published policy, serious about exerting influence.

¹ HM Queen Elizabeth II, “Coronation Day speech, 2 June 1953” The British Monarchy, <http://www.royal.gov.uk/ImagesandBroadcasts/Historic%20speeches%20and%20broadcasts/CoronationDaySpeech2June1953.aspx> (accessed 21 February 2015).

² UK Prime Minister, *A Strong Britain in an Age of Uncertainty: The National Security Strategy* (London: The Stationery Office Ltd, October 2010), 10.

³ UK Prime Minister Appearance before the Joint Committee on the National Security Strategy, 30 January 2014. C-SPAN, <http://www.c-span.org/video/?317503-1/british-pm-national-security> accessed 29 December 2014.

⁴ Prime Minister, *A Strong Britain*, 33.

⁵ *Ibid.*, 22.

Just 24 hours after releasing the NSS, the British Government then delivered the SDSR. While the NSS articulated the national objectives and the strategic environment in which Britain operated, the SDSR set out the ways and the means to achieve those goals.⁶ Although not just aimed at Defence, the SDSR included an approach to ensure the UK's Armed Forces were appropriately equipped, and to address a significant overspend in the Defence Budget, while retaining capability and versatility in the current age of uncertainty.⁷ The SDSR sought to move British Defence from the Cold War, for which much of the military was still equipped, to a more versatile, expeditionary force able to deliver effect rapidly across the globe. However, amongst a broad array of tasks and policies within the SDSR, the government specifically tasked the Ministry of Defence to project UK power and influence. To “defend our interests by projecting power strategically and through expeditionary interventions. [and] providing a defence contribution to UK influence.”⁸ The CEPP concept is in direct response to these tasks. Taken together, and allied to the need for a unilateral ability to act,⁹ the SDSR sets clear direction for apportionment of resources to deliver this national capability.

The last time the UK introduced new aircraft carriers was at the height of the Cold War. Those carriers were wedded to a European focused threat and a contest the UK had been engaged in for several years. Committed to the NATO alliance and a major western

⁶ HM Government, National Security Secretariat, *Fact Sheet 1: Our Approach to the National Security Strategy* (2010).
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/62483/Factsheet1-Our-Approach-National-Security-Strategy.pdf (Accessed 5 February 2015).

⁷ Part Six of the SDSR discusses structural Reform and Implementation, while the table on page 69 outlines the lead Ministers for each priority work area.

⁸ UK Prime Minister, *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review* (London: The Stationery Office Ltd, October 2010), 18.

⁹ *Ibid.*, 17.

power in the showdown with the Soviets, Britain's place in the world was clear. Can the same be said today?

How does Britain view its place in the World?

To understand Britain's aspiration for influence globally, consideration must be given to the strategic context in which the UK finds itself and, specifically, how does that relate to the global perspective of the UK's place in the world. The 2010 NSS lays out "Britain's Distinctive Role"¹⁰ as a means to set that strategic context and articulate the operating environment. In examining 'Britain's Distinctive Role,' there are two points to consider: Firstly is the accuracy of the portrayal, albeit accepting that this is highly subjective and personal perspectives tend towards stereotyped extremes, either love it or hate it. Secondly, considering that subjectivity, recognize that, whether accurate or not, it is the role that is perceived by the British Government and therefore sets its aspiration, and is the rubric against which the outcome should be judged.

The NSS sets out Britain's role considering its economic position, its geographical and virtual location within global networks, its role in international affairs, and the UK way of life and national interest. Generally quantitative, and therefore easily validated, the arguments presented by the government demonstrate a leading power with a worldview of Britain as an important, global leader, strong and influential on the world stage. There are a few key headlines: with less than 1% of the world's population, the UK has the 6th largest economy; London is a "World City", and the UK is placed to provide a link between the economic markets of Asia and North America. Albeit written four years ago, the Government's case remains apropos; in fact, at present the UK's economic

¹⁰ Prime Minister, *A Strong Britain*, 21.

performance is considered the strongest among the G7 leading nations.¹¹ The UK continues to be a leading nuclear power and retains its permanent seat on the UN Security Council; ally to that the relationship with the Commonwealth and the European Union and there is a considerable case for UK influence on a global scale. It follows therefore, that as a major power the UK would expect to, and does, feature extensively on the world stage and should aspire to significant global influence. Having looked into Britain, it is worth looking out and seeing how Britain interacts outwardly on the global stage.

Britain has to look out. The UK imports more than it exports and its markets are inextricably linked globally. While the UK is at the forefront of energy development, she remains reliant on the import of oil and gas from overseas sources. Nearly 50% of food and energy is imported, which contributes to imports of over £534Bn (839B USD) a year. With a relatively small population, limited land mass and natural resources, Britain must engage globally for trade, energy, food, and all manner of other resources. Although it may be relatively intuitive, as an island nation, 95% of Britain's economic activity depends on the oceans.¹² Britain is reliant on looking outwards, with a global worldview.

It is also worth noting that the UK is not only the home countries of England, Scotland, Wales, and Northern Ireland, it includes seventeen territories and dependencies that look to Britain for their security. The sovereignty of some of these lands is contested, not by their residents, but others lay claim to them—the Falkland Islands and Gibraltar being the most obvious. The British Government, having long been an advocate of self-determination, has pledged to continue to uphold the principles of democracy and with it

¹¹ BBC News, "CBI urges government to focus on cutting deficit in new year," *BBC News Business*, 29 December 2014, <http://www.bbc.com/news/business-30628166> (accessed 4 January 2015).

¹² Royal Navy, "Protecting our Economy," The Royal Navy, <http://www.royalnavy.mod.uk/what-we-do/protecting-our-economy> (accessed February 8, 2015).

those territories' right to decide whether they wish to remain aligned to the Union. For as long as these populations wish to remain allied to the UK, Britain has made a clear commitment to ensure their security, that it will defend them. Such a responsibility to protect extends much further, to partners and allies around the world, many of whom Britain has treaty obligations to assist in times of conflict or threat. A long history on the global stage has not only earned Britain wealth and power, but also responsibilities, a legacy of the sun never setting on the British Empire. No longer a super-power, but firmly a major power, Britain must look outwards and globally; the UK's national interest is tied to it.

British Influence

The UK identifies influence as a specific National Security Task within the 2010 NSS.¹³ It is a task that has been specifically given to the military in the context of delivering national security, but is not exclusively within the military purview. State power, or influence, can be delivered through diplomacy, information, the military, and economically. This is critical to the British approach to influence which seeks a diplomatic solution to disagreement and conflict. Diplomatic power is undoubtedly enhanced by a strong economy, but even more so, by a strong military.

Consider the UK's desire for peace and security through diplomacy through a realist lens. Mearsheimer, writing on the 'tragedy of modern power politics', argues that states exist to maximize their share, to seek the best for themselves.¹⁴ Diplomacy becomes irrelevant once a state believes it can achieve more through force or means other

¹³ Prime Minister, *A Strong Britain*, 33.

¹⁴ John J Mearsheimer. *The Tragedy of Great Power Politics* (New York: W. W. Norton & Company. Inc, 2001), 2.

than diplomacy. When the penalty for a non-diplomatic course of action is outweighed by the benefits gained then the limit of the utility of diplomacy is found. That limit is not easily qualified or identified, and it is significantly dependent on both the economic and ultimately the credibility of the military capability that backs the diplomacy. The British approach to influence is through peaceful, democratic means, but backed by a strong and credible military. Put far more eloquently in the words of President Theodore Roosevelt: "Speak softly and carry a big stick; you will go far."¹⁵

¹⁵ Theodore Roosevelt, from a speech in Chicago 3 April 1903 in: The Quotations Page, *Theodore Roosevelt*, Quotation Details, "carry a stick" <http://www.quotationspage.com/quote/30185.html> (accessed 21 Feb 15).

Three: Carrier Enabled Power Projection – A Concept for Power Projection

‘Since men live upon the land and not upon the sea, great issues between nations at war have always been decided, ...either by what your army can do against your enemy’s territory and national life, or else by the fear of what the fleet makes it possible for your army to do’

- Julian S. Corbett¹

The ability of a nation to project power, or force, has long been a key factor in international relations. Building on Mearsheimer’s supposition that states exist to maximize their share and to seek the best for themselves,² nations have, for centuries, used military force to further their aims. However, in the context of modern international relations theory, the term power projection describes more than just the ability to wield military might; rather it refers to a nation’s ability to deliver that power beyond a state’s own borders and specifically against an adversary with whom that nation does not have a contiguous land border or the benefit of an aligned ally as an immediate neighbor to the adversary. The U.S. military sums it up neatly as it describes force projection: “The ability to project the military instrument of national power from the United States or another theater, in response to requirements for military operations.”³ The term military operations does not necessarily mean combat operations or even employing force, it could include deterrent operations, increasing readiness, or training as a persuasive measure to change an adversary’s calculations in the cost benefit analysis of using force. These types of operation all demonstrate credible fighting power as a threat. Threatening

¹ Julian S. Corbett, *Some Principles of Maritime Strategy* (Breinigsville, PA: Dodo Press, 2011), 2.

