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Neglected Skies

The Far Eastern Demise of British Naval Supremacy, 1922 – 1942

A thesis submitted in fulfilment of the requirements for the award of (Research) Master of Philosophy in History.

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The British cruisers HMS *Cornwall* and HMS *Dorsetshire* under attack by Japanese dive-bombers to the south-west of Ceylon, 5 April 1942.
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Angus Britts

18 May 2015.
Notes for the Reader

Japanese Names – Japanese participants are referred to by family name first and given name second in accordance with Japanese practice. The sole exception to this method is to be found in the footnoting of all United States Strategic Bombing Survey (USSBS) interrogation transcripts, in which Japanese names are referenced in the Western format.

Aircraft Identification – Japanese aircraft are identified by type designation and assigned Allied codenames (e.g. Type 0 Zeke), German, Italian and all Allied aircraft by designation or given name (e.g. P-40, Swordfish).

Time References – time references are provided in both standard and 24 hour modes; local time unless stated otherwise.
Introduction

Over six days in early April 1942 the equatorial waters of the Eastern Indian Ocean hosted a momentous episode in the annals of modern naval history. In spite of being saddled with conflicting strategic priorities, Britain’s Royal Navy (RN) had retained its status as the paramount Great Power fleet throughout the first thirty-one months of war. However on 7 December 1941 the spectacular manifestation of a new and devastating form of warfare took place in Hawaiian skies as the Imperial Japanese Navy (IJN) unleashed its fearsome aerial spearhead. Four ominous months of mayhem and chaos had followed as the carrier-borne and land-based elements of Japan’s naval air arm tormented their opponents from the Central Pacific to the Indonesian archipelago. Having already sacrificed two capital ships to the expertise of the land-based Eleventh Koku Kantai (Air Fleet) off the east coast of Malaya on just the third day of hostilities, the British were about to foolishly expose their recently-arrived Eastern Fleet to an appalling fate to the south of Ceylon. The large wave of carrier-borne aircraft which initiated the Imperial Navy’s Operation C by blitzing Colombo’s port facilities and airfields at dawn on 5 April 1942 revealed the presence of a first-strike weapon – the Kido Butai (Mobile Force) – which could annihilate any fleet that Whitehall and the British Admiralty chose to throw against it. Winston Churchill would subsequently describe this Japanese incursion as the ‘most dangerous moment of the war’.¹

Within the post-war historiography, the demise of British naval supremacy during the course of the Second World War has been addressed primarily at the strategic level. It remains an

undeniable fact that the Royal Navy entered hostilities in September 1939 as a weakened fighting force which would be extremely hard pressed to maintain its command of the sea in the event of a worldwide maritime conflict. Similarly there is no dispute with the conclusion reached by Geoffrey Till and others that by 1945 the RN had become strategically subordinate to the true extent of America’s global naval might. This thesis will conclude, however, that the dominance of the British fleet was initially extinguished by its demonstrated inability to compete effectively within a combat environment that had become dominated by the aeroplane. What follows is an analysis wherein the events of 4 – 9 April 1942 will emerge as the operational-level culmination of a two-decade process which resulted in the Royal Navy possessing an insufficiently developed fleet-support air arm that was no match for the IJN’s modern offensive aerial armadas. Whereas the RN possessed the requisite means and methods to eventually counter its European Axis opponents, the onset of war with Japan in December 1941 rapidly confirmed the inferiority of British naval-air integration when pitted against Japanese air-naval concentration. And given this marked gap in combat capabilities between these two former allies, the naval security of the British Empire’s Far Eastern peripheries lay in tatters in the absence of timely and decisive American intervention.

One fundamental difference exists between the construction of this work and the manner in which the large majority of the relevant post-war publications have addressed the issue at hand. Both the expiration of the Anglo-Japanese Alliance in December 1921 and the signing of the Washington Naval Arms Limitation Treaty in February 1922 seriously eroded the Royal Navy’s global capacities, and the economic crisis which followed severely exacerbated the situation by the imposition of heavy service budget cuts from 1927 until 1932. Largely

upon the basis of this evidence, many historians have concluded that British naval supremacy had indeed expired prior to 1939. As shall become evident from the opening chapters and onwards, the following work takes issue with this interpretation by asserting that no truly definitive assessment of naval supremacy can be made in the absence of war. And furthermore, what emerges from the study of Second World War naval operations from September 1939 until May 1942 is that supremacy at sea could not be regarded first and foremost as an arithmetic exercise. Within the immediate post-Washington era, the material examined will conclusively prove that even a below-strength British Fleet was capable of prevailing in a wide variety of localities and operational situations by achieving major successes when possessing the bare minimum of warships and tactical advantages. And likewise it will be demonstrated that when deployed as a mobile independent fighting force, just six Japanese aircraft-carriers possessed a sufficient level of concentrated aerial firepower to crush the Royal Navy’s greatest fighting strength – its longstanding dominance of opposed fleet combat.

**Historiography**

From the formulation of a national maritime policy in 1436 which declared that “we bee maysteres of the narrow see…” to its current stewardship of Britain’s thermonuclear deterrent, the nation’s senior service has assumed a place in history that may only be surpassed by the Roman military state.³ It remains a compelling institution to explore because of its complex interconnectivity with, and influence over, British public life for five centuries. Be it through its paramount role in the establishment of the British Empire or the social impacts of declining naval shipbuilding in the early 1930s, the RN has succeeded in

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generating a similarly voluminous historiography. In seeking to frame genres which reflect the particular requirements of this work, the thesis expands upon the model of the so-called ‘Singapore Schools’ that Karl Hack and Kevin Blackburn have previously identified in their collective analysis of the ‘Singapore strategy’. Four distinctive schools of Western enquiry are likewise defined herein, these being naval, aerial, imperial and global, with the latter category encompassing published histories of both the Pacific conflict and the Second World War in their entirety. Additionally the thesis both commends and incorporates the Japanese perspective as a school in its own right, given the roles that the IJN and its air-arm assumed in these events.

As the principal genre to be employed in this thesis, the British naval histories provide an expansive coverage of the period in question although the Far East has not enjoyed the same degree of attention that has been applied to the European theatre of operations in the Second World War. The post-war era has produced a lengthy succession of narratives and narrative-analyses ranging over a large array of topics, from the official *Grand Strategy* series and Stephen Roskill’s multi-volume wartime histories to recent publications such as Kathryn Spurling’s *Cruel Conflict* in which a vivid social portrait of an individual ship’s crew is presented for the reader. Of particular relevance for this work is Arthur Marder’s two-volume *Old Friends, New Enemies*, the most comprehensive narrative-analysis yet published of the specific interaction between the Royal Navy and the Imperial Japanese Navy from

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4 K. Hack & K. Blackburn, *Did Singapore Have to Fall?* (London: Routledge Curzon, 2004): 2. Hack and Blackburn’s four ‘Schools’ are identified as follows: Naval, Diplomatic, Grand Strategy and Intelligence.
5 *the author’s research indicates that a significant number of Japanese primary and secondary sources have yet to be translated into English.
1936 to 1945. Marder’s salient grasp of a subject which he addresses from both the strategic and operational perspective is undoubtedly enhanced by the quality of the primary source material which he employs, most notably through his use of Cabinet and Admiralty documentation, private papers and personal interviews with a number of the British and Japanese participants. Other major contributions to the thesis are to be found in works by John Ferris, Arthur Hezlet, Paul Kennedy and Geoffrey Till, with Till’s *Airpower and the Royal Navy 1914-1945* being an especially valuable addition given that British pre-war and wartime naval aviation remains a relatively modest field of study within the genre as a whole.\(^7\)

In addressing the issue of British maritime supremacy in peace and war, the naval historians have generally adopted common conclusions. Paul Kennedy’s allusion to the “weary Titan” emphasises the prevailing historiographical conclusion that the combination of an ailing economy and a general domestic and international desire for collective security and arms limitation were responsible for the Royal Navy’s accelerated physical decline by the early 1930s.\(^8\) John Ferris, however, has identified a historical dispute as to whether the formulation of Admiralty policies by way of response to these circumstances, together with the expiry of the Anglo-Japanese Alliance, became the primary generator of Britain’s fading naval presence prior to September 1939. With regard to the wartime situation there is no disagreement amongst historians that the United States Navy (USN) eventually superseded the RN as the dominant Great Power fleet through the sheer weight of American industrial

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8 Kennedy, *The Rise and Fall of British Naval Mastery*: 268.
production. Yet a crucial flaw exists within the apparently tacit historiographical acceptance of the ‘Power-Standard’ as the principal means by which the Royal Navy’s supremacy could be accurately measured. As legislated in Whitehall’s Naval Defence Act of 1889, the Two-Power standard represented an equation in both numerical strength and combined firepower – surface firepower, whereby the RN would both outsize and outgun the combined capabilities of the two most powerful foreign navies in existence. However with no discernible re-definition of the standard within the interwar period, there are sound bases to regard this device as an obsolete measure of naval strength when applied to a future operational environment dominated by the aeroplane.

The formation of Japan’s Kido Butai aircraft-carrier spearhead in April 1941 represented the firmest repudiation of the power-standard as a credible analytical tool because this particular fighting instrument comprehensively reversed centuries of established naval doctrine. Admiral Yamamoto Isoroku and his planners had devised an independent first-strike capability which could rapidly decimate any opponent, large or small, in port or at sea, with overwhelming aerial force. Yet with the exception of a handful of historians including Hezlet, Till and David Brown, the critical importance of the methodological divide which characterised the respective approaches of the British and the Japanese towards the conduct of carrier warfare in April 1942 has been often overlooked within the navalist genre. Though authors such as Paul Kennedy and Malcolm Murfett have observed that the Japanese fleet had emerged as a serious match for the Royal Navy throughout the preceding decade, both they and their colleagues have not extensively explored the relevant tactical aspects in

formulating their conclusions. Even Marder’s extensive analysis of the Anglo-Japanese naval conflict does not convey the full enormity of the RN’s inability to contest the seas against this radical evolution in operational method. Indeed some of the existing commentaries upon the Operation C raids have reached a similar conclusion to that expressed by Roskill, who surmised (without supporting evidence) that the Eastern Fleet, when equipped with an enhanced naval-air presence, was still capable of meeting the Japanese with confidence – an interpretation that will be emphatically disproven within the following chapters.\textsuperscript{12}

Whereas the relevant events in the Indian Ocean have generated only a limited volume of concerted historical interest within the navalist genre, the prior sinking of the battleship Prince of Wales and the battle-cruiser Repulse (Force Z) by Japanese land-based aircraft on 10 December 1941 has been extensively explored. Russell Grenfell’s Main Fleet to Singapore typifies a range of publications which have elevated this episode to the status of a major imperial disaster, principally engineered as it were by a series of misjudgements and blunders in the corridors of Whitehall.\textsuperscript{13} In association with the subsequent British surrender of ‘Fortress Singapore’ in February 1942, the destruction of the two vessels has assumed a mythical prominence which has superseded its principal operational significance, namely the first occasion upon which capital-ships had been sunk \textit{at sea} by aircraft alone. However the prevailing historiographical trend, to be examined in some detail, does not reflect a significant effort on the part of the British authorship to consider the Force Z debacle and the


Operation C raids as the collective termination of the Royal Navy’s ability to wage war against superior air-naval tactics and weaponry.

Throughout the past four decades there has existed a growing tendency within the naval authorship to emphasise what Vice-Admiral Sir Richard Smeeton described in 1941 as ‘saloon bar speculation’, namely the misjudgement of pre-December 1941 Japanese naval and aerial capabilities by senior British naval officers upon ethnocentric grounds.\textsuperscript{14} This theme has likewise assumed a high degree of prominence within an aerial genre which performs a pivotal role within the early chapters of this work. The participation of the RAF in the interwar period becomes a principal factor in determining the operational effectiveness of the Royal Navy through the unique circumstances of ‘Dual-Control’, the system whereby both services shared a mutually distrustful stewardship over the development of the Fleet Air Arm prior to April 1939. In essence the character of the aerial histories in terms of methodology and sourcing is almost identical to that of their naval counterparts, with H. Montgomery Hyde’s informative \textit{British Air Policy between the Wars} being one of several leading publications which are accessed for an exploration of the interwar period. As for the wartime interaction between the services, this aspect is distinguished by the persistent reference to the frequent absence of the RAF in a fleet support role throughout the first three years of hostilities. Analysing the operational situation that prevailed in the Far East immediately following the onset of hostilities with Japan, John Burton’s \textit{Fortnight of Infamy} provides a particularly comprehensive analysis of the RAF’s fragile presence (and rapid neutralisation) in the skies above the seaward approaches to Malaya and Singapore.\textsuperscript{15}

\textsuperscript{14} Marder, \textit{Strategic Illusions 1936-1941}: 345.
\textsuperscript{15} H. Montgomery Hyde, \textit{British Air Policy Between the Wars 1918-1939} (London: William Heinemann Ltd, 1976); I.M. Philpott, \textit{The Royal Air Force – An Encyclopaedia of the Inter-War Years}, Volume 1: \textit{The
The aerial genre has correctly cast the RAF as a serious competitor for the Admiralty in terms of budget funding and the service’s developing strategic responsibilities throughout the course of the pre-war era. By identifying Air Marshall Sir Hugh Trenchard’s pursuit of a policy position which aimed to erect ‘a good cottage on the foundation of a castle’ these histories have endeavoured to illustrate a direct contrast between the skilful pragmatism of the newcomer and the entrenched bellicosity of the established senior service. In turn this approach has created a considerable level of division between the navalist and aerial genres over which service bore the majority of responsibility for the Fleet Air Arm’s troubled interwar development, though both have acknowledged the general proposition that the FAA had become a victim of what Geoffrey Till has described as Britain’s “whole predicament in defence” after the First World War. Aside from the issue of the Fleet Air Arm, the existing aerial histories enhance the relevance of this work through analyses such as John Ferris’s detailed exploration of the RAF’s involvement in the formation of the Imperial Japanese Naval Air Force (IJNAF) during the 1920s as well as the subsequent British categorisation of the Japanese as indifferent aircraft-designers and poor flyers. As the thesis progresses the reader shall come to appreciate the ultimate folly of this Anglo-Japanese initiative which ultimately gifted the IJN the necessary means and methods for establishing a technically sophisticated and highly trained carrier-borne and land-based naval air-arm.