² John J Mearsheimer, *The Tragedy of Great Power Politics* (New York: W. W. Norton & Company, Inc, 2001), 2.

³ U.S. Department of Defense, *Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington DC: Department of Defense, 15 November 2014), 94.

with force, without necessarily employing it, is a significant factor when considering power projection and is explored further below.

While all nations have varying levels of ability to exert influence over one another—by informational, economic, or diplomatic means—there is no inherent ability to exert military power, particularly at range. As such, for a nation to be able to project power it is reliant on a means to get its force there. Realistically, that means a navy.⁴ Navies, however, are expensive, particularly those capable of traversing the world’s oceans and delivering comprehensive force at their destination. As such, these navies of global reach—the “blue-water navies”—have been limited to the world’s great powers.

CEPP

CEPP is an extension of a blue-water naval capability—carrier strike. It incorporates new programs with the existing “brown-water” amphibious vessels and landing forces of the RFTG. In addition to the QEC carriers and the F35B JSF, the new programs include the Tide Class support ships—the first to be delivered in 2016⁵—and the Crowsnest ISR package. The RFTG has been established since 2011 and combines specialist amphibious ships—as a minimum a Landing Platform Dock (LPD), a Landing Platform Helicopter (LPH) and a Landing Ship Dock (Auxiliary) (LSD(A))—with the landing force of circa 1800 troops from 3 Commando Brigade Royal Marines, and a tailored air group (TAG) of transport and attack helicopters. Collectively, it should provide a comprehensive capability to deliver sea, air, and land fighting power.

⁴ While the importance of airborne or air delivered forces should not be understated, there is a significant challenge for air delivered forces to generate sufficient mass, with protection and mobility, and then sustain them. Without some form of surface support, land or sea, they offer only the smallest and shortest duration impact.

⁵ Ministry of Defence “The Way Ahead”, *desider*, Issue 81, Feb 2015 22.

The CEPP concept sees a scalable power projection capability. Strategic influence could be delivered by either a carrier strike group (CSG) or the RFTG operating independently. Elements from either, a combination of both, or the entirety of the CSG and RFTG can be brought to bear in protecting the UK's interests and exerting influence. It is a flexible package that can provide presence, coerce, threaten, or compel. It can deploy without any intention or commitment to actually use force.

There is a virtuous circle between economic might and the ability to project power. Economic wealth allows nations to raise great navies, which in turn enhances that economic wealth. The British Empire was built on the largest most modern navy of the time. As Britain's economic power grew and allowed it to expand its navy, its ability to project force grew and so did the economic benefits. It is the same model seen now at the hands of the Americans. Economic strength has allowed the creation of the largest navy in the world, which in turn, supports greater economic growth and security. These great navies protect sea lanes, demonstrate power, and project will and influence globally.

Although not always fashionable to recognize, as part of a nation's ability to project power, these forces have the potential to generate wealth in themselves. Many nations invest in the defense industries of powerful allies for more than one reason. Not only do they procure top-of-the-range military equipment, but they also 'buy in' to the national interest of the nation from which they are buying. Few defense sales are black and white cash transactions; they show allegiance and seek to ensure support, whether explicit or tacit, military or diplomatic, in times of increased tension or conflict.⁶ "There was a [Washington] lobbyist who used to say, 'When you buy U.S. weapons, you're not

⁶ Kevin M. Woods, *Iraqi Perspectives Project, A View of Operation Iraqi Freedom from Saddam's Senior Leadership*, Norfolk, VA: Joint Forces Command, pp. 28-32.

just buying the weapon—you're buying a relationship with the United States,"⁷

The idea that nations buy a relationship when they procure arms from another raises the question of the principal driver for those purchases. How much of the decision is based upon the specific defense industry capability and how much on the credibility of an exporter's military? Saudi Arabia offers an interesting case study. The fourth largest importer of defense capability, by value, in 2013, the Kingdom has long links to western powers for its arms supplies. Throughout the 1980's the top three arms exporters to Saudi Arabia were the U.S., UK, and France. However, in the early 1990's, France's sales to the kingdom declined rapidly, then stopped, before slowly growing in the 21st century. While there is no formal explanation for this decline it is interesting to note that it occurred immediately after the 1991 Gulf War, a war in which France contributed forces, but offered no carrier strike capability. The question is whether the decrease in French arms exports to Saudi Arabia was due to a perceived lack of French credibility by the Saudis when they called on those in whom they had invested so heavily?⁸

More recently the emerging BRIC⁹ nations have increasingly sought to develop blue water navies, procure aircraft carriers and exploit the potential economic and influence opportunities that these capabilities offer.¹⁰ These nations, which cannot match

⁷ William Hartung quoted in: Kenner David, "Why is Saudi Arabia buying 15000 Anti-Tank Missiles for a War it will Never Fight?" *Foreign Policy* December 12, 2013, <http://foreignpolicy.com/2013/12/12/why-is-saudi-arabia-buying-15000-u-s-anti-tank-missiles-for-a-war-it-will-never-fight/> (accessed 22 February 2015).

⁸ Stockholm International Peace Research Institute, "SIPRI Arms Transfer Database" Stockholm International Peace Research Institute, <http://armstrade.sipri.org/armstrade/page/values.php> (accessed 22 February 2015).

⁹ Brazil, Russia, India, and China.

¹⁰ For more on the Blue-Water Navies of Brazil and India see Matthew Rolfes and Sean LaBar, "India: Budding Blue-Water Navy Capabilities," *The Daily Signal*, December 10, 2013, under "India Blue Water Navy," <http://dailysignal.com/2013/12/10/india-budding-blue-water-navy-capabilities/> (accessed February 8, 2015); and Michael E. Connors, *Tudo Pela Patria: The Brazilian Navy's Drive to Blue Water* (Naval Postgraduate School Monterey, California, June 2005).

the GDP or discretionary cash of nations such as the U.S. or UK, seek to capitalize on the opportunity power projection offers to further their claims to resources or trade, and to project influence on the world stage. The ability to project power has many uses.

The Threat of Force

The idea of deploying a military force but not employing it is at the heart of power projection. Politically, the ability to threaten or poise a force in the direction of a potential foe is one of the more attractive qualities of maritime force projection. “With little or no intention or expectation of using brute force,”¹¹ a carrier task group or amphibious force offers an uncommitted statement of intent and resolve, available for an extended period of time at relatively little cost to its owner. What’s more, it is scalable: able to loiter beyond the horizon and out of sight of the public and media, but known to the host government that is the target of the influence. Such an uncommitted but potent capability offers real opportunity for diplomatic and political negotiations to occur. Either side can back down without claiming to have intimidated or been intimidated, and for the majority, the presence of a foreign navy need never be known. Conversely, in relatively short time that force can be escalated through shows of presence and force, without ever breaking territorial waters, through to delivering direct action in a scalable and flexible manner should the situation change. British Maritime Doctrine describes this flexibility as “Poise”.¹² However described, afloat maritime forces have the potential to offer unrivaled flexibility to their political and military masters.

¹¹ K. Booth, *Navies and Foreign Policy* (London: Croom Helm Ltd. 1977), 26.

¹² Ministry of Defence. *British Maritime Doctrine*, Joint Doctrine Publication 0-10 (Swindon: The Developments, Concepts and Doctrine Centre, August 2011), 2-5.

The Limits of Naval Power

Naval forces, without an ability to conduct land operations, are defense forces. Maritime forces offer significant utility and are critical to a national arsenal, however as Blagden and others argue, these forces are inherently defensive in nature and are therefore benign.¹³ Navies patrol the ‘moats’ of maritime powers like the UK and U.S., they exert influence and power, protect sea lanes and economies, but don’t offer an existential threat to an adversary. Without the ability to achieve credible effect in the land environment, maritime forces are unable to win the clash of wills—the limit of naval power.

Acting independently, as a discrete maritime force without a land component, navies have two means to influence the land environment, either through bombardment or blockade. Naval bombardment includes artillery and/or missiles delivered from ships or submarines, or bombs delivered by aircraft flying from carriers. While bombardment can be coercive, limited in range and duration, it has rarely achieved the desired effect alone. As Mearshiemer describes it: [bombardment is] “not a serious strategy; naval bombardment is pinprick warfare”.¹⁴ Additionally, it is becoming ever increasingly politically unacceptable, at least for the West, to target anything other than the military elements of state power. The evolving emphasis on protecting human rights questions the legitimacy of targeting anything that will impact the general population. Such an approach then limits naval bombardment to targeting specific military capabilities but not

¹³ Blagden, David. "Sea Power is Benign Power." *The RUSI Journal*, 159:3, Jun 26, 2014: 54-61, see also Mearshiemer, *Great Power Politics*, 87.