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Trenchard Years: 1918 to 1929 (Barnsley: Pen & Sword, 2005); J. Burton, Fortnight of Infamy – The Collapse of Allied Airpower West of Pearl Harbour (Annapolis: Naval Institute Press, 2006).

Given that the first-line security of the British Empire had become inexorably linked with the capacity of the Royal Navy to exercise a global presence during the course of the nineteenth century, the imperial genre emerges as the most fluid of the various schools to be employed in the thesis. Indeed an assessment of this genre reveals the very real difficulties in establishing a firm means of historiographical categorisation, as publications from the likes of W. David McIntyre and Orest Babij have their feet anchored equally in the navalist and imperialist camps. The composition of these works and others differs from a purely naval approach through their ability to cast the RN as a portion of a wider discourse which emphasises the interconnectivity of the various political, economic, military and diplomatic circumstances which dictated the course and conduct of Britain’s imperial affairs throughout the course of the Empire’s existence. As such the imperial school has generally accessed a wider (though similar) source base to its naval counterpart, and the stated conclusions from its authorship have emphasised the broad scope of factors which led to the British Empire’s decline and eventual fall in the second half of the twentieth century. These publications have paid particular attention to the interwar evolution of the Singapore strategy, Whitehall’s ever-decaying resolve to deploy a major British naval presence in the Far East, thereby exposing what David Day has described as the “shrinking tentacles of British sea-power.”

The principal strength of the imperial genre shall be found in its capacity to illustrate the failings of the Royal Navy at the strategic level. This has been largely achieved through the establishment of the connection made between the RN’s reduction in overall strength to a one-power standard with the triggering of what has been variously described as the ‘One-

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Hemisphere’ or ‘Two-Ocean’ dilemma; the supposed inability of the Fleet to confront multiple concurrent threats in both the European theatre and the Far East. Throughout the past four decades the two-ocean interpretation has come to assume a powerful orthodoxy within the historiography, as has the notion that Britain’s naval defences in the Far East were effectively denuded in the wake of the French surrender in June 1940 following the destruction and/or demobilisation of the *Marine Nationale*. At first glance this line of reasoning appears to be beyond serious reproach, given that the authorship has consistently drawn upon the debilitating effects of the Washington and London naval accords, the expiration of the Anglo-Japanese Alliance and the interwar downturn of the British domestic economy in establishing the validity of this adjudication. Within the imperial genre, the fate of Force Z has generated a wider symbolic interpretation as the event which terminated Britain’s command of the sea; in some instances the histories have cast the disaster as the metaphoric end of Empire. However a closer reinspection of the peculiar circumstances surrounding Force Z’s demise provides a compelling contrary perspective that illustrates the necessity for a fresh counterfactual evaluation.

As will become evident in the following chapters, the sinking of the *Prince of Wales* and *Repulse* cannot stand as an accurate measure of British naval capabilities because neither the composition nor operational employment of Force Z were sufficiently indicative of the Admiralty’s common wartime practices. On both sides of the naval-imperial divide there has been some limited consideration of the potential operational benefits of aircraft-carrier support for the *Prince of Wales* and *Repulse*, given that the fleet carrier *Indomitable* had been

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forced to withdraw from the expedition due to damage she had suffered in the West Indies.\textsuperscript{21} However the failure of these accounts to provide any substantial interpretation as to just how the Admiralty intended to meet the Japanese in battle within the so-called ‘Malay Barrier’ presents the occasion for a critical misunderstanding of the facts at issue. Whereas Murfett’s informative anniversary essay, \textit{Reflections on an Enduring Theme: the “Singapore Strategy” at Sixty}, provides a comprehensive evaluation of the various naval dispositions which the Admiralty could have chosen to utilise at Singapore, his work does not extend to any fulsome consideration of their likely performance in battle against the Japanese.\textsuperscript{22} Without an exploration of how the RN would seek to oppose the formidable surface and aerial firepower to be mustered against it, there exists little opportunity for the reader to adequately test the proposition that a heightened British naval presence would have reversed the Empire’s defensive fortunes in the South China Sea.

Whereas the British histories have frequently maintained a neutral position over the question of Whitehall’s alleged betrayal of its imperial obligations to the east of Suez, the Australian authorship has displayed a preparedness to point the finger at Britain. The fall of Singapore has cast an unbroken shadow across Australia’s national experience since 15 February 1942 and published titles such as David Day’s \textit{The Great Betrayal} reflect a prevailing domestic belief that the nation’s security interests were willingly sacrificed by assorted villains in London as well as ‘stuffed-shirt’ imperialists at home. It is suffice to record that these views have arisen from what has become known as the so-called ‘radical-nationalist’ genre which has sought in recent decades to re-define the basis for Australia’s ongoing discourse concerning her national identity by marginalising the country’s imperial past. And with the

\textsuperscript{21} Marder, \textit{Strategic Illusions, 1936-1941}; Grenfell, \textit{Main Fleet to Singapore}: 96; Till, \textit{Airpower and the Royal Navy}: 184.
\textsuperscript{22} Murfett, ‘Reflections on an Enduring Theme; The 'Singapore Strategy at Sixty'": 16-17.
coming of the twenty-first century the nation’s military mythology has often been defended with indignation and anger by those who have sought to enshrine an authentic Australian battlefield story through the recent public emergence of the ‘Battle for Australia’ platform. Yet the majority of the Australian histories, as well as prominent public figures (including former Prime Minister Paul Keating) who have assumed passionate views in respect of the subject, have neglected to address one salient question. Should the failure by Whitehall and the Admiralty to despatch a significant fleet to Singapore be regarded as an act of imperial betrayal if such a force faced the likely prospect of suffering virtual annihilation?

Within the Australian histories, the failure of imperial defence in the Far East throughout the first five months of the Pacific conflict has been consistently sheeted home to the strategic preference of Churchill and Roosevelt for beating ‘Hitler first.’ From Winston Churchill’s multi-volume *The Second World War* through to more recent publications by authors including Gordon Corrigan and Antony Beevor, the great global narratives have correctly cast the European theatre as central to the outcome of the series of wars which had coalesced into a giant worldwide conflagration by January 1942. Whilst Corrigan and others have noted that for the British, ‘the war in the Far East was almost peripheral’, there has been no shortage of attention to the fall of Singapore within the globalist genre, with frequent references to Whitehall’s failure to properly prepare the British Empire’s Far Eastern defences as well as the symbolism of Singapore’s capitulation for the fate of the Empire as a whole. However the events surrounding the evaporation of Britain’s strategic position in the

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Pacific theatre have been inevitably superseded by the enormity of the struggle on the Eastern Front, the outcome of the Battle of the Atlantic, the combined bomber offensive against Germany and the final Allied establishment of a second front in Western Europe. Accordingly the Pacific theatre has assumed the identity of the secondary theatre, a ferocious struggle which eventually pitted stoic Japanese fanaticism against the irresistible force of American industrial might.

Whereas Singapore remains cast in the public imagination as a supreme example of military neglect and blundering in high places, the global and imperial genres have continued to overlook the significance of the Operation C raids which produced Churchill’s ‘most dangerous moment’ of the war. An examination of works by Beevor, Corrigan and A.J.P. Taylor reveals the coverage of the Indian Ocean episode to be of the order of a paragraph or less in each instance whilst the theatre-centric publications such as Dan Van der Vat’s *The Pacific Campaign* also deal with the issue in a minimalist fashion.\(^{26}\) In comparison with the lavish attention which has been afforded to the engagement at Midway, the events off Ceylon have become a sideshow in the wider scheme of the Pacific War. By compartmentalising the abortive clash between the Kido Butai and the Eastern Fleet in this manner, only a limited opportunity has existed for a fuller understanding of the broader issues at stake, namely the epic clash of two diverse naval doctrines and the disastrous threat to the overall Allied strategic position had the Japanese sought to maintain a significant naval presence in the Indian Ocean. And whilst Taylor’s assessment of Japan’s initial aero-amphibious thrust as “the greatest improvisation of the war” may well reflect the extraordinary skill of the comparatively-small Japanese invasion forces, both he and many of his colleagues have not

extensively recognised Nagumo’s carrier-borne spearhead as representing the greatest quantum leap in naval warfare since steam power supplanted the days of sail.27

In concluding the appraisal of the four Western genres it is important to make some observations concerning the use of a peculiar class of primary source commentaries which has been noticeably ignored within the broader range of post-war accounts. The most prominent of the semi-official ‘Annuals’ which had been first published in 1886 as a means of garnering public support for the revitalisation of the Royal Navy, *Brassey’s Naval Annuals* have become one of the foremost repositories for reports, accounts and opinion pieces that have covered a myriad of contemporary subjects ranging from grand strategy to gunnery procedures.28 For the purposes of this work the pre-war and wartime annuals are of immense value because they present a large range of analyses which deal with the major issues in question, including the ongoing state of British naval aviation and its incorporation into the RN’s existing operational structures. Aside from these unique insights into the functioning of the Royal Navy, the *Brassey’s* also provide a comprehensive evaluation of concurrent developments within all foreign fleets and naval air arms. A key component of this coverage is to be found in the writings of Axis contributors such as Commander Sato Ichiro, as these contributions disclosed the various rationales for the chosen maritime policies which the IJN and their future allies were pursuing. Indeed Sato’s 1927 essay concerning Japan’s naval objectives should be viewed as something of a rarity in the pre-war era, given his own fleet’s penchant for maintaining stringent operational-level secrecy.29

28 Beeler, ‘Steam, Strategy and Schurman’: 37.
From the Japanese post-war perspective both the primary and secondary source bases are fairly limited, in the former case due to the wholesale destruction of documentation in the days prior to Japan’s final surrender. A most revealing source of information is to be located in what Donald Goldstein and Katherine Dillon describe as the practice of ‘memory-histories’ which commenced in the late 1940s. A cross-section of surviving IJN commanders including Vice-Admiral Ozawa Jisaburo, recognised by a number of Japanese and Western experts as Japan’s foremost naval tactician, recorded their recollections in a series of essays which described Japan’s build-up for war and her conduct of hostilities in detail. Others including Fuchida Mitsuo, Okumiya Masatake and Horikoshi Jiro, the designer of the famous Mitsubishi Type ‘Zero’ fighter, have subsequently published accounts of their experiences. Several works including Japan’s Decision for War, edited by Nobutaka Ike, provide both transcripts and analysis of the all-important series of leadership conferences which were responsible for formulating Japanese strategic polices prior to December 1941. Aside from the fact that the presence of this material enriches the credibility of the thesis as a whole by encompassing the invaluable Japanese viewpoint, these histories also assist in mitigating a tendency within the Western literature that Stephen Falk has described as an over-concentration upon British fallibilities which “does an injustice to the ability of the Japanese.” Although Falk’s remarks specifically refer to the circumstances surrounding the fall of Singapore, a similar conclusion can be reached in respect of a number of episodes which shall be referred to in the following chapters.

The Japanese perspective is further enhanced through reference to a series of interrogations which were conducted by the United States Strategic Bombing Survey (USSBS) in the aftermath of Japan’s surrender. In concert with its role in post-war Germany, the military and civilian members of the USSBS were compiling detailed information ‘as evidence for an evaluation of the role of airpower in the Pacific war.'\textsuperscript{33} Whereas various portions of the evidence which the USSBS obtained were subsequently employed in war-crimes prosecutions, the organisation’s activities were not undertaken primarily to facilitate the preparation of criminal indictments. These sessions involved a wide range of surviving IJN commanders across all officer grades and the published summaries of the individual interrogations largely commended the credibility and objectivity of the Japanese witnesses. Through the recollections of these officers, a vivid picture emerges of the uncertain balance between common-sense and irrationality that permeated Japan’s armed-services leadership during the pre-war era and in wartime itself. Aside from highlighting the sources of the infighting which characterised the relationship between the Imperial Japanese Army (IJA) and its naval compatriot at the highest levels of command, the interrogations account for the enormous logistical difficulties which both armed services were required to overcome in formulating their plans for waging a Far Eastern conflict against the Western powers. In common with the post-war memory-histories, there existed a distinct willingness on the part of the surviving participants (including a substantial number of Admiral-grade officers) to recount their experiences in a blunt and unembellished fashion.

On balance the Japanese accounts mirror their Western counterparts in most respects; they are similarly professional in their various methodological approaches to their chosen topics.

\textsuperscript{33} United States Strategic Bombing Survey (USSBS) [Pacific], Naval Analysis Division: Interrogations of Japanese Officials, OPNAV-P-03-100, \url{http://www.ibiblio.org/hyperwar/AAF/USSBS/IJO}. 
and in so doing rely upon a far smaller primary source base. If one aspect of Japanese enquiry differs markedly from the Western genres, it may be witnessed in the preparedness of authors such as Commander Fuchida to describe what he viewed as the fundamental defect in his country's underlying national character:

Our want of rationality often leads us to confuse desire and reality, and thus do things without careful planning. Only when our hasty action has ended in failure do we begin to think rationally about it, usually for the purposes of finding excuses for the failure.\(^\text{34}\)

Fuchida’s observation should be regarded in the first instance as an important social commentary which serves to broaden the reader’s appreciation of the core nature of Japanese militarism. However it also succeeds in accurately defining the nature of the decision-making environment that frequently prevailed in Downing Street and the British service ministries prior to the outbreak of hostilities with Germany, and subsequently with Japan. For the past six decades an evolving historiography has essentially acknowledged a similar confluence between desire and reality as lying at the core of Britain’s declining naval fortunes. Yet the persistent employment of such notions within the prevailing orthodoxy of a grand strategy-centric perspective cannot provide a full conclusion in the absence of a fulsome operational-level appreciation, and this thesis accordingly sheds new light on our understanding of both British and Japanese naval successes and failures during the course of Second World War.