¹⁴ Mearsheimer, *Great Power Politics*, 89.

targeting the will of the people and not threatening the seat of government.¹⁵ Corbett and Mahan, both advocates of naval bombardment, wrote at a time when targeting the will of the people through direct military force was seen as a legitimate form of warfare. In the 21st Century, the utility of a bombardment as called for by these naval theorists must be considered carefully in all but the most existential threats to a nation.

Mahan believed that the blockade was the Navy's greatest tactic in winning great wars. He espoused the possibility of a relatively small force blockading the entire eastern seaboard of the U.S. as justification for maintaining American naval military forces able to challenge any blockading force afloat.¹⁶ However, even Mahan recognized the limitations of a blockade stating that: "the people of the United States will certainly not starve, but they may suffer grievously."¹⁷ The blockade remains an entirely justifiable tactic today, it is routinely used in enforcing sanctions against an adversary or rogue state. In these circumstances, enforcing sanctions, the blockade is rarely used in isolation and again often represents a punitive action. For blockades to be used as Mahan aspired, they target the will of the people as a mechanism to challenge the seat of power. Again, the questions of legitimacy that limit the use of bombardment apply to blockades.

The Primacy of Land Power

"everything you do from standoff leaves the decision to the enemy, it takes land power and boots on the ground to compel an adversary. Take the land power out and you don't have jack!"

- LTG H. R. McMaster, USA¹⁸

¹⁵ Naval bombardment of specific key military targets is an important and highly effective military action. It delivers punitive effects and/or sets conditions for further air or land operations.

¹⁶ A. T. Mahan, *The Influence of Sea Power upon History 1660-1783* (New York: Dover Publications Inc, 1987), 85.

¹⁷ *Ibid.*, 86.

¹⁸ Brief to Joint Advanced Warfighting School at the Joint Forces Staff College on 8 January 2015, included with the permission of LTG McMaster, Commander Army Capabilities Integration Center, Training and Doctrine Command.

While carrier strike capability and naval forces have great utility in projecting power and influence around the globe they are ultimately a supporting function to land forces. As Julian Corbett, a leading maritime theorist of the early 20th century, eloquently notes in the quote that opens this chapter, people live on the land.¹⁹ To that end, land power remains the dominant expression of military might in the modern world. A country's ability to project that might, and that which the air and naval forces make it possible for that land force to do, is the essence of power projection.

The simple fact remains that warfare is, and always will be, a clash of wills; a conflict of interests between nations, individuals, and organized groups. It is a bloody reality that war is a fundamentally human endeavor where each combatant seeks to impose his will upon the other. In modern warfare, contrary to that espoused in the 1990s as a "Revolution in Military Affairs" seeking technology to make war cheap and efficient, definitive outcomes only come about through human interaction, and that takes place on land. "Operations in the land domain, are most effective at achieving the human outcomes that are the prerequisite for achieving national objectives."²⁰

The pre-eminence of the land domain is hardly a revelation, but the outcomes that can only be achieved through land forces are potentially increasing. While states are likely to remain the dominant actor on the world stage for the foreseeable future, the state's monopoly on violence has been significantly eroded in recent decades. The proliferation of weapons, globalization, and enhanced communications have put

¹⁹ Corbett, *Principles of Maritime Strategy*, 2.

²⁰ Raymond T. Odierno, James F. Amos, and William H. McRaven, *Strategic Landpower: Winning the Clash of Wills*, U.S. Army, U.S. Marine Corps, and U.S. Special Operations Command Strategic Landpower White Paper. <http://www.tradoc.army.mil/FrontPageContent/Docs/Strategic%20Landpower%20White%20Paper.pdf> (Accessed 21 February 2015). 1.

organized violence in the hands of non-state actors, violent-extremist organizations, and transnational criminal networks. Without the trappings of national governments these groups lack the physical infrastructure of state institutions, the seats of power, and reliance on popular support. Without these physical trappings to target from the sea or air, the requirement for boots on the ground is reinforced.

Equally, as national strategies have become more altruistic, justification for intervention in another sovereign nation can be found on the premise of human rights. In these incidents, short of war, the timely introduction of focused, sufficient land power could prevent or stop a human catastrophe. Albeit with the benefit of a better understanding through hindsight, Bosnia and Kosovo provide appropriate examples.²¹

Increasingly, physical seats of power as legitimate military targets, devoid of fratricide, become less obvious. As megatrends of population growth, urbanization, littoralization, and connectivity dominate the world's future, the operating picture is becoming ever more opaque, and with it the ability to target physical seats of power all the more difficult.²² The vital ground is as much cognitive as it is physical, making it all the more difficult to target and defeat anywhere but up close and personal, on the ground. It is on the ground, where the man can be challenged. But also, by discriminating between the combatant and non-combatant, by challenging the propaganda, so too can the idea be challenged, and the clash of wills won.

²¹ Ibid., 2.

²² David Kilcullen, *Out of the Mountains: The Coming Age of the Urban Guerilla*, (Oxford: Oxford University Press, 2013), 28.

The Relationship between Sea and Land Power

*“Already in 2012, 80 percent of people on the planet lived within sixty miles of the sea...the practical effect of all that is that a huge proportion of the world’s population now lives in what we might call the ‘littoral influence zone’”*²³

Nearly 400 years ago Francis Bacon observed that “he that commands the sea is at great liberty, and may take as much [or] as little of the war as he will.”²⁴ This is a fact that remains absolutely true today for maritime powers, such as the UK. Command of the sea, generally, allows the UK to choose the conflicts it wishes to engage in. The UK’s aspiration is to be able to be involved on the world stage and, if necessary, to do so unilaterally. That approach requires an inherent capability not only to project British military power around the globe but to project it ashore. A properly equipped and prepared carrier strike capability must feature at the heart of Britain’s security. However, without the ability to effectively deliver ground forces and transition to land operations, the threat of force lacks credibility, and much of the escalatory utility of carrier strike is lost. Projecting power from the maritime environment requires the ability to transition to land operations for it to be a truly effective means of state power. Ultimately, the full utility of the joint force is found in the effective integration of the air and maritime forces with the land forces in the achievement of the desired objectives. “The Fleet and Army, acting in concert, seem to be the natural Bulwark of these Kingdoms”²⁵

Notwithstanding the roles of maritime forces in supporting the landing forces with fire support, either from aircraft, missiles, and artillery, the life support they offer, or

²³ Ibid., 30.

²⁴ Francis Bacon, *Of the True Greatness of Kingdoms and Estates*, in Charles W Eliot (ed.) *Essays, Civil and Moral* (New York: P F Collier and Son, 1909-1914 [1625]), 11.

²⁵ From *Conjunct Operations, 1789* quoted in Major-General Sir George Aston, *Letters on Amphibious Wars* (London: John Murray, 1920), 2.

securing the maritime and air flanks; critically navies provide strategic maneuver and deliver land forces to the site of conflict. There are a number of ways in which navies deliver land force power ashore. The obvious is transport, the movement of troops from the home nation to a friendly port. Secondly the amphibious assault, akin to the landings in Normandy in WW2 or at Inchon during the Korean War. Finally, there is the amphibious landing or offload, an unopposed delivery of forces over a coastline: This is accomplished either away from enemy forces, as seen during the landings in San Carlos Water during the Falklands campaign, or after sufficient preparation by another force (naval fires, air power, or pre-landing force operations) to sufficiently degrade the opposition such that the landing is unopposed. While transport will remain an enduring task for a navy there is very little appetite for an amphibious assault, at present, and amphibious landings are the most likely approach a modern military is likely to take. Both the amphibious assault and landing require complete cooperation between sea and land forces and significant specialist equipment, not least the ships able to operate in the littoral environment. This comprehensive sea, air, and land integration is the goal of the CEPP concept.

Four: Diagnosing Utility

“The paramount concern, then, of maritime strategy is to determine the mutual relations of your army and navy in a plan of war. When this is done, and not till then, naval strategy can begin to work out the manner in which the fleet can best discharge the function assigned to it.”

- Julian S. Corbett¹

Britain’s Defence Doctrine model for fighting power was introduced in Chapter 1; the triad of the moral, the conceptual, and the physical components. Chapter 2 explored the moral component: why Britain seeks influence and what that influence means to the UK. Chapter 3 considered the conceptual component—the concept of CEPP, broader ideas of military power projection, and the ways in which the military instrument of state power can have utility in exerting influence. This chapter seeks to analyze the key points from the previous two chapters in relation to CEPP and explore how they are manifest in the physical component of CEPP. In addition to fighting power, there are two other key terms to consider when analyzing the military instrument of power projection—those of credibility and utility. These three terms—fighting power, credibility, and utility—form the rubric for determining whether CEPP can deliver that which is being asked of it.