Thesis Structure

In order to test this hypothesis the thesis must explore three central issues. Firstly it shall establish the principal factors at both the policy-making and operational levels which were responsible for the Royal Navy entering the European conflict equipped with an underdeveloped naval air-arm. It is likewise necessary to include an appraisal of the interwar evolution of Japanese naval airpower so as to illustrate the stark differences in operational capabilities that existed between both nations. The second task is to assess the RN’s performance against Germany and Italy throughout the period September 1939 – April 1942 so as to confirm Britain’s capacity to defeat her European Axis opponents in all forms of maritime operations on a global scale. And the third issue to be addressed is the diminution and eventual demise of British naval supremacy from December 1941 – April 1942 at the hands of vastly superior Japanese naval airpower. These requirements are reflected in the structuring of the work itself. The relevant machinations and consequences of both government and armed-service interwar policy-making are the subject of the opening chapter, to be followed by the concurrent operational aspects and the rise of Japanese might in Chapters Two and Three respectively. Chapter Four deals with the European maritime conflict before passing to the Far East in Chapters Five and Six where the Royal Navy’s inability to confront Japanese naval aviation within distinctly separate geographical environments supports the historical validity of the propositions in question.

Exploring the complex web of interwar policies which shaped the character of the Royal Navy and the Fleet Air Arm does not involve a radical departure from the existing authorship, though in common with the works of Geoffrey Till and David Brown, Chapter One does concentrate upon the naval-air aspect. The effects of such events and circumstances as the
Washington Treaty, the termination of the Anglo-Japanese Alliance, the Ten Year Rule and the Singapore strategy are explored so as to identify where the policy-making responsibility for the RN’s state of readiness in September 1939 should properly reside. In Chapter Two, the employment of period commentaries from the Brassey’s annuals significantly expands the primary source base for the purposes of examining the material and doctrinal development of British naval aviation. These contemporary analyses from both participants and naval aviation experts enrich the portrayal of airpower’s struggle to gain legitimacy within a highly traditionalised interwar naval setting. In placing the Royal Navy as well short of full operational effectiveness at the outbreak of hostilities with Germany, the opening chapters confirm the adjudications of John Ferris and others on a strictly material basis.35 Yet in acknowledging the fact that the RN’s eleventh-hour rejuvenation was scarcely complete in September 1939 – a far cry from its overwhelming battle strength in August 1914 – these chapters initiate the thesis-wide proposition that determining the question of naval supremacy in the absence of its wartime application provides a less than complete perspective.

Moving to an assessment of the threat that Churchill described in 1925 as a danger that existed “only when greater dangers had passed away”, Chapter Three explores the pre-war evolution of Japan’s air-naval capability; a process which benefited from generous British assistance in the 1920s.36 Again the originality of the exercise is to be found in its utilisation of the available source documentation. The extensive employment of Japanese participant accounts seeks to explain the nuances of Japanese militarism from the indigenous perspective wherever possible, a practice which has only been followed within the minority of the Western histories. Equipped with a necessary understanding of the state of the IJN’s

35 See p. 7.
preparedness as of December 1941 the reader’s attention returns to September 1939 as Chapter Four analyses the Royal Navy’s efforts to maintain wartime supremacy against its German and Italian foes. In this instance it is the template for the analysis that provides the originality of enquiry as Dr Herbert Rosinski’s 1940 essay ‘Mahan and the Present War’ remains virtually unknown within the post-war accounts.\(^{37}\) Contemplating the issue of naval supremacy through reference to the continuing applicability of Admiral Alfred Mahan’s strategic insights, Rosinski squarely addresses the means through which the RN had maintained its command of the sea prior to November 1940 as well as the likely course of future events. Replicating the structure of this forgotten commentary, a critique of Rosinski’s thinking especially illustrates the first large-scale impact of the air-weapon upon the prevailing gunnery-centric conduct of naval warfare.

What this analysis does establish is that the effective disposition of the RN’s forces upon a minimalist basis, in combination with its outstanding leadership at the operational level and the inherent weaknesses of the European Axis’s maritime situation, enabled the British to retain their supremacy whilst in possession of often inferior fighting resources. Chapters Five and Six, however, plot the Royal Navy’s inability to meet the new challenge of what Commander Fuchida described as the “overwhelming strength” of the massed naval air-weapon in the differing circumstances of waging war within enclosed and open geographic environments.\(^{38}\) Employing a counterfactual-based analysis to expand upon the portrayals of the 1941 Force Z disaster constitutes a significant departure in terms of scope from the existing post-war publications, whereas the exploration of the 1942 Operation C raids in Chapter Six will elaborate upon the historiographical importance of this episode as has been


outlined above. These chapters emphasise what is popularly described in today’s lexicon as the ‘line in the sand’ moment for Whitehall and the Admiralty; the practical severing of Britain’s ability to participate at the cutting-edge of naval warfare as it existed from December 1941 onwards. Although there is no disputing the fact that the RN remained a superior naval power in the aftermath of 4 – 9 April 1942, it could no longer be regarded as the supreme naval power in the aircraft-carrier era. Henceforth this mantle passed with industrial inevitability to the United States, where it has resided to this day.

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To the casual observer gazing across the roadsteads at Scapa Flow in late August 1939, the Royal Navy’s assembled Home Fleet must have presented a truly awe-inspiring sight. Swaying at anchor was the massive, yet graceful battle-cruiser H.M.S. Hood, along with at least five other capital ships, several aircraft-carriers and a plethora of cruisers, destroyers and smaller craft. Twenty-three years had passed since the epic showdown at Jutland in which surface gunnery had reigned supreme. When addressing a Lord Mayoral banquet on 9 November 1923 in his capacity as First Sea Lord, Admiral Beatty defined the capital ship as “an inexpungable ship combining the greatest offensive powers with the greatest powers of defence, with the addition of speed and good sea-keeping qualities.”39 For Beatty, the Fleet’s battleships and battle-cruisers remained the bearers of this mantle, whereas he spoke of the aircraft-carrier as an increasingly important support element for the battleline. And for the following sixteen years, the evolution of the fleet air-weapon had spluttered along as the

imposing might of the Royal Navy began to fade in an unfriendly interwar environment. Yet
the service would succeed in defying its aging muscles and sinews to repel two worthy
European adversaries, only to be left astounded and humiliated by an opponent whose grasp
of the use of naval airpower would prove to be absolutely lethal. And as Paul Kennedy sagely
remarked in his summation of the Indian Ocean episode, “Beatty, had he lived to see the
sight, would have scarcely believed his eyes.”

40 Kennedy, The Rise and Fall of British Naval Mastery: 304.
Chapter One

Scylla and Charybdis: a policy odyssey, 1919-1939

Upon the expiration of the British government’s ultimatum to Germany at 11.00am on 3 September 1939, the Royal Navy entered hostilities equipped with 347 warships. Of twenty-two first-line capital ships and aircraft-carriers, only the carrier *Ark Royal* had been laid-down, launched and commissioned within the current decade. Of the remainder, three battleships and a single battle-cruiser had enjoyed substantial refits in an effort to bring them up to modern standards, including improved anti-aircraft armament and anti-torpedo protection. Just under half of Britain’s cruisers had been constructed prior to 1922, and three-quarters of the vessels within her destroyer flotillas were over ten years of age. The Fleet Air Arm consisted of 228 aircraft of which all but thirty were of biplane configuration, whilst the FAA’s specialist fighter element fielded a paltry eighteen single-seater interceptors.¹ The shades of grey which characterised the appearance of the big ships as they rested snug in the murk of the Scapa Flow roadsteads represented more than the combination of camouflage and falling sleet. Here dwelt a fading instrument of global power, a past-middle-age juggernaut which had reflected the debilitating consequences of government and armed-service policy machinations over the better part of two decades. For within a decision-making environment which Lord Balfour, the perennial denizen of government committees, described in February 1922 as being dominated by the choice “between Scylla and Charybdis”, the

Fleet had been obliged to navigate a course through the perilous squalls and shoals of unfriendly peacetime seas.\(^2\)

The effects of this voyage upon the Royal Navy’s ongoing readiness to wage a modern war were profound, and have been extensively documented within the existing historiography. Following a short overview this chapter will explore the broad range of government and armed-service policies which came to determine the operational readiness of the Fleet and its air arm in September 1939. Individually identifying and subsequently examining the impacts of these various initiatives is a necessary first step in understanding why the RN retained its wartime capacity to counter every Axis maritime threat bar one – the massed power of Japanese naval aviation. When the Eastern Fleet confronted Japan’s hydra-headed carrier strike force to the south of Ceylon in early April 1942 its warships, aircraft, personnel and tactics were all the products of interwar circumstances that restricted the RN’s ability to prevail at the highest operational level, and thereby led it to surrender its command of the sea. The policies of the 1920s and 1930s would compel both Whitehall and the Admiralty to wage a global maritime conflict by making its dispositions upon a minimalist basis, seeking to utilise sound method and clever leadership in order to overcome frequent instances of material inferiority. Without an examination of these policies, it is impossible for the reader to fully appreciate the core reasons why the Fleet’s most potent striking power eventually resided in the partnership between a handful of obsolete carrier-borne biplanes and an arthritic battleline.\(^3\)


\(^3\) *battleline – a common collective term for a nation’s capital-ships.
1919 – 1939: An Overview

In rejecting the Admiralty’s submission for a proposed £10 million addition to the budget spending within the 1925-26 Navy Estimates, Winston Churchill succinctly described the major dilemma which confronted Britain’s armed services in the aftermath of the Great War. As Chancellor of the Exchequer, Churchill contended that large increases in defence expenditure could only be justified upon “the clearest evidence of mortal peril” to British national and imperial security. In June 1919 Germany’s High Seas Fleet had been scuttled by its crews at Scapa Flow so as to prevent its seizure as reparations at Versailles. Given the absence of any obvious European naval threat, the Royal Navy suddenly found itself in a vulnerable budgetary position. This was exacerbated in August of the same year when David Lloyd-George’s Liberal-Conservative coalition government instituted the Ten-Year Rule, a Treasury requirement that future defence budgets be formulated on the basis that there would be no major war for a period of ten years. However the hardest funding blows throughout 1919 were reserved for the Army and the RAF, with the latter losing over four-fifths of its squadrons as well as being denuded of much of the infrastructure that was necessary to sustain the service’s existence. As early as January 1919 the Secretary of State for Air, Lord Weir, had alerted the Cabinet to the dangers of over-rigorous demobilisation, and in November the Chief of the Air Staff, Sir Hugh Trenchard, sought the Admiralty’s support for maintaining the RAF as an independent air arm.

An uneasy truce between the services prevailed over the following twelve months as the Admiralty commenced the formulation of war plans for possible future conflicts involving

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5 Montgomery-Hyde, British Air Policy 1918-39: 442.
Japan and the United States. Meanwhile the Royal Navy’s capital-ship construction programme continued apace, with the completion of the 44,600 ton *Hood* on 5 March 1920 thus equipping the Fleet with the largest and fastest warship then in service. In January 1921, however, the Admiralty and the War Office determined to wrest control of the air-weapon from the RAF, and this initiative set in train a protracted and bitter inter-service feud. As subsequent memorandums from all sides began to ricochet within Whitehall, Lloyd-George’s government referred the matter to the Committee for Imperial Defence (CID) for adjudication. Lord Balfour’s Standing Defence Sub-Committee issued a preliminary ruling on 26 July 1921 which favoured the retention of the RAF, and thereafter the issue stalled as it became overtaken by more substantial events. In November 1921, Britain joined Japan, France, Italy and the United States at the Washington Conference, which sought to negotiate a series of naval arms-limitation protocols. These efforts culminated in the signing of the Washington Naval Treaty in February 1922, a historic multilateral agreement that succeeded in placing an agreed ratio limit upon capital-ship numbers whilst imposing tonnage ceilings for all other warship classes. Additionally, the negotiation of a Four-Power Pacific agreement between Britain, France, Japan and the United States on 10 December 1921 replaced the expired Anglo-Japanese Alliance. At the same time the Geddes Committee on National Expenditure had proceeded from August 1921 to formulate a raft of wide-ranging budget cuts for all three British armed services.

Though Geddes’s recommendations were watered-down by a subsequent Cabinet committee in February 1924, funding for the Naval Estimates had already declined by almost £25

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million since 1920. Nevertheless the Admiralty proceeded with the formulation of its principal strategic objective, namely the creation of a plan to confront the Japanese in the event of a future Far Eastern conflict. In June 1921 the government had given its preliminary consent for the establishment of a major naval base at Singapore, and it had likewise resolved to permit the expiry of the existing Anglo-Japanese Alliance within the same year. The project received official sanction at the October 1923 Imperial Conference, though not without some reservations on the part of the Dominion representatives present. At the same time the Admiralty had recommenced its struggle with the Air Ministry in February 1922 as to which service should exercise control over the Fleet Air Arm. In March of that year the Cabinet sent the whole question of inter-service relations back to the ubiquitous Balfour, and after further delays due to the fall of the Coalition government in October a fresh inquiry in March 1923 eventually produced what became known as the Dual-Control system; the sharing of responsibility for the FAA between both services. Adding to the Admiralty’s woes, Ramsay MacDonald’s Labour government suspended work on the Singapore project, although this decision was rescinded after Stanley Baldwin’s Conservatives took office in November 1924. And in early 1925 the Fleet’s all-important reconstruction programmes suffered a particularly serious blow.

Following heated debate between the Admiralty and the Treasury over the substance of the 1925-26 Naval Estimates, Winston Churchill disallowed the former’s submission which

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advocated funding for new cruisers. This rejection of a key component of the Fleet’s ‘tentative Ten-Year Plan’, which also included a provision for the construction of four aircraft-carriers, marked the commencement of a noticeable decline in the RN’s peacetime fortunes over the following seven years. Annual naval outlays fell from £60 million in 1925 to an interwar low of £50 million in 1932, and following an abortive attempt to revive the cruiser issue in 1927, the Admiralty suspended its ten-year programme. With Admiral Lord Beatty’s departure as First Sea Lord in 1927, his successors Sir Charles Madden (1927-1930) and Sir Frederick Field (1930-1933) came to implement a series of stringent savings measures as the economic situation deteriorated even further. Madden and Field both sought to preserve the first-line battlefleet at the expense of almost everything else, including the Fleet’s carriers and the FAA, so as to prevent further erosion of the service’s strategic position. The consequences of these economies were particularly severe; the procurement of fuel-oil reserves was cut in half whilst the deferment or cancellation of orders resulted in several prominent shipbuilding firms going belly-up. Furthermore, in September 1931 the

The three major players in the Admiralty-RAF dispute over control of the Fleet Air Arm; (2-4: left to right) Admiral Sir David Beatty, Air Marshall Sir Hugh Trenchard and Lord Balfour, whose committee ultimately chose to impose the system of ‘Dual-Control’.

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Royal Navy experienced a number of brief mutinies, most notably at Invergordon, after the seamen and petty-officers had initiated strike action over proposed cuts to existing pay scales.\textsuperscript{15}

With its budget reductions bottoming-out in 1932, the Royal Navy had reached a peacetime nadir in terms of its overall preparedness for war. However as the international situation took a decided turn for the worst from 1931 onwards, momentum began to build within the recently installed National Government for a precautionary scale of rearmament, given the nature of the military threats that had arisen in both the Far-East and Europe.\textsuperscript{16} Following the Japanese Kwantung Army’s forcible annexation of Manchuria in 1931, the emergence of martial sentiment which had accompanied the complete seizure of executive power in Germany by Adolf Hitler by August 1934 would trigger a gradual pattern of foreign expansionism on the part of the three future Axis powers. And with this escalation in international tensions, both the Washington Treaty (which had been extended at the 1930 London Conference) and the ongoing Geneva arms negotiations began to collapse. Despite their endeavours to defer general rearmament for as long as possible, as well as an attempt to regulate the expansion of the Kriegsmarine through the auspices of the 1935 Anglo-German naval accord, the National Government at last commenced a series of programmes in 1936 which sought to reinvigorate the Royal Navy and the Fleet Air Arm.\textsuperscript{17} Yet through the combination of foreign appeasement and the urgent need to reconstruct a mothballed

armaments industry, the RN would eventually confront the dual menace of the modern Kriegsmarine and the Regia Marina in an alarmingly under-modernised condition. And as war finally beckoned in Europe, the roadsteads at the recently completed Singapore naval base remained an expansive patchwork of empty moorings.

“The trewe processe of Englyshe polycye”\(^\text{18}\)

1919 – 1929

What made the 1920s such a unique decade in the formulation of policies for the defence of the realm was the coalescence of four nascent factors – the existence of a mechanism for resolving international disputes (the League of Nations), a multilateral naval arms-limitation accord (the Washington Treaty), the expiry of the 1902 Anglo-Japanese Alliance, and three armed-service mouths to feed. As of 1919 the Royal Navy easily eclipsed its foreign contemporaries in terms of size and strength, yet by December 1929 its operational capabilities had begun to slip into decline as the then-Labour coalition government sought the attainment of adequate national and imperial security at the lowest possible cost.\(^\text{19}\) Almost all of the principal detriments which were subsequently visited upon the Fleet’s operational capacities during the course of the 1930s owed their origins to the policy-making circumstances of the 1920s. The gradual estrangement between cabinet-government and the Admiralty in this respect will be seen as arising from two incompatible policy postures. Regardless of their differing political philosophies, a succession of coalition governments embraced a pragmatic approach to the question of defence expenditure, as in the words of Lord Weir they attempted to balance “how much \textit{should} the country spend…and how much

\(^{18}\) Libelle of Englyshe Polycye (ca 1436)’ Doc. 4, British Naval Documents 1204-1960: 12.
the country can spend.” In response the Sea Lords articulated a vision of the future whereby the remotest of foreseeable threats were utilised to firstly justify the continuation of a large-scale arms-race between the world’s three biggest navies, and thereafter seek a massive investment in the Empire’s defences within Far-Eastern waters.

No assessment concerning the question of responsibility for the Royal Navy’s declining fortunes in the 1920s can be undertaken without first understanding something of the contextual parameters which came to shape British government and armed-service policy-making throughout the decade. With the extension of the electoral franchise and the emergence of the Labour Party, Britain’s political landscape had experienced a profound transformation in the post-war era. Successive coalition governments were confronted with an unsettled economic outlook as 30% of annual government expenditure became earmarked for repayment of Britain’s accumulated war debt. Organised labour had become a source of growing social, economic and political power as exhibited in the 1926 General Strike, whereas the fear of Bolshevist expansion generated growing alarm within the nation’s elites. By the middle of the decade a growing chorus of legislative agitation for increased expenditure on social reform had assumed the proportions of a dull roar as the nation’s economic situation began to decay, whilst abroad there was growing Dominion pressure for increased autonomy within the Empire. Within this environment, large-scale defence spending in the absence of a clear and present danger would run the risk, as Churchill alluded to in January 1925, of incurring the wrath of the British voter/taxpayer whose already heavy pecuniary burden could not be relaxed if such a course were undertaken. Yet at the same

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time such intangibles as national pride and imperial prestige could not be readily ignored even if the monetary cost of symbolism became inordinately high.

For the denizens of Whitehall, their deliberations upon the future of the Britain’s domestic and imperial defences now included the RAF which represented the source of a potential leap forward in industrialised warfare that had yet to be properly appreciated by its senior partners. However within a political, economic and social atmosphere which increasingly embraced collective security and anti-militarism, the respective services were presented with three clear choices for their future policy pathways. They could circle their wagons and present a united front to whatever form of budgetary onslaught that assailed them; follow the lead of their political masters and form loose coalitions to ensure the survival of the fittest; or instead opt for unilateralism and thereby seek to defend their individual fiefdoms from all-comers. Yet to choose anything less than a unified standpoint invited the near-certainty of inter-service conflict which would inevitably weaken the bargaining position of the military because they would be fighting each other as well as the “Treasury Myrmidons” whom Admiral Beatty so heartily detested. And as John Ferris has noted, the Admiralty’s capacity to meet the Fleet’s ongoing needs resided in the maintenance of a finely-tuned partnership with Britain’s shipyards. For such had become the interdependence of both instruments under the flamboyant First Sea Lord, Admiral Sir John ‘Jacky’ Fisher, throughout the decade preceding August 1914, the Royal Navy and its key industry partners found themselves

enmeshed within a self-perpetuating phenomenon that President Eisenhower would subsequently describe as the military-industrial complex.\textsuperscript{25}

From its final signing in February 1922 the Washington Treaty became the most pervasive influence upon the Fleet’s operational capacities throughout the following two decades. Of the five participating naval powers, the greatest burden undoubtedly fell on Britain because of the sheer geographic scope of that nation’s naval commitments. Yet there can be no logical argument that Britain had any choice other than to sign away her existing two-power maritime advantage because the continuation of an immediate post-war naval arms-race presented an open invitation for national financial suicide. In 1915 the 31,100 ton super-dreadnought \textit{Queen Elizabeth} had cost £2,473,103 on completion; by 1928 this figure was almost half a million pounds shy of the final price tag for the 9,750 ton cruiser \textit{Cumberland}. And if the reader considers for a moment that the battle-cruiser \textit{Hood} came in at £5,698,946 in 1920, the cancellation of three further ships in her class together with four proposed battleships represented a notable act of political common-sense.\textsuperscript{26} Regarding capital-ships in isolation, such an undertaking would have presented considerable difficulties within a relatively healthy financial environment, let alone a situation whereby the British had just lost 6.3\% of their 15-49 aged male population base together with 15\% of total national assets.\textsuperscript{27} However the response from both Whitehall and the Admiralty to another outcome of the Washington accords, namely the prohibition upon further fortification of certain Far Eastern military facilities deemed to be geographically offensive in nature, would sow the seeds for a future imperial catastrophe.

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With the British fleet reduced in strength and sharing parity with its American counterpart, the decision reached at Washington on 10 December 1921 to enact a Four-Power Pacific agreement ended Britain’s 1902 alliance with Japan, and with it, imposed the future potential burden of a large Royal Navy presence in the Far East should the Japanese become hostile. As N.H. Gibbs has correctly identified, the relinquishment of the Anglo-Japanese Alliance became a landmark in the development of British defence policy because Whitehall no longer possessed the firm alliance relationship which had previously given the RN the necessary leeway to deploy the majority of its assets in European waters.28 By contrast, the stated objectives of the Four-Power agreement which replaced the Alliance proved to be vague, with no firm actions beyond mutual consultation prescribed in the event of a dispute between the signatories, or involving a third-party aggressor. In response, however, the Admiralty intensified its efforts to have the government commit to a substantial Far Eastern naval presence by increasing its budget estimates and formulating the specifications for a naval base at Singapore. Yet with the Japanese displaying no imminent signs of hostility towards the British Empire, and the recent implementation of an international naval disarmament regime, the Sea Lords found themselves upon uncertain ground when debate commenced over the 1925-26 Naval Estimates.

In January 1925 Winston Churchill concluded that the Admiralty’s ongoing determination to construct a state-of-the-art naval base at Singapore represented “a peg on which to hang the whole vast scheme of scientific naval control of Japan.”29 Regarding the establishment of the facility itself, the decision of the MacDonald Labour government to suspend the project in 1924 should be regarded as eminently sensible on two bases. Firstly, as Malcolm Murfett and

others have correctly pointed out, the location chosen was entirely unsuitable for its effective defence. With the bulk of Sumatra to the immediate south, Singapore could only be accessed through the Strait of Malacca or the narrow waters which abutted the Java Sea to the southeast.30 If the Japanese were able to achieve localised naval and/or air superiority over these access routes, Singapore would be exposed to a geographically similar fate as that to be visited upon France’s Indo-Chinese citadel at Dien Bien Phu some three decades hence. And secondly, the Royal Navy would be deprived of an effective forward base because under the terms of the Washington Treaty, Hong Kong had been classified as geographically offensive, and was therefore unable to be fortified. In the absence of this peripheral shield, Singapore’s defence could only be guaranteed by either the permanent presence of a powerful naval squadron, or the timely disposition of a mobile fleet to the Far East at the outset of hostilities if Britain’s existing strategic situation permitted the latter course to be undertaken.31

Following his attendance at a ceremony to inaugurate the new floating dock at the Singapore base in 1929 the Straits Settlement’s Governor, Sir Hugh Clifford, expressed some doubts as to whether he had attended ‘a christening or a funeral.’32 Given the course of what became known as the Singapore strategy throughout the 1920s, it becomes clearly evident that whilst the Admiralty provided the coffin, Stanley Baldwin’s Conservative coalition supplied the nails by overturning their predecessors’ decision to suspend construction. The principal rationale which Lloyd-George’s cabinet had accepted from the Jellicoe Committee in granting initial permission for the base’s construction in June 1921 had been that Singapore “not only covered the main entrance to the Indian Ocean from the eastward but flanked the

30 Murfett, ‘Reflections on an Enduring Theme’: 5.
route from Eastern Asia to Australasia, and was of very great importance to the Dominions.”

By rejecting alternative options such as Ceylon which possessed a much healthier defensive outlook, both parties will be seen as compromising potential naval operations in the Far-East through a mixture of strategic misjudgement and a desire to symbolise Britain’s imperial resolve, both to the Japanese and the Dominion nation-states. Yet for the Admiralty, Singapore represented but part of a wider scheme through which cabinet-government would be compelled to fund large-scale modernisation programmes to meet the strenuous operational demands of a naval war against Japan. In this instance, however, the basis for its arguments would be less sound than that which Jacky Fisher had utilised so effectively within the decade preceding the Great War.

Should the Royal Navy have been capable of deploying a credible naval presence to Singapore’s roadsteads, then what course of events would follow? Whereas the relevant histories have devoted considerable attention to the Admiralty’s campaign for increased expenditure within the parameters of Washington, less has been said about the precise strategic means by which the Royal Navy would seek to meet and defeat its Japanese opponent to the east of Singapore itself. In addressing this issue by exploring the thoughts of the strategist Admiral Sir Herbert Richmond, Christopher Bell has teased out the inordinate ambition of the Admiralty to either impose a general economic blockade in the Asia-Pacific region or wage war within the vicinity of the Japanese mainland. In either instance as Richmond later conceded, success could not be assured in the wake of the negotiated limitations to both warships and base defences despite the fact that the navy’s planners were

contemplating such a course as late as 1929.\textsuperscript{34} Here again existed further evidence of the fundamental weakness within the Admiralty’s approach in seeking Whitehall’s approval for new warship construction upon the basis of a doubtful strategic campaign being waged from a perilously-situated stronghold. And given the vast developmental strides that the Imperial Japanese Navy and its air arm were to undertake throughout the 1930s in particular, an antiquated RN material presence at Singapore in wartime would be as practicable as no British naval presence at all.

\begin{figure}
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\caption{(5-7: left to right); Ramsey MacDonald, Winston Churchill and Stanley Baldwin. MacDonald twice authorised the suspension of the Singapore naval base project, only to have the decision reversed on both occasions when Baldwin succeeded him as Prime Minister, whereas Churchill disallowed large-scale budget increases for the Admiralty in 1925 whilst Chancellor of the Exchequer.}
\end{figure}

The rejection of the RN’s proposed cruiser programme by Baldwin’s cabinet in 1925 marked a major schism in relations between the Admiralty and the Exchequer, and much of the blame for this must be borne by the former. In attempting to convince the legislators as to the credibility of its planning, Beatty had sought to employ the time-honoured tactic of a scare campaign to gain public and political support. However on this occasion the Sea Lords were

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negotiating from a position of weakness. Whereas Fisher could point to the proximity of Germany as a naval threat and utilise the growth in German heavy industrial output in support of his successful lobbying for new *Dreadnought*-class battleships, Beatty enjoyed no such luxury. Unlike Fisher, Beatty was operating within a regulated environment on two fronts; Washington, and the domestic application of the Ten-Year Rule. His reference to the proposition that “in time of peace we have no friends and no influential party supporters” should be viewed as somewhat disingenuous for the Admiralty’s own campaign to wrest control of the Fleet Air Arm had cost the service a raft of cabinet support as early as 1922.35 And no tangible evidence had been uncovered by the Foreign Office as late as 1929 that suggested any imminent hostile intent towards London from Tokyo. Indeed up until 1926 the Admiralty was still conducting an active officer exchange programme with the Japanese whilst simultaneously providing much valuable technical information for Japan’s naval designers and shipbuilders.36

Care should be exercised when apportioning blame to the administration of the Ten Year Rule prior to its repeal in 1932. The greatest detriment undoubtedly lay in the probability that substantial cuts to the nation’s current naval capabilities would leave the Fleet in a precarious strategic position if war arrived before an adequate rehabilitation of its operational readiness had been undertaken. A firm majority of historical opinion has placed the domestic responsibility for this situation at the feet of the ambulatory interpretation of the Ten-Year Rule from 1925 onwards by successive cabinets which deprived the Royal Navy of the


opportunity to effectively address this mounting conundrum.\textsuperscript{37} There exists considerable merit in this conclusion when it is applied to the evolution of naval-air warfare within the service, with a particular applicability to the interwar composition of the RN’s aircraft-carrier force. The disallowance of large-scale rejuvenation projects in the 1925-26 Naval Estimates included the scheduled replacement of the Fleet’s three oldest, slowest and least-efficient aircraft-carriers, \textit{Argus}, \textit{Hermes} and \textit{Eagle}, which together constituted fifty per cent of its available contingent.\textsuperscript{38} By failing to replace these ships the Admiralty exposed itself to the risk that half of its carriers would be unfit for service within a mobile operational environment. Yet at the same time the Sea Lords had afforded priority for the replenishment of the Fleet’s cruiser arm over the need to reconstruct its carrier force, further restricting the capacity of the Royal Navy to develop air operations to their fullest extent.