Enduring throughout any discussion of power projection and the military tool of influence is the concept of credibility. Credibility, not only to be relied upon to do that which one claims to do, but also the ability to make good on those claims. For the military, credibility is vested in being able to deliver fighting power when and where it matters. The credibility of the CEPP concept and that of its constituent parts becomes a factor in determining its utility. If the concept lacks credibility then the utility of the

¹ Julian S. Corbett, *Some Principles of Maritime Strategy* (New York: Dover Publications, 2004), 16.

constituent capabilities is called in to question. With that in mind, let's return to the model of fighting power described in Chapter 1, analyze the CEPP concept against that model, and determine to what extent the concept has credibility and therefore utility.

The Moral Component

In the foreword of the 2010 NSS the British Government identifies a requirement to project power.² In doing so, the Government sets out the moral component—the why—of CEPP fighting power; it is a specified task. But, it is a task that finds its roots not only within the specifics of a NSS, but deep within the national psyche, in history, in Britain's very place in the world. Much of the moral component is owed to history and stems from the age of empire, with the UK as the leading player on the world stage. It is an intangible, a national identity that says the UK must have a voice and have influence. Still, it is found today in the Commonwealth and in the relationships the UK enjoys across the world, often as a legacy of that history. The quantifiable metrics describing the UK's economy, trade, and energy needs in Chapter 2 add weight to Britain's aspirations and provide a more tangible recognition of the UK's world position and its need to look globally.

The British psyche and the national interest as justification for government to demand a defense capability to project power can be seen to reflect Thucydides "three very powerful motives...security, honor, and self-interest."³ Security is found in the first responsibility of government, to protect the nation.⁴ The British government makes a

² UK Prime Minister, *A Strong Britain in an Age of Uncertainty: The National Security Strategy* (London: The Stationery Office Ltd, October 2010), 4.

³ Thucydides, trans. Rex Warner, *History of the Peloponnesian War* (New York: Penguin Books, 1954), 80.

⁴ Prime Minister, *A Strong Britain*, 9.

clear connection between security and the need to project power.⁵ The intangible quality that exists within the British psyche, which says ‘we have a voice’, ‘Britain counts on the world stage’ is the Thucydides ‘honor’. Additionally, a reliance on overseas trade, food, and energy is key to Britain’s national self-interest. Together these factors provide a powerful motive, a clear ‘why’ for the CEPP concept, the moral component of fighting power.

The Conceptual Component

The CEPP concept, discussed in Chapter 3, envisages a carrier strike group able to operate alongside the specialist platforms of the UK’s Response Force Task Group (RFTG). Scalable, it offers strategic options to politicians without, necessarily, any intention to commit boots on the ground, but with the potential to do so. Therefore, by allying the RFTG with the future carriers, the CEPP concept delivers air, sea, and land capability. The concept appears to be able to deliver comprehensive force at range and unilaterally.⁶ But, for CEPP to be credible the concept must be valid with the resources allocated to it. This is the first area of concern.

Without getting too far ahead to the physical component it is important to understand the resourcing constraints within the CEPP concept. The UK’s last helicopter carrier—HMS Ocean, a specialist amphibious LPH—is due to be retired once the second Queen Elizabeth Class (QEC) carrier becomes operational. The concept then envisages an aircraft carrier that can also provide the helicopter carrier function. However, capital ships, like aircraft carriers, require significant periods in port conducting training,

⁵ Ibid., 4.

⁶ The Prime Minister, *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review* (London: The Stationery Office, October 2010), 17.

maintenance, resetting, and taking leave. That requirement will routinely see one of the two QEC being held at a lower state of readiness; therefore, one carrier will need to deliver both the carrier strike and helicopter carrier roles simultaneously. Of course, the QEC has a large flight deck and can carry helicopters and planes, but is the concept of a single platform delivering both roles valid? It raises a question of tactics.

Tactics

Admiral Yad'ari warns of the constraints and specifically the threat of operating platforms designed for the open ocean in the littoral space.⁷ The littoral differs from the open ocean in a number of ways, mostly as a result of geography. Defined by the shoreline, littoral waters are often relatively narrow, shallow, and confined; they dictate the employment and type of ships that can operate there.⁸ The littoral creates a hostile environment for maritime forces. In addition to the geographical constraints, the proximity to the shore brings ships into the Anti-Access Area Denial (A2AD) zone, under the watchful eye of robust land based ISR and strike capabilities that significantly favor the land based force. Or, in the words of the British Admiral Horatio Nelson “a ship’s a fool to fight a fort.”⁹ The damage suffered by the RN during the Falklands Campaign in 1982 or caused by Hezbollah to an Israeli ship 75 miles out to sea in 2006 displays this threat plainly.¹⁰ It is hardly the environment where an aircraft carrier, constrained in maneuver as it conducts flying operations, would seek to be. Yet this is precisely where the landing force wants its ships as it goes ashore and at exactly the same time as it wants

⁷ Yedidia Yad'ari, “The Littoral Arena: A Word of Caution”, *Naval War College Review*, Summer 2014, 81

⁸ *Ibid.*, 82.

⁹ Quoted in John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W. W. Norton & Company, Inc, 2001), 89.

¹⁰ J.C. Lewis, "Power Projection," *Marine Corps Gazette*, September 2014, 33.

the maximum support from the carrier air wing. To illustrate the problem created, if the landing force is reliant on helicopters returning to a carrier stationed over 70 miles away between each sortie—a distance optimal for conducting flying operations outside the most imminent A2AD threats, the first troops on the ground will be waiting for close to 2 hours (total time for a round trip) before reinforcements arrive. With only a small helicopter capacity embarked on the carriers to retain the ability to deliver fixed wing operations, it could be a very long wait for the first troops ashore.

Corbett, in making the case for the primacy of land power, emphasizes the importance of the supporting role of naval forces to land power, describing it as “what the fleet makes it possible for your army to do.”¹¹ In amphibious operations the landing force wants air and maritime dominance. The carrier has the capacity to provide that dominance. However, to best maintain those air operations, the carrier needs to be steaming a flying course,¹² away from the immediate threat, unconstrained by shallow waters and a hostile shoreline from where the weight of land based systems are able to see and target her. When the landing force is at its most vulnerable, as it lands, the carrier would be caught between two vastly opposing mission requirements. While the carrier will undoubtedly be a credible carrier strike platform, and may well be credible as a helicopter carrier, delivering both roles requires it to operate in two different ways, in two different places at the same time. Against that scenario, CEPP lacks credibility, which undermines the utility of the carriers as well as the overall concept.

¹¹ Julian S. Corbett, *Principles of Maritime Strategy*, 2.

¹² Aircraft carriers steam flying courses heading into the wind to maximize the wind speed over the deck to allow their aircraft to carry the maximum payload on takeoff.

Conceptual Culture; blue or brown water?¹³

Another conceptual consideration, particularly difficult to qualify, is that of culture and specifically mindset. As with all large organizations, the people making up the subgroups develop their own identities and cultures. This is undoubtedly the case in the military where teamwork is at the heart of the psyche. Both amphibious and carrier strike operations are niche areas within any navy, with their own collection of nuanced and unique behaviors and approaches. The two are not necessarily closely aligned. While few would question why a submariner should command a submarine, the distinction among surface vessels is perhaps not as clear. The mindset required in the brown water navy of the amphibious forces is different than the blue water mindset of carrier operations. It is a difference that is important to understand, and the UK must address this issue early if it is to continue along the current path of using the carriers to do both functions. In 2012, with HMS *Illustrious* new to the role of a helicopter carrier there was friction between the Embarked Military Force (EMF) and the ship's crew. Despite command direction to facilitate the EMF, the ship's company found the EMF to be a hindrance to their business of launching and recovering aircraft, rather than recognizing the EMF as the primary weapon system of a helicopter carrier.¹⁴ This was markedly different to the LPD in the same task force—HMS *Bulwark*—a ship and crew that fully embraced the EMF rather than just seeing them as a taking up space.

The UK would be wise to look to the Americans to see how this cultural friction can be mitigated, particularly the USMC and the elements of the Navy that operate the

¹³ Blue and brown water describes either the open oceans—blue water, or the muddied waters close to shore—brown water. In the context of ships or navies, brown water refers to amphibious ships while blue water refers to ships designed to operate across the open ocean.

¹⁴ Author's experience serving as a member of the EMF on both ships during a deployment.

Americas and Wasp Classes of amphibious ships. However, this is not where the Royal Navy (RN) is focusing its attention. In retaining carrier strike knowledge, the UK has looked to the French and the Americans for assistance. Yet, in both cases it has been to pure carrier strike communities, to aircraft carriers that operate catapults and arrestor gear to launch and recover planes, platforms without a remit to embark and deliver a landing force or to operate in the brown water of the littoral environment. Admiral Yad'ari's words of caution, that thinking that brown and blue navies were interchangeable, should be heeded. The characteristics of the operating environment, the threat, and the mindset required are different: "Even more important is the effect that the littoral's special circumstance have on the commanding officer's decision making."¹⁵

The Physical Component

The means to deliver CEPP have already raised a question over the CEPP concept. Without a dedicated helicopter carrier platform, does the UK really have a credible means to project force in to the land domain? The physical implications of removing the LPH from the order of battle go further, it is a simple question of space.