Whilst the evolution of the RN’s aircraft-carrier capabilities became frustrated by the combination of government and Admiralty prioritisation, the subdivision of authority over the Fleet Air Arm represented a dereliction of collective common-sense from the outset. A brief outline of the chosen Dual-Control regime provides the reader with some idea of the jumble which cabinet committee processes had imposed upon the development of the FAA as of November 1923. Whereas the Admiralty had been granted responsibility for the funding, operational specifications and tactical control of its carrier-borne aircraft, the RAF maintained jurisdiction over flight training, technical development and supply of the aeroplanes themselves. A prolonged adjudication of the manning issue resulted in the Air Staff agreeing to supply not less than 30\% of the pilots whereas the Navy provided all the


observers, with participating officers being seconded to the RAF.\textsuperscript{39} The formulation of this model demonstrated the willingness of government to maintain separate service ministries in the absence of a singular co-ordinating instrument, thereby sustaining an environment in which inter-service friction could fester at both the political and organisational levels. By rebuffing the establishment of an independent Ministry of Defence (MOD) that had been recommended by the Geddes Committee as early as 1921, the issue had become mired in an exhaustive and often-fractious committee process at the expense of a decisive political intervention to resolve the impasse.\textsuperscript{40} And the situation did not improve with the Admiralty’s ongoing efforts to regain authority over the FAA from November 1923 onwards.

For its part the RAF acted responsibly in prioritising the building of the vital logistical and educational foundations of Lord Trenchard’s good cottage during the course of the 1920s.\textsuperscript{41} In spite of the numerous problems which were encountered throughout the Dual-Control regime, there can be little disagreement that the incremental program of infrastructure development during this important period in the evolution of the air weapon was entirely appropriate. Yet Lord Trenchard's pursuit of a no-specialisation policy, which emphasised his belief that the employment of aircraft in naval operations produced a similar range of challenges to those experienced in other combat flying environments, should be recognised as highly significant in two respects.\textsuperscript{42} As will become apparent in the following chapters the existence of 'one-size fits-all' design parameters for both land-based and carrier-borne aircraft did not allow for the necessary differentiation in developing machines which were appropriately suited for shipboard service. And in a similar vein the RAF's failure to

\textsuperscript{39} ‘The Relations of the Navy and the Air Force’ 31.7.1923, CAB/23/46-0015.
\textsuperscript{40} Churchill, Memorandum 4.2.1922, CAB/24/132-0091: 4.
\textsuperscript{41} See p. 10.
propagate a competent shore-based anti-shipping capability prior to September 1939 largely denied the Admiralty the crucial assistance of effective land-based air support throughout the first three years of the war.\textsuperscript{43} As will be explored in greater detail shortly, the most far-reaching outcome for the Fleet Air Arm arose through the determination of both Whitehall and the Air Staff from the mid-1930s onwards to establish RAF Bomber Command as a potent air striking force that would serve as an effective strategic deterrent to the growing power of Hitler’s \textit{Luftwaffe}.

In comparison with its pragmatic approach towards the development of British air power, the Air Ministry’s preparedness to support technical missions to Japan for the establishment of the Japanese naval air-arm (IJNAF) in the 1920s would produce a range of extremely adverse outcomes for Japan’s future opponents.\textsuperscript{44} Within Britain itself the assortment of misjudgements and contradictions which have been explored above had yet to ripen by the close of the decade. Having exercised commendable judgement in agreeing to the instigation of the Washington accords and implementing the restraints of the Ten-Year Rule, Whitehall had failed to demonstrate a similar degree of pragmatism elsewhere. By supporting the construction of the Singapore facility whilst concurrently rejecting the Admiralty’s demands for the warships that would be required to operate from its roadsteads, successive British governments were actively engineering the circumstances for a major disaster. For its part the Admiralty had notably failed in its attempts to rehabilitate the Fleet through an inability to convince Whitehall of the existence of a foreseeable Japanese threat as economic circumstances worsened, whilst ill-serving the RN’s cause in cabinet-government by its continuing truculence over the Fleet Air Arm issue. And the RAF would not assist matters

\textsuperscript{43} Hezlet, \textit{Aircraft & Seapower}: 119, 130.
\textsuperscript{44} Ferris, ‘A British ”Unofficial” Aviation Mission and Japanese Naval Developments, 1919-1929’. 
through the ever increasing belief within its senior ranks that strategic airpower alone could win a major conflict. These aspects would come to hinder the belated reinvigoration of British sea power at a moment when the nation could least afford it; as Britain reluctantly prepared herself for another European war.

1930 – 1939

Addressing the House of Commons on 3 March 1936, Prime Minister Stanley Baldwin emphasised the tenor of the decade when he stated that “taking risks for peace has not removed the dangers of war.” 45 And for some time further a similar message would follow before Hitler’s naked ambition became unmasked upon the streets of Prague in March 1939. On 25 February 1936 Baldwin’s National Government had authorised a naval expansion programme which included seven new battleships, four aircraft-carriers and five cruisers, as well as numerous destroyers and submarines. Referring to the progress of rearmament a year later, the Minister for Defence Co-Ordination, Sir Thomas Inskip, advised his cabinet colleagues that whilst the construction of new vessels remained on schedule, the urgent modernisation of seven existing battleships would be delayed because of the need to substantially accelerate naval armaments production. 46 Unlike the situation in Germany and Japan, the Great Depression had left armaments manufacture in a fragile state within most Western economies, especially so in Britain where severe defence cutbacks were being enforced during the early 1930s. For whilst cabinet-government sought to negotiate a centrist path during a period of profound social misery, in which the peripheries of party-political expression enjoyed growing public appeal, the Royal Navy’s operational readiness declined

alarmingly just as potential foes in the Atlantic and the Mediterranean began to attract increasing concern at the expense of the Far-East. Therefore there can be little doubt that the risks being taken for peace were very real indeed.

The course of Britain’s naval fortunes throughout the 1930s will be viewed as proceeding through two distinct phases. From 1930 until 1933, government and armed-service policy-makers alike conducted a scorched-earth campaign to enforce economies, driving the Royal Navy to the verge of inactivity in the process. As economic circumstances began to ease in 1934, a second phase emerged. The National Government’s support for collective security and arms-limitation held firm for as long as such objectives were, in its judgement, feasible, whilst at the same time taking ever-increasing steps to bolster the nation’s military position and that of the industries upon which it relied. This route was not without political risk because a popular mood in support of collective security and disarmament still existed within the electorate; in 1934 the government lost a series of by-elections to ‘Peace-Ballot’ candidates.47 And at the same time it entailed a serious military dilemma, that the phased upgrading of industrial output that came to be known as ‘Stop-Go’ would leave the armed forces short of high combat readiness if war broke out before production had reached full-swing. In addressing the various outcomes for the RN and its evolving air-arm which eventuated throughout these two policy-making phases, the ongoing damage to the Fleet’s standing as the paramount Great Power navy becomes readily apparent.48 It follows therefore that a compelling argument can be advanced that the effects of government and service

policy-making were sufficient to deny Britain her existing naval supremacy prior to September 1939.

Table 1: The World’s Principal Fleets in 1930\textsuperscript{49} *(building)

<table>
<thead>
<tr>
<th>Type</th>
<th>Britain</th>
<th>USA</th>
<th>Japan</th>
<th>France</th>
<th>Italy</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battleships</td>
<td>16</td>
<td>18</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>--</td>
</tr>
<tr>
<td>Battle-cruisers</td>
<td>4</td>
<td>--</td>
<td>4</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Pocket-Battleships</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>(1)*</td>
</tr>
<tr>
<td>Aircraft-carriers</td>
<td>6</td>
<td>3</td>
<td>3 (+1)*</td>
<td>1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Heavy Cruisers</td>
<td>20 (+3)*</td>
<td>5 (+5)*</td>
<td>8 (+4)*</td>
<td>6</td>
<td>2 (+4)*</td>
<td>--</td>
</tr>
<tr>
<td>Light Cruisers</td>
<td>40</td>
<td>10</td>
<td>21</td>
<td>9</td>
<td>6 (+5)*</td>
<td>6 (+1)*</td>
</tr>
<tr>
<td>Destroyers</td>
<td>146 (+10)*</td>
<td>230</td>
<td>120</td>
<td>70 (+10)*</td>
<td>75 (+15)*</td>
<td>25</td>
</tr>
<tr>
<td>Submarines</td>
<td>50 (+10)*</td>
<td>100 (+6)*</td>
<td>60 (+10)*</td>
<td>60 (+35)*</td>
<td>65 (+10)*</td>
<td>--</td>
</tr>
</tbody>
</table>

Based upon the above figures, John Ferris’s assertion that the Royal Navy still retained its supremacy at the conclusion of the 1920s is substantially accurate, given the clear advantage which the British enjoyed in vessel classes except for destroyers and submarines. It is also noteworthy that at a stage where the Admiralty had already begun the wind-back of its building programmes, twenty-three warships remained under construction. However from 1930 until 1933 the dramatic downsizing of the Fleet’s logistical circumstances, namely the cutting of funds for accumulation of fuel-oil and ammunition reserves, severely compromised Britain’s capacity to respond to any immediate naval crisis.\textsuperscript{50} This outcome, along with unrest over proposed pay cuts which led to the disturbances at Invergordon and elsewhere in September 1931, amply demonstrated the perils present when austerity measures were pursued beyond their practical limitations. In the latter instance MI5 had made the cabinet aware of possible Communist infiltration on the ‘lower-deck’, an outcome that Whitehall was especially sensitive towards in the wake of prior mutinies within the German and Russian

\textsuperscript{49} Bennett, Naval Battles of World War Two: 27.
fleets that had initiated popular revolutions. The diminution of the Fleet’s capabilities on these grounds can lead to a conclusion that the RN had in fact forfeited its supremacy as early as 1933, especially in the realms of imperial defence. For as Churchill had warned in February 1922, in the absence of adequate refuelling and re-victualling facilities to the east of Suez, “we cannot base a fleet capable of fighting Japan on Singapore. By 1931 the situation had become so serious that the Chiefs-of-Staff warned that both Singapore and Hong Kong would be captured well before the Fleet was able to arrive.”

Table 2: Relative ages of existing first-line capital-ships as of September 1939 *[reconstruction]

<table>
<thead>
<tr>
<th>Years Commissioned</th>
<th>Britain</th>
<th>USA</th>
<th>Japan</th>
<th>France</th>
<th>Italy</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910 – 1914</td>
<td>--</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>--</td>
</tr>
<tr>
<td>1915 – 1919</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>--</td>
</tr>
<tr>
<td>1920 – 1924</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>[1]*</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1925 – 1929</td>
<td>2</td>
<td>[2]*</td>
<td>[2]*</td>
<td>[1]*</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1930 – 1934</td>
<td>--</td>
<td>[7]*</td>
<td>--</td>
<td>[1]*</td>
<td>--</td>
<td>2</td>
</tr>
</tbody>
</table>

However it is equally the case that the majority of these crucial shortages had been generally alleviated by the outbreak of war in September 1939, thereby classing the outcome as a relatively short-term phenomenon. Yet there is no doubt as to the steep decline of the Admiralty’s capital-ship capabilities from 1930 – 1939 with Britain falling substantially behind both Japan and the United States in terms of its reconstruction of the Fleet’s existing capital-ships. The extension of the Washington building holiday at the 1930 London Naval Conference undoubtedly reserved its most severe impact for the Royal Navy, largely because the Admiralty had been so insistent since the late 1920s about maintaining as large an active

battle-fleet as possible. With the onset of the Abyssinian Crisis in 1935 and the general heightening of military tensions in Europe thereafter, the mass withdrawal of battleships and battle-cruisers from operational service for the purpose of overdue refits and reconstruction could no longer be sensibly contemplated. Without adequate anti-aircraft protection the Fleet’s older capital-ships were helpless in the face of air attack, whilst the first months of war would emphatically prove that Great War-standard anti-torpedo protection was no match for modern torpedoes. And because of their reduced operational endurance which had been occasioned by a lack of major refits to propulsion systems, the majority of Britain’s big ships would have severe difficulty in reaching the Far-East in good time if required to do so, thereby further degrading the RN’s presence beyond the Atlantic and the Mediterranean.

Table 3: Non capital-ships in first-line service 1930 – 1939

<table>
<thead>
<tr>
<th>Vessels</th>
<th>Britain</th>
<th>USA</th>
<th>Japan</th>
<th>France</th>
<th>Italy</th>
<th>Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft-carriers</td>
<td>6 – 7</td>
<td>3 – 5</td>
<td>3 – 6</td>
<td>1 – 1</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Heavy Cruisers</td>
<td>20 – 20</td>
<td>5 – 18</td>
<td>8 – 18</td>
<td>6 – 7</td>
<td>2 – 9</td>
<td>0 – 2</td>
</tr>
<tr>
<td>Light Cruisers</td>
<td>40 – 44</td>
<td>10 – 19</td>
<td>21 – 17</td>
<td>9 – 11</td>
<td>6 – 12</td>
<td>6 – 4</td>
</tr>
<tr>
<td>Destroyers</td>
<td>146 – 192</td>
<td>230 – 214</td>
<td>120 – 104</td>
<td>70 – 70</td>
<td>75 – 112</td>
<td>25 – 57</td>
</tr>
<tr>
<td>Submarines</td>
<td>50 – 59</td>
<td>100 – 95</td>
<td>60 – 57</td>
<td>60 – 78</td>
<td>65 – 104</td>
<td>0 – 57</td>
</tr>
</tbody>
</table>

Based upon the figures quoted for surface warships and submarines, the Royal Navy no longer possessed an apparent One-Power standard in September 1939 as it had done in 1930. However it should be noted that the major reconstructions of American and Japanese capital-ships during the 1930s were largely confined to the upgrade of their defensive capabilities.