The Strategic Defence and Security Review (SDSR) gave the MOD a specific task "be able to land and sustain a commando group of up to 1,800 personnel from the sea from a helicopter platform and protective vehicles, logistics and command and control from specialist ships, including landing and command ship."¹⁶ Currently, the UK has three amphibious assault ships: two Landing Platform Docks (LPD)—HMS Albion and Bulwark—and a Landing Platform Helicopter (LPH)—HMS Ocean. Additionally there are three Landing Ship Docks (Auxiliary) (LSD(A)), operated by the Royal Fleet

¹⁵ Yad'ari, *The Littoral Arena*, 83.

¹⁶ Prime Minister, *Securing Britain*, 21.

Auxiliary (RFA).¹⁷ These ships form the core delivery platforms for the landing force of the RFTG. Yet, once the second QEC carrier, HMS Prince of Wales, comes into service, HMS Ocean is scheduled to be retired, and the helicopter carrier function will be delivered by the QEC class (routinely at the same time as delivering carrier strike). This current plan raises a simple question of personnel capacity.

Consider the figures in Table 1. Even with the LPH, the RFTG requires at least four of the other five platforms (not including the CVS) to achieve the 1800 personnel mass required in the Government’s task.¹⁸ Using the EMF surge capacity provides additional personnel accommodation but it creates over-crowding and degrades the force. While surge capacity may allow for more people, there is no additional space for vehicles and equipment severely limiting the overall flexibility of the force. If CEPP is to credibly influence—threaten, coerce, and compel—it must be able to endure and maintain an effective and properly prepared force.

Table 1.

Type	Qty	EMF	EMF Surge	Aviation Offload	Surface Offload	Remarks
Landing Platform Dock (LPD)	2	256	405	2 Spots (no dedicated helicopter)	4 x LCVP 4 x LCU	HMS’ Bulwark & Albion
Landing Platform Helicopter (LPH)	1	450	800	12 Sea King 6 Lynx	4 x LCVP	HMS Ocean. Options to embark Apache Attack Helicopters
Land Ship Dock (Auxiliary) (LSD(A))	3	<400	NK	2 Spots	1 x LCU, or 2 x LCVP 2 x Mexefloat ¹⁹	RFAs Mounts Bay, Lyme Bay and Cardigan Bay
QEC Aircraft Carrier (CVS)	2	250	NK	Up to 12 Merlin and 8 Apache with F35	Nil	HMS Queen Elizabeth HMS Prince of Wales

EMF - Embarked Military Force, LCVP - Landing Craft Vehicle Personnel, LCU - Landing Craft Utility, NK – Not Known
All information taken from the Royal Navy Website, <http://www.royalnavy.mod.uk/> (accessed 2 February 2015).

¹⁷ The RFA is a civilian manned fleet of vessels that provides logistical and operational support to the Royal Navy. <http://www.royalnavy.mod.uk/our-organisation/the-fighting-arms/royal-fleet-auxiliary>

¹⁸ Prime Minister, *Securing Britain*, 21.

¹⁹ Mexefloat is a transportation barge for the administrative offload of vehicles and equipment.

Remove the LPH from the equation and every ship less one is required in order to lift the 1800 strong force (including the CVS). With the SDSR directing that one LPD should be placed at extended readiness, the entire fleet would be required to lift the landing force.²⁰ It has already been recognized that capital ships require significant periods of repair and refit, and that ships companies cannot be held at high readiness indefinitely. There is a need for redundancy.

There are of course alternatives: hiring civilian ships or embarking landing forces on the destroyers and frigates that make up a task groups escort; but these ‘fixes’ merely serve to disrupt the force or only offer a temporary solution. Against the Government’s own criteria, the question of space for embarked forces challenges the credibility of the physical component.

Summary

Against the UK Defence’s model for fighting power, there is clear justification as to the why of power projection, CEPP as the concept provides the ways, and specialist equipment undergirding the means. However, closer analysis suggests that a lack of investment in the physical component raises serious questions over the credibility of CEPP as a military instrument of power projection. An over-reliance on the carriers challenges the credibility of the overall concept and therefore the full utility of the carriers themselves.

²⁰ Prime Minister, *Securing Britain*, 17, HMS Albion has been held at extended readiness and recently left dry dock, the program of work to return her to front line service is expected to take two years. Royal Navy “HMS Albion Comes Back to Life” The Royal Navy. <http://www.royalnavy.mod.uk/news-and-latest-activity/news/2014/december/05/141205-albion-awakes> (accessed 23 February 2015).

Stated simply, “[Aircraft Carriers] play a key role in winning and exploiting control of the sea without which it would be extremely hazardous to mount amphibious operations... Carriers provided air cover and support for land forces during the 1982 war in the Falklands,... It was precisely because Argentina realized the importance of carriers to the UK’s campaign to reclaim the Falkland Islands that its Navy tried to sink them. If Argentina had been successful, the UK would almost certainly have lost the war.²¹ The UK undoubtedly needs aircraft carriers. The carriers are critical to retaining a leading role on the global stage, maintaining influence, projecting power, and defending the nation’s interests. But, they cannot do it on their own; they are not a panacea to the ills of British Defence. An effective and properly resourced amphibious capability is also key to retaining Britain’s place in the world. These capabilities complement one another and must be seen as supporting elements to a larger ‘comprehensive’ CEPP concept of power projection which includes the ability to control the air and maritime domains and project lethal military force ashore to the land domain.

²¹ IISS (1998) The Strategic Value of Aircraft Carriers, *Strategic Comments*, 4:2, 1-2, DOI: 10.1080/1356788980423 (Accessed on: 27 January 2015, <http://dx.doi.org/10.1080/1356788980423>), 2.

Five: Recommendations

“Carriers and amphibious forces are not a strategic panacea and have limitations...Nevertheless, they offer unique advantages and are essential for a viable British strategy.”¹

The principal recommendation is that the UK must continue to operate at least one dedicated helicopter carrier alongside the future carriers, thus ensuring there is always two platforms available, one in each role.² Any other course of action runs the significant risk of neutering both the UK’s carrier strike and amphibious capabilities. Excessive compromise will create a hollow force. A Navy with a credible new carrier, flying fifth generation aircraft able to do some things very well, but without the supporting elements to reach its full potential. At the same time, a highly capable commando force, with trained and prepared people, also able to do some things very well but without the lift and support to realize its full potential. Unfortunately, the key output to be compromised is the very area the Government has asked Defence to address, projecting power strategically. Without additional capabilities, one platform will be trying to deliver two competing roles at the same time, when the full CEPP concept is needed most.

Ensuring that CEPP, and therefore the future carrier strike capability, realizes its full potential requires the same level of investment across the elements of the concept as with the QEC themselves. It is clear that MOD recognizes that there is considerable risk, but in the fiscally constrained environment there are limited options. With that in mind,

¹ Tim Benbow, “British Uses of Aircraft Carriers and Amphibious Ships: 1945-2010,” *Corbett Paper No 9*, The Corbett Centre for Maritime Policy Studies, Kings College London, March 2012, 1.

² It is recognized that the current age of austerity some of these options may be cost prohibitive. The recommendations are made aware of, and informed by the financial situation but not constrained by it.

the UK is seeking to maximize the output from the carrier, but in doing so accepts the risk to and, potentially, compromise in the national aspiration. It also follows that the investment in Defence is not in line with aspiration nor in keeping with Britain's perception of its place in the world. Ideally Defence should seek to continue with a dedicated amphibious fleet, specifically a number of helicopter carriers, to complement the carrier strike group and properly realize the CEPP construct. While financial constraints make this difficult, and the current policy position from the Government is that the QEC will deliver both functions, careful consideration must be given to the options across all of the components of fighting power. The QEC carriers are critical to the UK national interest and represent a nation emerging from the economic downturn at the fore of the recovery. However, there are options for further consideration as to how the UK can project power globally with a force built around the future carrier capability.

The Moral Component

The moral justification for CEPP, and ensuring the full potential of the program is realized, is found in the aspirations and direction given by the Government in the NSS and the SDSR. That aspiration is a reflection of the British psyche, forged in the nation's history and identity. It is critical to the British way of life and protecting her interests. Collectively, these factors provide the 'why' for CEPP.

However, while stated in policy, the 'why' is subject to review later this year with the next SDSR. That review provides an opportunity to reconsider what the Government wants Defence to achieve, to challenge the national aspiration. While potentially unpalatable, if investment simply cannot match aspiration then it follows that aspiration must be curbed. This appears to be contrary to the Government's position: the Prime

Minister has recently called for increased influence, and the British economy is leading the recovery from the global economic meltdown. Such a change in direction would not only be counter to a resurgent Britain, but also is likely to have far broader ramifications for the UK's relationships with key allies and partners. Unintentionally, this action might signal a lack of confidence in the Government, which could potentially harm the economy and wider British prosperity. Realistically, and rightly, Britain should feature on the world stage, and the desire to project power and exert influence should remain a key priority. However, it must be noted that Defence cannot be continually asked to do more with less.