With the exception of the three British battle-cruisers and four Japanese Kongo-class battle-cruisers that were converted to fast battleships, the majority of the world’s capital-ships

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56 Bennett, Naval Battles of World War Two: 27, 35, 37.
continued to plod along at speeds of twenty-five knots and under whilst there remained limited difference in terms of main armament carried. Yet much of the British cruiser complement paid the price for the decision at London to include the light and heavy cruiser classes under the re-negotiated building embargo. A higher percentage of the Fleet’s cruisers had been constructed prior to 1930 than those belonging to the United States, Japan and Italy, and the British did not construct any new heavy cruisers during the course of the 1930s. As early as 1927 the Exchequer had warned the Admiralty of the dangers of obsolescence if too many ships were built before they were required, and this situation had come to pass through the combination of London and the Ten-Year Rule. With a growing percentage of its cruisers verging upon the obsolete as war approached, the Royal Navy’s global capabilities were compromised further as a significant portion of the RN’s light cruiser force lacked the required endurance for Far Eastern operations.

The interwar battle-cruiser HMS Hood (8: left) and the ageing Great War battleship HMS Revenge (9: right), neither of which were properly modernised before the outbreak of the Second World War.

In correspondence to Sir Phillip Sasson, Under-Secretary of the Air Ministry on 31 January 1934, the First Lord of the Admiralty, Sir Bolton Eyres-Monsell expressed his fears over the absence of a modern aircraft-carrier in service with the Fleet:

57 'List of British and Foreign Ships’ BSY 1941: 216-256.
In view of the present weakness of the Fleet Air Arm, I am firmly convinced that unless we lay down the carrier as part of the 1934 programme the fighting efficiency of the Fleet will be in serious danger. This is an Admiralty responsibility, and one which the Admiralty cannot fail to press.\(^{59}\)

Eyres-Monsell got his wish, and the addition of the *Ark Royal* to the Fleet in 1938 at last provided the Sea Lords with a powerful carrier that possessed roughly the same range of capabilities as its foreign contemporaries. Largely as a consequence of the Admiralty’s decision to defer the development of its carriers in order to maintain the operational presence of the capital-ships, only the converted battle-cruisers *Furious*, *Courageous* and *Glorious* were otherwise capable of participating in a fast-moving engagement, limiting the Admiralty’s capacity to formulate a potent aerial spearhead. By 1938 the British had lost their lead in the aircraft-carrier race to Japan and the United States as both these nations had succeeded in completing additional ships that were both faster, and which carried 50% more aircraft (each) than their British contemporaries.\(^{60}\) In this instance the reluctance of the Admiralty to fully utilise the provisions of the Washington Treaty represented a potentially disastrous misjudgement on its part.

Whereas the Admiralty’s reticence to fulfil its allowable carrier tonnage quota under the terms of Washington will be seen as downgrading the Fleet’s future aerial capabilities,\(^{59}\) *The Building of the Ark Royal, 1934*, Doc. 505 in Hattendorf & Ors. (eds.), *British Naval Documents 1204-1960*: 943.

caution is required when the condition of the RN’s air assets is assessed. From the assorted cabinet and service-level documentation of the early 1920s, there exists a clear acknowledgement from all parties that naval aviation had only just commenced a lengthy developmental process. The following chapter identifies the existence of three distinct generations of carrier-borne aircraft between 1919 and 1934, with Louis Casey having identified this period as one in which advances such as new lightweight alloys and improved aero engines were consistently generating evolutionary momentum, thereby resulting in smaller numbers of aircraft in active service. This interpretation complements various references within Brassey’s which described these advances in documenting the limited introduction of a variety of the first all-metal concepts into Fleet Air Arm service throughout 1929 and 1930. Therefore any conclusions as to whether Whitehall, the Admiralty or the RAF should assume the majority of responsibility for the material state of the FAA during the early 1930s shall be tempered by this situation which, as shall be highlighted in Chapter Two, was certainly not confined to Britain alone. Yet it also remains the case that the Admiralty and the War Office had openly highlighted the experimental nature of the air-weapon to support their arguments that its future operational potential would be best served by remaining within their capable hands.

The persistent inter-service brawling, which initially threatened the future of the RAF itself before turning to the question of control over the Fleet Air Arm, had abated somewhat in the

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latter half of the 1920s. When it reignited in 1936 over the issue of manning ratios with control of the FAA being returned to the Admiralty within the following year, a fundamental weakness of the Dual-Control regime became exposed. Because a large proportion of trained maintenance personnel had chosen to return to the RAF, the Fleet’s carriers were short by upwards of a thousand skilled technicians, so the discarded system actually remained in effect until after the outbreak of war with Germany in order to make up these shortages. Accordingly the operational capabilities of the Fleet Air Arm were initially compromised by the absence of vital ancillary support. Whilst in this instance the combination of poor policy and stringent economies were the principal culprits, both the Air Staff and the National Government come under scrutiny for their collective resolve to build up a major strategic deterrent in the form of RAF Bomber Command from 1934 onwards. Although there can be little disagreement that this initiative ultimately provided Britain with the means to wage an offensive aerial campaign in partnership with the Americans that decimated Germany’s war economy, it initially produced serious side-effects. The construction of bombers came to occupy the majority of Britain’s pre-war aircraft manufacturing base, thereby imposing delays upon the procurement of modern fighter aircraft.

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Was policy or technology the principal villain in this instance? By the allocation of priority to the assembly of a full-strength Bomber Command, both RAF Fighter Command and the Fleet Air Arm entered the war with a shortage of fighters, most particularly in the latter case. And on its own admission, Bomber Command was not properly equipped for strategic operations until May 1942 at the earliest.\(^66\) The aircraft types which had flowed from British production lines since 1935 were found to be unsuitable for the task and suffered such heavy daylight casualties during the first year of conflict that they were switched to night attacks, equipped as yet with no means of locating their targets with reasonable precision. However it is difficult to describe the bomber-first policy as negligent because the British, in common with every other major power, fervently believed that, in Stanley Baldwin’s words, ‘the bomber would always get through.’\(^67\) Prior to 1936 the most significant advances in military aviation had arisen through the development of fast civil transports as bombers. And until early 1939 when monoplane fighter designs began to enter service in sufficient numbers, the majority of monoplane bomber types outperformed the biplane fighters which still predominated within the various national air-arms.\(^68\) Therefore by prioritising bombers ahead of fighters, the British and their foreign counterparts were pursuing a concept of air power that, in common with all other forms of military aviation, had yet to be conclusively tested in modern combat.

If significant blame is to be sheeted home, it resides in the failure of the government and the RAF to understand both the specific nature of the threat posed by the German Luftwaffe and the inherent structural weaknesses within Germany’s Air Ministry. This subject is largely canvassed within Chapter Four, and it is sufficient to note here that the Luftwaffe had


\(^{67}\) Ibid, p. 8.

\(^{68}\) Shepherd, *The Air Force of Today*: 182.
discarded strategic bombing as a priority developmental stream in 1936, instead favouring the assembly of a ground-support force which would form a key plank in that nation’s *Blitzkrieg* combined-arms offensive doctrine. Yet Whitehall’s advocacy for Bomber Command also reflected a sharp rise in popular public support for a strong strategic deterrent, particularly in the wake of the horrors that had been visited upon Shanghai and Guernica during 1937. Faced with the future prospect of British cities meeting a similar fate, the establishment of a deterrent striking force became a political necessity to both counter public anxiety and, if possible, assist in dissuading Hitler from initiating a European war.  

Domestic public opinion, however, had barely raised an eyebrow over the employment of the RAF since 1920 as an imperial security force that bombed defenceless tribal villages as an alternative to employing costly land and naval expeditions to maintain order in the remote peripheries of the Empire. This expansion of the RAF’s role represented a direct challenge to the long-standing jurisdiction of the senior services and it had generated a furious dispute in the 1920s over the proposed defences for Singapore.

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The two issues which have come to distinguish the pre-war development of the Singapore strategy within post-war memory were the physical defences of the base and the gradual evaporation of Whitehall’s commitment to dispatch a ‘Main Fleet’ to the Far East. In the first instance the government approved the deployment of fixed heavy-calibre coastal artillery in 1928 as the primary means for defending Singapore Island, disregarding the RAF’s submission which advocated airpower as the principal defence weapon.\textsuperscript{71} And since the days of the base’s initial conception, prominent voices within the Admiralty had increasingly questioned the capacity of the Fleet to respond \textit{en-masse} to a Japanese threat in the Far East. In 1932 Admiral Richmond went so far as to describe those who would authorise this potential disposition as being ‘less than fools’, yet at the outbreak of the European war Whitehall had not abandoned its pledge to the Australian government that in the event of a crisis the big ships would be sent within a period of seventy to ninety days.\textsuperscript{72} Whereas the historiography has tended to cast the abandonment of the Main Fleet option during the 1930s as the key plank in the evolution of the Singapore saga, the current thesis refutes this contention. Over the course of the following chapters it will become evident that regardless of the scale of any attempted naval disposition, the RN did not possess the necessary capabilities to ultimately withstand Japanese air-naval superiority.

Through the RAF’s support for the priority production of long-range bombers that were designed to attack land targets, specialised reconnaissance, anti-shipping and anti-submarine aircraft were in critically short supply for Coastal Command throughout the opening stages of


the European war. And in the absence of these land-based air assets, an active RN wartime presence within the South China Sea would verge upon the untenable. However the impact of the Singapore strategy upon Britain’s overall naval supremacy throughout the interwar years should be regarded first and foremost as a matter of financial delinquency. The Singapore base cost approximately £60 million upon completion in 1939. Sixty-million pounds which, if not spent on a highly suspect strategic investment, could have financed a refit of virtually all the Fleet’s capital-ships and most of its carriers, and enhanced the RN’s air-arm and logistical reserves.73 On balance both Whitehall and the Admiralty deserve heavy censure for continuing to allocate vast sums of money for a base that could not be properly utilised because the very funds needed to refit the necessary ships were instead being expended on Singapore! The ultimate cost of imperial symbolism in this instance has generally been associated with its wartime outcomes, yet Singapore’s very completion clearly involved a consequential diminution of the Fleet’s overall pre-war operational capabilities, even though by 1936 the Far East had been superseded by the defence of the Atlantic as the Admiralty’s primary strategic priority.74 And the RN’s formidable numerical advantage over its European foes became increasingly balanced by the growing obsolescence of most of its principal fleet units; capital-ships and aircraft-carriers alike.

* * * * *

Throughout two decades of peace, a potent mixture of pragmatism and misjudgement had come to shape both the evolution and resolution of the policies which governed the Royal Navy’s ongoing capacity to maintain its command of the sea. It is difficult to imagine how such a fighting instrument could have retained this mantle in lieu of the severe material and

logistical debilitations which it had suffered, in spite of the fact that the Fleet continued to retain its superiority in numbers. Whereas successive British governments had little choice in adopting a sensibly pragmatic stance towards naval limitation in the 1920s, the ongoing non-Labour support for the Singapore strategy and the failure of government to address inter-service conflicts with a firm hand represented policy failures with numerous unfortunate consequences, most particularly for an aging battle-line and its ill-equipped air-arm. As for the armed services, the Admiralty’s misjudgements in the 1920s performed a critical role in retarding the Fleet’s operational readiness in the 1930s whereas the Air Staff’s growing preoccupation with strategic bombing undoubtedly compromised the Fleet Air Arm’s evolving air-fighting capabilities. The substance of the evidence examined above lends considerable weight to John Ferris’s contention that the RN had indeed forfeited its naval supremacy from 1930 onwards as an increasing proportion of its vessels were ill-equipped to cope with the rigours of naval combat within the forenoon of the aerial age.

However to reach such a conclusion upon the basis of interwar policy-making in isolation is to fundamentally disregard a wider ambit of wartime circumstances. Size and firepower do undoubtedly present paramount bases for measuring the operational capabilities of a nation’s naval forces, yet they do not constitute the entire narrative. In the absence of a thorough appreciation of the various tactical doctrines with which the Royal Navy and its opponents had sought to achieve their aims, a conclusive determination cannot be achieved. And it is further the case that the ultimate measure of naval supremacy resided in one forum alone – upon the seas and oceans of the battlefield itself – as will be widely illustrated within the following chapters.
Chapter Two

In the outhouse: the carrier-borne air-weapon and the interwar Royal Navy

During routine exercises in 1928 a certain Lieutenant Cathcart-Jones proceeded to dive-bomb the battleship Revenge, the flagship of Britain’s Mediterranean Fleet, with several rolls of toilet paper. Geoffrey Till has characterised this as an act of calculated tomfoolery that highlighted a growing sense of frustration within the ranks of the Fleet Air Arm over the subordinate role which had been assigned to naval aviation within the Royal Navy’s existent tactical planning.¹ The reluctance of the service’s leadership to fully acknowledge the offensive value of aircraft coincided with the Admiralty’s commitment to a risky pathway throughout the interwar era. Thanks to what Admiral Sir David Beatty had described as the peculiar geographical situation of the British Empire, an underpowered RN would find itself thinly stretched if it were required to repel simultaneous threats across two hemispheres.² Given the ageing capabilities of its big ships, any marked flaw in the Admiralty’s tactical approach exposed the British to a disaster of a similar magnitude to that inflicted upon Admiral Rojdestvensky’s luckless Baltic Fleet at Tsushima in 1905. For Rojdestvensky had been compelled to pit his largely obsolete warships against a qualitatively superior Japanese opponent, resulting in the virtual annihilation of the Russian forces involved. And the odds in favour of such an outcome for the Royal Navy would continue to shorten while the majority of the Admiralty’s planners and senior operational commanders believed the effects of bombs and aerial torpedoes to be as soft and thoroughly absorbent as Cathcart-Jones’s chosen ordnance.