Conceptual Component

If the current policy not to replace HMS Ocean remains and the UK can only routinely operate one dual-role carrier strike and helicopter platform, considerable consideration must be given to how she is employed. As described by Admiral Yad'ari, "The movement to the littoral is much more than a mere change of mission."³ The first consideration should be a shift in emphasis of the carrier's primary purpose to that of an amphibious carrier. Immediately, a change in culture could be inculcated by adjusting the current UK-U.S. exchange program. Rather than employing RN personnel on U.S. Navy carrier strike aircraft carriers, move them to amphibious carriers, in support of the U.S. Marine Corps. These ships operate Harrier STOVL⁴ aircraft (protecting the landing force as part of an Amphibious Ready Group). It is the capability the UK is currently buying, by default, should it stick to a dual-role, or hybrid, carrier approach.

³ Yad'ari, Yedia, "The Littoral Arena: A Word of Caution", *Naval War College Review*, Summer 2014., 81.

⁴ STOVL – Short Take Off and Vertical Landing.

The Physical Component

While the current policy position from the Government is that the UK will not be investing in a new helicopter platform, it is worth considering the options. The global security situation has not improved since 2010; if anything, it has got worse. Major world challenges now include the rise of the Islamic State in Iraq and Syria, unrest and un-governed spaces in the aftermath of the Arab Spring, and a resurgent Russia goading NATO at every turn. There are grounds to reconsider the means Defence has to do the task—to consider matching investment to aspiration.

Options in the physical domain realistically extend to the continued operation of at least one amphibious helicopter carrier. In this resource constrained age there is significant reluctance to invest in further capital ships; however, while the UK retains the aspiration to be a major power, to have influence, and project force, there is an a clear requirement to do just that. Having retired HMS Illustrious in 2014, the UK currently operates only one LPH—HMS Ocean. HMS Ocean has seen service around the globe since 1998 and was recently used to launch attacks against targets in Libya during the Arab Spring. However, HMS Ocean is due to be retired once both QEC aircraft carriers have entered service.

There is clear justification for having both the QEC and a dedicated helicopter carrier. The time when a landing force is most vulnerable and most in need of air cover is the same time when it most needs the helicopter support. When a carrier platform wants to be out at sea, away from land-based threats to conduct aircraft launch and recovery

operations, the landing force wants it as close to the shore as possible, to minimize the turnaround time between waves of assault troops. Two roles, two different ways of operating, in two different spaces, at the same time – one ship or two?

Simply, there is a need for two. A dedicated amphibious helicopter platform has a number of tangible benefits. Firstly, it provides sufficient EMF capacity to meet the requirement set out in the SDSR. Secondly, it frees the aircraft carrier to focus on its core mission set while an LPH/Landing Helicopter Platform Dock (LHD) could be employed with its helicopters elsewhere. For example, the Carrier Strike Group (CSG) could support the air campaign against ISIS from the Persian Gulf as the French Carrier, Charles de Gaulle, is set to do, while, at the same time, the RFTG employs its helicopters on a disaster relief mission in the Philippines, as HMS Ocean did in 2013. Thirdly, a dedicated amphibious platform removes the juxtaposition between the carrier's need for open water and the landing force's need for a short transport cycle time. Finally, it addresses the cultural idiosyncrasies of blue and brown water navies, allowing the two missions and cultures to operate effectively in their core competencies while supporting the same task. With an eye to the financial situation there are broadly three options for the UK to continue to operate an LPH/LHD:

HMS Ocean?

Option 1, extend the service life of HMS Ocean. The UK already plans to extend HMS Ocean beyond her end of service date of 2019 in order to cover the gap until the second QEC carrier, HMS Prince of Wales, comes into service and reaches full operating capability, currently envisaged in 2023.⁵ However, this option considers extending HMS

⁵ Gareth Jennings, "UK reviews Falklands defence as Argentina eyes Su-24s," *HIS Jane's Defence Weekly* 52, No. 1 (7 January 2015): 5.

Ocean beyond 2023 to operate alongside the QEC carriers. It is not necessarily a cheap or easy option; significant investment would be required to ensure she remained fully operational. Nevertheless, the UK could then maintain three aviation platforms allowing one ship to operate in the carrier strike role, one as a helicopter carrier, and one in dock or under repair.

Mistral?

Option 2: Procure another helicopter carrier. Perhaps the best way to meet the requirement, there are options to procure new or second hand helicopter carriers. Most interestingly, there may be an opportunity to procure from the French the Mistral Class LHDs originally built for the Russians. These ships remain in an undetermined status due to the sanctions imposed on Russia for its actions in fomenting the crisis in the Ukraine. It is an option that provides a relatively quick and effective means to secure a highly capable modern amphibious platform with flexibility and broad utility for the UK—the Mistral is advertised as a “*political tool for civilian and military action.*”⁶ With the UK and France cooperating as a Combined Joint Expeditionary Force (CJEF), the UK RFTG has already exercised alongside the Mistral Class. Such a sale would support the concept of enhanced bi-lateral and EU Defence cooperation. More than that, the purchase could be tied to French support for the UK’s plan to renegotiate the terms of EU membership.

While UK industry would be disappointed if a major contract such as this went overseas, there is always a balance to be struck in Defence procurement between national self-reliance and value for money in a timely fashion. While initially the French

⁶ From Mistral promotional video in, “Mistral Amphibious Assault Ships for Russia: Deliveries hanging on Ukrainian Ceasefire.” *Defense Industry Daily* <http://www.defenseindustrydaily.com/Russia-to-Order-French-Mistral-LHDs-05749/> (accessed February 1, 2015).

Government may be reluctant to renege on its contract with Russia, French officials recognize that completion of the contract, purportedly for 1.2Bn Euro (\$1.6B),⁷ is dependent on Russia contributing to meaningful peace in the Ukraine. With little likelihood of that occurring France will have to look for other buyers.

HMS?

Finally the UK could engage in a program to design and build its own LHD or LPH, as well as other amphibious platforms that will reach the end of their service lives before too long. However, with the Rosyth shipyards set to close after the completion of the QEC carriers, ship building in the UK is limited to ship yards on the Clyde. The contract to build the next round of UK Frigates has not yet been awarded; they are expected to be built on the Clyde, and programming the construction of further amphibious vessels is unlikely to occur before completion of that program—well in to the 2030's. That represents a significant gap in capability.

People

Any decision that sees a helicopter carrier continue to operate alongside the QEC will pose the RN with the not-so-small task of manning these platforms. Recent cuts in Defence have gutted the RN, and it struggles to achieve all that is asked of it. Defence must look closely at how it meets the needs for mass. While speculation already abounds about the RN's ability to man both HMS Queen Elizabeth and HMS Prince of Wales within the current headroom of circa 30,000—the Royal Navy is already “*perilously*

⁷ RT News, “Russia and France Strike Deal on Mistral,” RT.com, <http://rt.com/news/prime-time/russia-france-mistral-deal/> (accessed February 1, 2015).

*close to its critical mass*⁸—any increase in the number of platforms will place an ever greater demand on manpower.

Ultimately, the UK must look more broadly at its amphibious capability. It is a key capability for the UK in its approach to operations, for power projection, and a viable security strategy. Rather than conducting piecemeal deployments of much of the amphibious fleet, consideration must be given to holding amphibious capabilities in their proper role and at the right level of readiness. Through the routine operation of at least four amphibious assault vessels—1 x LHD, 1 x LPD, 2 x LSD(A)—along with support ships, the UK could generate depth in a force that complements carrier strike and offers real strategic utility. When required, it can operate with the CSG, a balancing force that adds escalatory offensive capability when needed, or it can operate independently as the situation demands. At present these ships are spread across multiple tasks with only the smallest RFTG possible, and this at a time when “The UK Needs Depth not Breadth.”⁹ As an expression of power and intent, there are few military capabilities that can match that of amphibious forces. In fact, Basil Liddell-Hart contended that “*Amphibious flexibility is the greatest strategic asset that a sea-based power possesses.*”¹⁰

⁸ Chief of Defence Staff, General Sir Nick Houghton quoted in Ben Farmer, “Head of the Armed Forces: Military risks becoming ‘hollow force’,” *The Telegraph*, December 18, 2013, under “News, UK News, Defence, Houghton, Hollow Force,” <http://www.telegraph.co.uk/news/uknews/defence/10526828/Head-of-Armed-Forces-military-risks-becoming-hollow-force.html> (accessed February 1, 2015) see also Former US Defense Secretary Robert Gates at <http://www.bbc.com/news/uk-25755840> (accessed February 1, 2015); or Chief of the Naval Staff, Admiral Sir George Zambellas in John Ingham, “Cuts risk turning Navy in to ‘hollow force’, warns new Armed Forces Chief” *Sunday Express*, December 18, 2013, under “First Sea Lord Hollow Force” <http://www.express.co.uk/news/uk/449433/Cuts-risk-turning-navy-into-hollow-force-warns-new-Armed-Forces-chief> (accessed February 1, 2015).

⁹ Elizabeth Quintana, “Building a Force for the Future: The UK Needs Depth not Breadth,” *RUSI Analysis*, 17 Jan 2014, <https://www.rusi.org/go.php?structureID=commentary&ref=C52D957331F6E1> (Accessed 26 August 2014).

¹⁰ B H Liddell Hart, *Deterrent or Defense: A Fresh Look at the West's Military Position* (New York: Frederick A. Praeger, 1960), 128.

Six: Conclusion

“we will retain...an effective amphibious capability.”

- Prime Minister David Cameron, 2010 SDSR.¹

The combination of Britain’s history, economic and military strength, and a unique legacy around the globe affords the UK a position of global leadership at the fore of international politics. To retain that position and continue to project power and influence, the UK must realize the carrier strike program in full. Tied to it, the CEPP concept offers real potential to deliver the UK’s aspiration to exert influence and address issues upstream. However, it is concept that must be considerably bigger than just the QEC carriers, the aircraft that fly from them, the systems they operate, and the ships that support them. This paper has focused on the comprehensiveness of CEPP, specifically the transition to the land, and the need to ensure that the landing force can be delivered ashore. There are other areas that also warrant close analysis.

Significantly, and not limited to CEPP, the UK must look closely at the concepts of depth and scale. Whether considering the numbers of JSF the UK plans to routinely embark on the carrier, the number of cruise missiles available to a task group to target enemy A2AD capability, or the need for dedicated maritime patrol aircraft, serious questions need to be asked about quantities available. By-in-large, the UK retains the breadth of capabilities to conduct a theatre entry operation. But, whether it does so with sufficient quantity to undertake such an operation unilaterally, as the Government aspires, should undoubtedly be subject to further rigorous analysis. While small numbers of

¹ The Prime Minister, *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review*, (London: The Stationery Office, October 2010),5.

highly technical capabilities can offer huge advantage and utility, they remain susceptible to physical attack, often by the most low tech and simplistic threat. While the technological advantage is also an absolute must for the UK, in military operations, quantity often has a quality of its own.

Ultimately, the QEC aircraft carriers are essential if the UK is to retain its position as a nation of influence on the global stage, but so too is an amphibious capability. The concept of CEPP is the epitome of national, joint military capability able to project power unilaterally, but only if all the elements are fully resourced. While carrier strike must be one of the highest priorities for the British Government, it is not a panacea and is only part of the equation. If the overall concept is not comprehensive and credible, the utility of the CEPP, and of the carriers, will be severely eroded.

The modern world is no less volatile or dangerous than that witnessed by previous generations, but lately states have lost much of their monopoly on violence. When non-state actors, violent extremist organizations, and terrorists dominate media headlines without a physical seat of power, they offer a dynamic that magnifies the importance of land power and the need for an ability to put boots on the ground. For CEPP to realize its full potential, the UK must tackle the serious conceptual and physical challenges of delivering land power ashore, at range, and supported. If done right, CEPP has the potential to deliver potent land forces, supported by coherent air and sea power. Realizing CEPP fully will offer the UK the chance to really project power, to threaten, coerce, or influence; to do so, hopefully, without having to commit the land force to the fight; in other words, *“To subdue the enemy without fighting is the acme of skill”*²

² Sun Tzu, *The Art of War*, “Translated and with an Introduction by Samuel B. Griffith”, (London: Oxford University Press, 1963), 77.

Bibliography

- Aston, Major-General Sir George. *Letters on Amphibious Wars*. London: John Murray, 1920.
- Barriera, Victor M S. "Continue the Story: Landing Craft for Amphibious Operations." *Naval Forces IV* (2014): 41-42.
- BBC News. "CBI urges government to focus on cutting deficit in new year." BBC News Business, 29 December 2014, <http://www.bbc.com/news/business-30628166> (accessed 4 January 2015).
- . "Gates: UK Armed Forces have 'limited' capabilities." 16 January 2014 BBC News. <http://www.bbc.com/news/uk-25755840> (accessed February 1, 2015).
- Benbow, Tim. "British Uses of Aircraft Carriers and Amphibious Ships: 1945-2010." *Corbett Paper*, No 9. The Corbett Centre for Maritime Policy Studies, Kings College London, March 2012.
- Blagden, David. "Sea Power is Benign Power." *The RUSI Journal*, 159:3 (Jun 26, 2014): 54-61.
- Booth, K. *Navies and Foreign Policy*. London: Croom Helm Ltd, 1977.
- Clausewitz, Carl von. *On War*. New York: Random House, 1993.
- Charles W Eliot (ed.) *Essays, Civil and Moral* (New York: P F Collier and Son, 1909-1914 [1625]).
- Chief of the Defence Staff. *UK Defence Doctrine*. Joint Doctrine Publication 0-01 (5th Edition) (Swindon: Development, Concepts and Doctrine Centre, November 2014).
- Connors, Michael E. *Tudo Pela Patria: The Brazilian Navy's Drive to Blue Water* (Naval Postgraduate School Monterey, California, June 2005).
- Corbett, Julian S. *Some Principles of Maritime Strategy*. Breinigsville, PA: Dodo Press, 2011.
- Davis, John H. "Victory from Afar." *Marine Corps Gazette* (September 2014): 50-53.
- Defense Industry Daily. "Mistral Amphibious Assault Ships for Russia: Deliveries hanging on Ukrainian Ceasefire." *Defense Industry Daily* <http://www.defenseindustrydaily.com/Russia-to-Order-French-Mistral-LHDs-05749/> (accessed February 1, 2015).

- Department of Defense. *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. Washington: Department of Defense, January 2012.
- Department of the Navy. *...From the Sea: Preparing the Naval Service for the 21st Century*. Washington: Department of the Navy, 1992.
- Donaldson, Peter. "Royal Navy Programme Update 2014." *Naval Forces II* (2014): 80-83.
- Farmer, Ben. "Head of the Armed Forces: Military risks becoming 'hollow force'", *The Telegraph.co.uk*. December 18, 2013.
<http://www.telegraph.co.uk/news/uknews/defence/10526828/Head-of-Armed-Forces-military-risks-becoming-hollow-force.html> (accessed February 1, 2015).
- Field, Chris. "Expeditionary Force 21." *Marine Corps Gazette* (September 2014): 54-56.
- Gray, Colin S. *The Leverage of Sea Power: The Strategic Advantage of Navies in War*. New York: The Free Press, 1992.
- . *The Navy in the Post-Cold War World*. University Park: The Pennsylvania State University Press, 1994.
- HM Government, National Security Secretariat. *Fact Sheet 1: Our Approach to the National Security Strategy*, (2010).
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/62483/Factsheet1-Our-Approach-National-Security-Strategy.pdf (accessed 5 February 2015).
- HM Queen Elizabeth II. "Coronation Day speech, 2 June 1953." *The British Monarchy*,
<http://www.royal.gov.uk/ImagesandBroadcasts/Historic%20speeches%20and%20broadcasts/CoronationDayspeech2June1953.aspx> (accessed 21 February 2015).
- House of Commons Committee of Public Accounts. *Providing the UK's Carrier Strike Capability: Fifty-sixth Report of Session 2010-12*. House of Commons Report. London: The Stationary Office Limited, 2011.
- House of Commons Defence Committee. *Towards the next Defence and Security Review: Part One, Seven Report of Session 2013-14*. Parliamentary Report, London: The Stationary Office Limited, 2014.
- Howell, Trevor. "Traditional Amphibious Warfare." *Marine Corps Gazette* (September 2014): 18-23.
- IISS (1998) "The Strategic Value of Aircraft Carriers." *Strategic Comments*, 4:2, 1-2, DOI: 10.1080/1356788980423, <http://dx.doi.org/10.1080/1356788980423> (accessed on: 27 January 2015,).