¹ Till, Airpower and the Royal Navy 1914-1945: 47.
Commencing with an examination of the Fleet Air Arm and its foreign competitors, this chapter analyses the incorporation of the interwar air-weapon within the RN’s operational doctrine. Louis Casey’s four separate phases of naval aviation evolution provides the framework for the chapter’s initial task which is to illustrate the comparative state of the FAA’s combat capabilities as of September 1939. By understanding the various trends in both design and operational employment that permeated this particular period, the reader will come to appreciate the specific developmental and doctrinal aspects which eventually placed Britain behind her American and Japanese contemporaries as a first-rate naval air power. The chapter subsequently addresses the Royal Navy’s war-fighting practices and establishes the Admiralty’s reluctance to establish the aeroplane as its primary offensive and defensive instrument. Instead the evidence illuminates the construction of the Fleet Air Arm as a competent supporting actor, a decisive factor through which the RN’s capital-ships would prevail on the battlefield, but a co-star nevertheless. Through a concurrent exploration of the European Axis naval threats that awaited the British in September 1939 and June 1940 respectively, it will become evident that in spite of its decaying surface power, the Admiralty’s available forces were likely to cope with whatever menaces that could be thrown at them across the expanse of two hemispheres. Yet this outcome also represented a minimalist application of airpower which would prove to be unsustainable when eventually pitted against the third signatory to the Tripartite Pact.

Four phases: the Fleet Air Arm, 1919-1939

The origins of the Fleet Air Arm lay within a committee-based framework which came to dictate the circumstances of the air-arm’s birth and its subsequent material progress.

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3 Casey, *Naval Aircraft*: 18.
throughout the first decade of peace. In 1912 a Committee of Imperial Defence sub-committee chaired by Lord Haldane recommended the establishment of an independent air service with separate naval and military wings. The War Office promptly ignored Haldane’s findings and established the Royal Flying Corps in April 1912, with the Admiralty following suit in forming the Royal Naval Air Service (RNAS) in July 1914. This arrangement persisted until 1917 when, in the face of mounting public and political concern over the inefficient employment of both air-arms, a merger was enforced through the passing of the *Air Force (Constitution) Act 1917* along with the establishment of an Air Ministry in January 1918 and the Royal Air Force itself on 1 April 1918.\(^4\) With the conclusion of the Great War in November 1918 and the subsequent widespread demobilisation of the RAF, both the Admiralty and the War Office had commenced their joint campaign to recover their pre-existing air elements. Whilst the British armed-services squabbled over the future of airpower at the highest levels, the Imperial Japanese Navy had accelerated its development with the arrival of the British Air Ministry’s first ‘unofficial’ aviation mission to Japan in 1921. Within the same period the United States Navy had also entered an experimental phase that initially lagged behind British and Japanese initiatives in the field of carrier-borne flight.\(^5\)

As the likes of Geoffrey Till, Arthur Hezlet and Antony Preston have substantially documented, this opening phase in the post-Great War evolution of naval aviation had been characterised by a marked fluidity of method in the approach of the interested parties towards the best means of utilising the air-weapon at sea. In confronting the challenge of operating aircraft from ships, the means for conducting these activities came to include a range of

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shipboard catapults, ‘flying-off’ platforms and other ingenious contraptions. By appreciating the advantages of a wholly flush-decked aircraft carrier for the launch and recovery of their aircraft, both the British and the Japanese had stolen a temporary march over the Americans who persisted with testing alternative approaches for the majority of the 1920s. The reader will observe the application of these contrasting views within the origins of the first three post-war aircraft-carriers to be commissioned; whereas the British and Japanese vessels *Hermes* and *Hosho* were specialist designs, the USS *Langley* mirrored the earlier British carrier *Argus* in being converted from an existing merchant ship. For its part the RAF had usurped its foreign competitors in the design of offensive naval aircraft with initiatives such as the Sopwith Cuckoo representing the blueprint for future biplane torpedo-bomber construction. Yet in spite of these advances towards the aircraft-carrier age there is no doubt that the balance of power at sea still resided in the concentrated employment of surface gunnery throughout this period.

*First-generation naval fighters (12-14: left to right): the Gloster Nightjar (FAA), the Mitsubishi 1-MF (IJNAF) and the Curtiss F-4 (USN).*

*First-generation aircraft-carriers (15-17: left to right): HMS Hermes, IJN Hosho and USS Langley.*

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The second phase of naval aviation evolution which Casey has defined as lasting from 1922 until 1927 became distinguished by a number of subtle developments in aircraft design. Within this period emerged the first post-war generation of aeroplanes that were specifically conceived to meet the needs of aircraft-carrier operations which resulted in improved structural reliability and more powerful engines so that larger aircraft could be operated with heavier payloads at sea. The Fleet Air Arm’s fighter and torpedo-bomber types continued to parallel their foreign contemporaries in terms of performance and modest firepower, whilst the British led the way in acquiring an experimental battlefield-orbiting capability which in many respects became the forerunner of the modern Airborne Warning and Control System (AWACS). As the 1920s progressed the three existing carrier powers were joined by France with the commissioning of the converted battleship Bearn in 1927, whilst the British, Japanese and Americans increased the size of their carrier fleets in accordance with the provisions of the Washington Treaty. By January 1928 the Royal Navy possessed five commissioned aircraft-carriers whereas the Japanese and the Americans could each field three vessels, although the IJN’s Akagi and Kaga and the USN’s Lexington and Saratoga were substantially larger than their British counterparts. Despite these advances in both the operational potential of carrier-borne aircraft and the increasing numbers of carriers in commission, the employment of the air-weapon in a combat environment remained a matter of fierce debate, especially within the ranks of the FAA.

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Arthur Hezlet has identified four schools of interwar opinion as to the future of the air-weapon at sea; with the so-called ‘FAA School’ contending that the functions of aircraft were entirely subordinate to the needs of the battle-fleet.\textsuperscript{10}Whilst the broader substance of Hezlet’s interpretation shall be addressed throughout the course of the subsequent chapters it is important to note here that this subordination came to sow divisions within the ranks of the dual-service FAA during this period. Whereas the naval flyers strongly supported the use of aircraft in a passive spotting/tactical co-ordination role, the RAF personnel favoured the offensive airstrike option. From the developmental perspective, the favouritism afforded to the ‘gunnery lobby’ as Anthony Preston and others have described them resulted in a significant effort on the part of the aircraft manufacturers to produce aeroplanes that were long-duration spotters such as the cumbersome Blackburn Blackburn and Avro Bison.\textsuperscript{11}The importance of this development will be seen as demonstrating not only the Admiralty’s unbroken commitment to surface engagement as the decisive means for achieving victory, but also the extent of the deep divisions which Dual-Control came to exercise. As an anonymous correspondent recorded in \textit{Brassey’s Naval Annual 1925}, spotting was strictly a naval gunnery problem, “and as such should be carried out by naval officers under the sole direction of the Admiralty.”\textsuperscript{12}And at the same time, the provision of observers engineered a fateful change within the service’s preferred operational specifications for future aircraft.

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{AvroBison.png} \includegraphics[width=0.4\textwidth]{BlackburnBlackburn.png}
\caption{Ugly ducklings: the Avro Bison (15: left) and Blackburn Blackburn (16: right) purpose-designed spotters that represented an early example of the modern AWACS concept.}
\end{figure}

\textsuperscript{10}Hezlet, \textit{Aircraft & Seapower}: 122-123.
\textsuperscript{11}Preston, \textit{Aircraft Carriers}: 31; Till, \textit{Airpower and the Royal Navy 1914-1945}: 43; Casey, \textit{Naval Aircraft}: 50.
Before turning to the third evolutionary phase in which the RN’s fixation with observers became a serious flaw, the division between the unhappy service newlyweds requires some necessary social context so as to appreciate the deep-seated forces which gave rise to the professional animosities between them. Beyond the simple fact of inter-service rivalry, the authorship has identified a major cultural divide; the Admiralty’s traditional centuries-old links with the British upper classes contrasting with Lord Trenchard’s belief in merit-based egalitarianism. Under the Dual-Control regime the requirement for dual-service membership became a considerable difficulty for naval pilot-officers especially, as their promotional prospects within the Navy were placed under constant pressure by senior officers who were opposed to ‘the evils of Dual-Control.’ This resulted in a significant pilot shortage as early as 1927 which had been exacerbated by the Admiralty’s refusal to consider recruiting candidates from its lower-deck ranks, another example of the class-conscious attitudes which persisted within the post-1918 Royal Navy. Clearly this situation represented an impediment to the establishment of an elite cadre of pilots and aircrew as the potential adverse impacts upon the organisation’s harmony and morale were considerable. Yet at the same time this should be viewed as a natural consequence of an imposed compromise which had attempted to integrate two entirely different sets of traditions and practices, unlike the situation in Japan and America where both nations continued to retain separate army and naval air forces.

The air-weapon’s evolutionary progress gained considerable momentum with the waning of the 1920s and the commencement of the biplane’s last great phase as the undisputed arbiter.

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of the skies. Within Casey’s third period (1927-34) the employment of a range of new lightweight alloys and uprated engines drove the biplane configuration to the limits of its flying performance with operational speeds of over 200mph becoming commonplace amongst British, American and Japanese carrier-borne fighters. Although the Fleet Air Arm had begun to fall behind its counterparts in numerical terms because of reduced funding and Whitehall’s reluctance to authorise mass production with the Geneva disarmament negotiations still unresolved, the British still kept pace in the developmental race. A series of new designs including the Hawker Nimrod single-seat fighter, the Blackburn Ripon torpedo-bomber and the Fairey III spotter remained the equals of their foreign counterparts with the widespread use of aluminium and tubular steel allowing for a larger external weapon capacity and heightened structural integrity. Within the same period both the Royal Navy and the USN largely discarded several alternative streams of aerial development, most especially in the field of airship design. Several catastrophes on both sides of the Atlantic spelt an unhappy end for the proposed utilisation of large airships in maritime operations, thereby entrenching the aircraft-carrier as the primary platform for naval-air activities. However the respective admiralties remained as yet undecided as to precisely how the carrier would operate within a fleet setting in which the broadsides of the capital-ship still predominated.

Throughout this time both the Royal Navy and the Fleet Air Arm continued to embrace the spotting-reconnaissance platform with the operational structure of the FAA reflecting its ongoing preoccupation. By 1932 the air-arm consisted of twenty-seven carrier-borne flights (6 – 12 aircraft per flight) of which nine flights were equipped with fighters, seven with
torpedo-bombers and eleven being designated as Fleet Spotter-Reconnaissance. And with the introduction of a new aircraft, the two-seater Hawker Osprey, Britain’s naval air-arm began to part ways with the other carrier powers in its attitudes towards the role of the fighter aircraft at sea. Whilst they had closely studied the development of single-seat fighters in foreign navies, the British turned to the multi-role fighter-reconnaissance concept instead. The adoption of this developmental pathway should be regarded as a seminal moment in the history of the Fleet Air Arm because unlike its overseas counterparts, the Admiralty placed an overriding emphasis upon the positive navigational aspects of the two-seater fighter configuration. In 1935, however, the editor of ‘Flight’ prophetically warned that multi-role fighters “would be at a serious disadvantage if pitted against land-based air forces, because of the big loss of performance both in speed and range which the extra crew weight and equipment involves.” By 1936 this definition extended to sea-borne fighters as the other carrier powers had introduced single-seater biplanes that were easily capable of outperforming the modest Osprey in most combat situations, whilst the Japanese in particular were well advanced in their development of monoplane fighter prototypes.


Below (19-21: left to right); the Curtiss F11-C-3(USN), the Nakajima A2N (IJNAF), and the French Morane-Saulnier MS-225 carrier fighters which were introduced during the same period.

Though the introduction of the fighter-reconnaissance concept in the early 1930s has been addressed within a number of the specialist naval-air histories (with similar negative conclusions), considerably less has been said about the biplane’s capacity per se to alter the balance of maritime power. Whilst acknowledging the performance advantages in converting to monoplane types, Oliver Stewart noted that “the biplane was the type better suited to give the slow flying qualities and good control at low speeds which are essential for deck-flying operations.”\(^{20}\) As to the question of inflicting a level of damage upon an opposing force that was sufficient to decisively alter the course of an engagement, the effectiveness of the multi-wing aircraft should be regarded as considerable. Based upon the post-September 1939 combat records of the Fairey Swordfish and its successor, the Fairey Albacore, the third-generation biplanes represented an obvious menace in the torpedo-bombing role as their performance and general characteristics differed little from these later designs.\(^{21}\) There exists no compelling evidence that would necessarily disqualify biplanes as inadequate weapons platforms upon the basis of their configuration alone, although it will be observed that a similar wartime comparison in respect of dive-bombing cannot be undertaken because the monoplane had come to dominate that particular field by 1939. The outcome of a major power naval engagement within the period 1930 – 1934 could well have been determined by


the adroit use of offensive carrier-borne airpower provided that the airstrike option enjoyed sufficient tactical priority to be executed effectively.

Any lingering doubts over the capacity of the air-weapon to dramatically alter the conduct of future naval warfare were finally extinguished with the emergence of the monoplane as the major player in carrier air operations during the fourth and final interwar developmental phase which lasted from 1935 until 1939. The introduction of low wing monoplanes with all-metal monocoque fuselage structures came to revolutionise all forms of military aviation as these advances generally allowed for the installation of more powerful engines, enhanced fuel stowage, aircrew protection and larger offensive and defensive weapons systems than could be carried by their biplane predecessors. Of the aircraft-carrier powers, Japan took the greatest strides in monoplane production prior to 1939; by 1938 the IJN’s carriers were equipped with specialist fighter, dive-bomber and torpedo-bomber designs. Whilst still retaining biplane single-seat fighters, the United States had likewise introduced monoplanes as the principal strike components aboard their carrier assets. Yet as the relevant authorship has recorded, the lack of a major available manufacturing capacity because of the concurrent priority afforded to RAF Bomber Command resulted in only one significant monoplane design being added to the Royal Navy’s inventory throughout this period. The appearance of the Blackburn Skua fighter/dive-bomber in 1937 is especially noteworthy for two reasons. First and foremost the Skua reflected the RN’s ongoing dalliance with the idea of multi-role

aircraft. And secondly, the primary function of Skua was dive-bombing – a mode of attack which the Air Staff had persistently denounced throughout the course of the 1930s.24

This aircraft embodied two critical factors that would severely compromise the Royal Navy’s future capacity to deal with Japan’s carrier spearhead. Though Till has observed that the Swordfish was an inferior design when compared with the American and Japanese monoplane torpedo-bombers of the late 1930s, it nevertheless remained a potent weapon.25 However in the absence of an equivalent dive-bombing capability, the FAA’s strike options lacked the degree of tactical flexibility which both of the aforementioned powers enjoyed. The Skua would only enjoy a brief operational career, being withdrawn from first-line service in late 1941, and less than fifty of these aircraft were deployed aboard the RN’s aircraft-carriers. Yet is was the preparedness of the Admiralty to employ the Skua as the Fleet’s principal fighter aircraft which more than anything else betrayed the blatant foolishness of the British approach in developing their on-board fighter capability. By neglecting the cause of the single-seat fighter-interceptor, the Royal Navy’s senior leadership rendered the Fleet’s air defences as virtually nil when facing a hostile escorted airstrike. As Eric Brown and other post-war experts have noted, neither the Skua nor the Fairey Fulmar, a two-seater fighter-reconnaissance type introduced in August 1941, were capable of matching strides with the likes of Germany’s Messerschmitt 109 and Italy’s Fiat G-50 single-seat fighter-interceptors.26 And if compelled to face Japan’s carriers, the British would be confronted with the menacing spectre of the Mitsubishi Reisen, Allied codename ZEKE – otherwise etched in popular memory as the Zero.