- Ingham, John. "Cuts risk turning Navy in to 'hollow force', warns new Armed Forces Chief" *Sunday Express*, December 18, 2013. <http://www.express.co.uk/news/uk/449433/Cuts-risk-turning-navy-into-hollow-force-warns-new-Armed-Forces-chief> (accessed February 1, 2015).
- Jennings, Gareth. "UK reviews Falklands defence as Argentina eyes Su-24s," *HIS Jane's Defence Weekly* 52, No. 1 (7 January 2015).
- Jr, Kenneth J Glueck. "The Amphibious Combat Vehicle." *Marine Corps Gazette*, (September 2014): 24-30.
- Kenner David. "Why is Saudi Arabia buying 15000 Anti-Tank Missiles for a War it will Never Fight?" *Foreign Policy* (December 12, 2013): <http://foreignpolicy.com/2013/12/12/why-is-saudi-arabia-buying-15000-u-s-anti-tank-missiles-for-a-war-it-will-never-fight/> (accessed 22 February 2015).
- Kilcullen, David. *Out of the Mountains: The Coming Age of the Urban Guerilla*. Oxford: Oxford University Press, 2013.
- Kozloski, Robert. "Power Through Stability." *Marine Corps Gazette* (September 2014): 10-15.
- Lewis, J.C. "Power Projection." *Marine Corps Gazette* (September 2014): 31-34.
- Liddell Hart, B H. *Deterrent or Defense: A Fresh Look at the West's Military Position*. New York: Frederick A. Praeger, 1960.
- Lykke, Arthur F. Jr. "Toward an Understanding of Military Strategy." *U.S. Army War College Guide to Strategy* (2001):179-184.
- Mahan, A.T. *The Influence of Sea Power upon History 1660-1783*. New York: Dover Publications Inc, 1987.
- Maritime Warfare Centre. "Maritime Doctrine Primer, First Edition." Fareham: Maritime Warfare Centre, July 2012.
- Matthew Rolfes and Sean LaBar. "India: Budding Blue-Water Navy Capabilities," *The Daily Signal*, December 10, 2013. <http://dailysignal.com/2013/12/10/india-budding-blue-water-navy-capabilities/> (accessed February 8, 2015).
- Mearsheimer, John J. *The Tragedy of Great Power Politics*. New York: W. W. Norton & Company Inc, 2001.
- Miller, Lt Col Gordon. "A More Responsive MEU." *Marine Corps Gazette* (August 2014): 77-80.
- Ministry of Defence. "Carrier Enabled Power Projection." *Defence Instruction and Notice*. London: Ministry of Defence, 2011.

- "Future Character of Conflict." *Strategic Trends Programme*. London: Ministry of Defence, 2014.
 - "Future Maritime Operational Concept." Swindon: Development, Concepts and Doctrine Centre, November 13, 2007.
 - "Global Strategic Trends - Out to 2045." *Strategic Trends Programme*. Ministry of Defence, April 30, 2014.
 - "Joint Doctrine Publication 0-10. British Maritime Doctrine". Swindon: Development, Concepts and Doctrine Centre, August 2011.
 - "Carrier strike takes on a more realistic look." *desider* (December 2013): 10.
 - "The Way Ahead." *desider*, Issue 81, (February 2015).
- National Audit Office Comptroller and Auditor General. *Carrier Strike: The 2012 reversion decision*, by Amyas Morse, National Audit Office, London, 10 May 2013. <http://www.nao.org.uk/wp-content/uploads/2013/05/10149-001-Carrier.full-report.pdf> (accessed 21 February 2015).
- Navy, Marine Corps, Coast Guard. "A Cooperative Strategy for 21st Century Seapower." October 2007.
- Nye, Joseph S. "Soft Power." New York: PublicAffairs, 2004.
- Odierno, Raymond T, Amos, James F, and McRaven, William H. *Strategic Landpower: Winning the Clash of Wills*, U.S. Army, U.S. Marine Corps, and U.S. Special Operations Command Strategic Landpower White Paper. <http://www.tradoc.army.mil/FrontPageContent/Docs/Strategic%20Landpower%20White%20Paper.pdf> (accessed 21 February 2015).
- Quintana, Elizabeth. "Building a Force for the Future: The UK Needs Depth not Breadth" *RUSI Analysis*. January 17, 2014. <https://www.rusi.org/go.php?structureID=commentary&ref=C52D957331F6E1> (accessed 26 August 2014).
- Rawlings, H. R., William T Wilburn, George Nunez, and Jason Berg. "The Maritime Syllogism." *Marine Corps Gazette* (September 2014): 57-61.
- Roosevelt, Theodore from a speech in Chicago 3 April 1903 in: The Quotations Page, *Theodore Roosevelt*. <http://www.quotationspage.com/quote/30185.html> (accessed 21 Feb 15).
- Royal Navy, "HMS Albion Comes Back to Life" The Royal Navy. <http://www.royalnavy.mod.uk/news-and-latest-activity/news/2014/december/05/141205-albion-awakes> (accessed 23 February 2015).

- . “Protecting our Economy,” The Royal Navy. <http://www.royalnavy.mod.uk/what-we-do/protecting-our-economy> (accessed February 8, 2015).
 - . “Royal Fleet Auxiliary,” The Royal Navy. <http://www.royalnavy.mod.uk/our-organisation/the-fighting-arms/royal-fleet-auxiliary> (accessed 22 February).
 - . “Securing Britain’s Future” The Royal Navy. <http://www.royalnavy.mod.uk/news-and-latest-activity/features/equipped-for-the-future> (accessed 2 February 2015).
- RT News. “Russia and France Strike Deal on Mistral,” RT.com, <http://rt.com/news/prime-time/russia-france-mistral-deal/> (accessed February 1, 2015).
- RUSI Defence Systems. "The Royal Fleet Auxiliary - Delivering Maritime Operational Support." *RUSI Defence Systems* (Autumn/Winter 2011): 72-73.
- Strachan, Hew. "Maritime Strategy." *The RUSI Journal* 152:1 (May 2, 2007): 29-33.
- Strategic Comments. "UK Aricraft Carrier projecting military power." *Strategic Comments*. August 19, 2014. <http://dx.doi.org/10.1080/13567888.2014.955292> (accessed September 01, 2014).
- Stockholm International Peace Research Institute. “SIPRI Arms Transfer Database.” Stockholm International Peace Research Institute. <http://armstrade.sipri.org/armstrade/page/values.php> (accessed 22 February 2015).
- The Royal Marines. *The Royal Marines Vision: Think Commando*. Portsmouth: Office of the Deputy Commandant General, October 2011.
- The Royal Navy. "The Royal Navy Today, Tomorrow and Towards 2025." The Fleet Graphic Centre, n.d.
- Tzu, Sun. *The Art of War*. “Translated and with an Introduction by Samuel B. Griffith”, London: Oxford University Press, 1963.
- UK Prime Minister Appearance before the Joint Committee on the National Security Strategy, 30 January 2014. C-SPAN, <http://www.c-span.org/video/?317503-1/british-pm-national-security> (accessed 29 December 2014).
- . *A Strong Britain in an Age of Uncertainty: The National Security Strategy*. London: The Stationary Office Limited, 2010.
 - . *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review*. London: The Stationary Office, 2010.
 - . *The UK National Strategy for Maritime Security*. London: The Stationary Office, 2014.

- U.S. Department of Defense. *Dictionary of Military and Associated Terms*. Joint Publication 1-02. Washington DC: Department of Defense, November 15, 2014.
- Vego, Dr Milan. "Modern Naval Logistics." *Naval Forces* IV (2014): 19-23.
- Vergun, David. "McMaster busts myths of future warfare." The United States Army. September 10, 2014.
http://www.army.mil/article/133446/McMaster_busts_myths_of_future_warfare/
(accessed September 15, 2014).
- Wood, Michael Leslie. *US Carrier Strike and the Mediterranean, 1970-89 - Lessons in Littoral Crisis Response for the UK's Joint Expeditionary Force*. Masters Thesis, Norfolk: Joint Forces Staff College, 2014.
- Woods, Kevin M. *Iraqi Perspectives Project, A View of Operation Iraqi Freedom from Saddam's Senior Leadership*. Norfolk, VA: Joint Forces Command, pp. 28-32.
- Wright, Quincy Wright Abridged by Louise Leonard. *A Study of War: Second Edition, Midway Reprint*. Chicago: The University of Chicago Press, 1983.
- Ya'ari, Rear Admiral Yedidia. "The Littoral Arena: A Word of Caution." *Naval War College Review* (Summer 2014): 81-95.

Vita

Lieutenant Colonel Tom Salberg was commissioned in to the Royal Engineers in August of 2000. He initially commanded a mechanized troop, including on operations in the former Yugoslavia, before completing the All Arms Commando Course. He has since commanded Commando soldiers at the Troop and Squadron level; and on return to the UK, Lieutenant Colonel Salberg will assume command of 24 Commando Engineer Regiment.

Away from command, Lieutenant Colonel Salberg has been the Senior Instructor Engineers Tactics at the Royal School of Military Engineering where he taught the planning process to newly commissioned Royal Engineer officers. At staff, he has been employed as an intelligence officer and extensively within the field of Counter-Terrorism and UK Operations, including contributing to the planning for the security of the London 2012 Olympic and Paralympic Games.

He has deployed on operations to the Balkans, Afghanistan, Northern Ireland, and on a number of discrete Counter Terrorism operations. Lieutenant Colonel Salberg is a graduate of Cranfield University (BEng) and Kings College London (MA). In 2012, he was appointed MBE.

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