The Fleet Air Arm’s principal fourth-generation carrier-borne aircraft (22-24: left to right); the Blackburn Skua, the Fairey Swordfish and the Gloster Sea-Gladiator. Below; American carrier aircraft introduced from 1936 onwards; (25-27: left to right) the Northrop BT-1 dive-bomber, the Douglas TBD-1 torpedo-bomber and the portly Grumman F3-F fighter; the last biplane fighter to see service with the USN and the forerunner of the famous wartime F4-F Wildcat.

In partnership with its lack of modern single-seat interceptors, the Fleet Air Arm’s overall carrier-borne capacity placed the RN in a decidedly inferior position when compared with Japan and the United States. In September 1939 the FAA could field a meagre 228 aircraft as compared with over 500 being deployed by the Japanese and Americans individually, an enormous detriment in the event of a full-scale naval confrontation with the IJN. 27 As will become apparent within the subsequent chapters, however, size on its own represented no guarantee for wartime success unless mixed with skilful airmanship and clever tactical application. In relation to the former, the available evidence points to the FAA’s prowess as a highly-skilled cadre possessing exceptional levels of competence in all forms of operations including the extra demands of night flying. 28 This speaks volumes for the quality of the organisation’s personnel who had been able to overcome their differing service prejudices.

27 “Vigilant”, ‘Foreign Fleet Air Arms’, *BSY* 1939: 181; Bennett, *Naval Battles of World War Two*: 54-55.
insufficient funding and scarce maintenance assets to exert the maximum performance from
the aircraft which they flew. And when deployed under the command of a fighting admiral
who understood how to best exploit the partnership between carrier-borne airpower and
surface gunnery, the Fleet Air Arm became the critical British player in a fleet or squadron-
scale engagement.\textsuperscript{29} However this advantage stood to be thoroughly nullified if the RN
encountered an opponent equipped with a multi-carrier spearhead that could decisively
prevail in battle without the necessity for the subsequent sought-after duel between the
opposing battlelines.

It was as well for the British that their competitors were equally intent upon preserving the
sanctity of the capital-ship’s paramount role at sea for the duration of the 1930s as the Fleet’s
aircraft-carrier resources were in a parlous state. Despite fielding a similar number of carriers
to the Americans and the Japanese, the quality of the RN’s vessels left much to be desired. As
detailed within the previous chapter at least half of the British carrier force could not compete
in a contemporary combat setting, and only the \textit{Ark Royal} enjoyed all the benefits of modern
carrier design. At the same time the Japanese were in the process of adding four fast carriers
to their complement whilst the United States Navy had commissioned two further fleet
carriers subsequent to the expiry of the Washington Treaty in 1936. The British found
themselves considerably behind the competition when it came to aircraft stowage aboard, as
they had not adopted permanent ‘deck parks’ for their aeroplanes as had the other aircraft-
carrier powers, and they had only recently stemmed an alarming rate of training fatalities by
the employment of effective arrestor gear for the safe retrieval of aircraft at sea.\textsuperscript{30} Given these

\textsuperscript{29} Kennedy, \textit{The Rise and Fall of British Naval Mastery}: 288; “Observer”, ‘Expansion of Naval Air Forces’,
\textit{BSY 1938}: 196.

\textsuperscript{30} “Phoenix”, ‘The Fleet Air Arm’ in C.N. Robinson & H.M. Ross (eds.) \textit{Brassey’s Naval Annual 1931 (BSY
various encumbrances, the Royal Navy’s carrier air arm could only function effectively in wartime if the tactical means for its employment did not impose an inordinate strain upon its limited striking and aerial interception capabilities which were best suited for combating hostile fleets that were themselves bereft of an aircraft-carrier presence.

Above; three of the large fleet carriers commissioned in the wake of the expiry of the Washington Treaty in 1936 (28-30: left to right) HMS Ark Royal (with a flight of Swordfish overhead), USS Yorktown and IJN Hiryu. Below; the converted WW1 battle-cruisers (31-33: left to right) HMS Courageous, HMS Furious and HMS Glorious.

A ‘balanced force’: the war-fighting tactics of the post-Jutland Fleet

From Salamis to Jutland, all of the great naval engagements had shared one common aspect – that combat on site could only be predicated upon combat on sight. Over the course of three millennia the maximum firing range which separated combatant fleets had expanded to little more than ten miles. Whereas the capital-ships that duelled at Jutland on 31 May 1916 possessed artillery which could strike the enemy at ranges up to twenty miles, their targeting capabilities were entirely governed by the visual limits of on-board sighting apparatus. Given these circumstances, both protagonists were directly exposed to the risk of severe damage

and/or destruction being visited upon their respective formations at such narrow intervening distances. However with the advent of the offensive air-weapon, the opportunity existed for this exposure to be substantially neutered. And this quantum leap in the conduct of naval warfare likewise gifted the opportunity for the equality, indeed the superiority, of forces which would have been otherwise deemed an inadequate match within a purely surface-orientated environment. For the Royal Navy in particular, bearing in mind the global nature of its responsibilities and the deleterious effects of various interwar maladies upon its fighting prowess, the aircraft-carrier offered a road to Damascus. Outwardly ‘superior’ opponents could be sufficiently neutralised through crippling carrier-borne airstrikes before the accompanying (and often slower) British capital-ships sought to inflict the killer blow upon a battered and disorganised enemy fleet or squadron.

An analysis of the incorporation of the air-weapon into the Royal Navy’s strictures for fighting the enemy as of September 1939 is greatly enhanced by utilising the Admiralty’s published *Fighting Instructions 1939* (C.B.04027) as a template. Derived from the prevailing Navy War Manual QU5394, these instructions set out the conduct of naval activities as falling within one of two categories, these being ‘Fleet Actions’ and ‘Minor Operations’. The concept of the fleet action revolved around a major engagement between the two principal combatant battlefleets on a similar basis to that experienced at Jutland, whereas all other forms of engagement were classified under the latter title. Yet the conduct of the naval war for which these instructions were prepared would assume a far broader tactical basis than had been contemplated within the Admiralty’s pre-war thinking. By the conclusion of hostilities in August 1945 the plethora of operational methods would range from the

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inspired to the bizarre; from massed airstrikes to suicide sorties undertaken by individual personnel who were encased within converted torpedoes. Bearing this fact in mind, the reader will appreciate the sheer complexity of the Royal Navy’s efforts to maintain Britain’s naval supremacy in such a fluid operational environment. For the likelihood of successfully maintaining control over the Empire’s vast network of maritime communications no longer resided in the bosom of Winston Churchill’s “supreme sea battle”, but lay instead within the combination of minimalist force dispositions, effective inter-service cooperation and superior battlefield leadership.32

Whereas Jutland ultimately represented the Gotterdammerung for surface naval combat involving large numbers of capital-ships, the fundamental tactical principles which governed the Royal Navy’s actions upon that occasion remained unchanged throughout the following two decades. In charting the sequence of an engagement, the Fighting Instructions emphasised the division of battle into three distinct phases – approach, contact and action.33 The principal objectives of the two opening phases were to locate, shadow and weaken the enemy force, depriving it of air support and screening forces before the Fleet’s battleships would directly engage their opposite numbers in the action phase. Within this paradigm the Fleet Air Arm would sight and shadow the enemy, establish air superiority by sinking any opposing aircraft-carriers, wound the opposing battlefleet and conduct real-time orbital spotting for its own battleships.34 In the event of a smaller-scale confrontation, that is, anything less than the commitment of the bulk of the respective combatants’ battlefleets,

these fighting principles continued to apply. And in strategic circumstances whereby the Admiralty would be compelled to disperse its assets, the deployment of a ‘balanced force’ became the decisive factor – especially within a multi-dimensional combat environment. As defined within the Fighting Instructions, a balanced force consisted of “capital-ships, cruisers, destroyers and perhaps an aircraft-carrier, irrespective of the number of each type.” What is particularly noteworthy about the wording of this definition was the apparent preparedness of the Admiralty as late as September 1939 to still regard carriers as optional extras within a modern combat setting.

Beyond the major assembly of warships upon either a regional command or Main-Fleet scale, the concept of the balanced force came to prevail over the disposition of squadron-scale battle units; this being the predominant means by which the Royal Navy would conduct operations with its big ships throughout the course of the Second World War. Malcolm Murfett’s assessment of the so-called ‘Backhouse-Drax’ strategy’s potential effectiveness as a means of implementing the Singapore strategy provides a portrait of how such a force should be properly balanced in its material composition so as to allow for maximum mobility and firepower across a range of diverse tactical circumstances. Yet in continued deference to the past, the Admiralty’s definition of balance remained in the realms of the direct surface engagement as the paramount method by which the opponent would be finally cornered and destroyed. This belief was emphasised in 1938 by the correspondent “Securus” who stated that control of sea communications “is exercised by cruisers which sweep the seas clear of

36 Murfett, ‘Reflections on an Enduring Theme; The Singapore Strategy at Sixty”: 16-17 *Note: the general composition of a battle-squadron, as detailed by Murfett and other relevant histories, included 1-2 capital ships, 1 aircraft-carrier, 4-6 cruisers and approximately a dozen destroyers.
enemy cruisers and commerce raiders…covered by the actions of battleships”. Therefore the role of the Fleet Air Arm would remain subordinate to the needs of the surface forces as Hezlet and others have suggested, however the notion of subordination should not necessarily convey a sense of implied British inferiority as a natural consequence of this situation. Such adjudication rests within the methods by which carrier-borne airpower would be applied, and the disposition of the opponents that it would be applied against.

For each of the Great Power navies the employment of the air-weapon in an observing role had become widely accepted by the conclusion of the Great War, and this trend continued to enjoy strong support throughout the interwar period. This passive employment of aircraft included fleet reconnaissance, shadowing and spotting duties with the correspondent “Zetes” noting as of 1936 that reconnaissance remained the principal task for the FAA to undertake during combat. Regardless of whether the action in question was deemed to be a fleet or minor-scale operation, there existed little difference between the available resources of the three major aircraft-carrier nations whilst they, along with the Germans and Italians, could call on support from catapult-launched seaplanes as well as long-range flying boats. Extensive reconnaissance and shadowing by aircraft and submarines served to greatly enhance the tactical manœuvreing of a fleet or squadron in order to secure the most advantageous approach for a forthcoming engagement. As for the use of spotters during subsequent gunnery exchanges – the primary function of the air-weapon in the minds of the powerful gunnery lobby (which Hezlet has described as the ‘Go-it-Alone’ school) – the

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38 Hezlet, Aircraft & Seapower: 123.
advantages for a battle-squadron were significant. Co-ordination of gunfire and increased accuracy allowed for ranges to be extended beyond the limits of range-finding optics aboard the capital-ship and cruisers. Therefore the paramount role of the capital-ship would continue to be sustained if the bulk of the participating aircraft were earmarked for observation and spotting duties as their primary functions.\(^{41}\)

Despite the presence of the newly-introduced Skua, albeit in pathetically small numbers, the FAA remained committed to torpedo-bombing as its foremost airstrike option at the outbreak of hostilities against Germany. This form of attack was ideally suited to the prevailing belief that aircraft could at least slow down a faster adversary, though the battleship remained an unsinkable aerial target in the minds of many within the Great Power navies. Whereas their armoured bulk provided reasonable shielding against bomb hits, the capital-ships remained at their most vulnerable when exposed to torpedo strikes because of the torpedo’s capacity to directly penetrate vital areas such as engine-rooms and associated propulsion spaces.\(^{42}\) And until such time as radar-controlled, rapid-fire anti-aircraft weapons were readily available, surface warships would continue to lack the proper means to generate an effective anti-aircraft barrage. However the lack of a more extensive dive-bombing capability deprived the Fleet Air Arm of the opportunity to conduct two-dimensional sorties which would have likely inflicted even greater damage upon the enemy force as a whole. And worse still, if the opponent possessed carrier-borne or land-based fighter cover, the defending fighters would concentrate all of their efforts upon shooting down the dawdling torpedo planes instead of

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being presented with the conundrum of combating separate attacking formations. At Midway on 4 June 1942 the IJN experienced this dilemma firsthand as the Japanese fighters massacred the American torpedo-bombers, only to leave their parent carriers totally unprotected against a devastating strike by the enemy’s dive-bombers.

Unfortunately for the FAA’s proposed employment of fighters in either offensive or defensive roles, the material and tactical state of British carrier-borne fighter aircraft in September 1939 could not have been more degraded. In 1925, Major P.L. Holmes had recorded that “under modern conditions, efficient Fleet Fighter Flights are one of the first essentials in the equipment of a fleet for war.” As explored previously, the Admiralty’s growing infatuation with the concept of multi-role aircraft during the course of the 1930s increasingly restricted the utilisation of single-seater interceptors. For the Skua multi-role monoplanes, their most effective fighter deployment as defensive bomber-destroyers assumed a secondary tactical priority to employment in long-range offensive fighter sweeps. Much of the responsibility for this situation resided within the Admiralty’s senior ranks as many officers including Admiral Sir Ernle Chatfield, First Sea Lord (1933-1938), believed that anti-aircraft fire on its own to be a far more adequate means of close-in protection than interceptors, as “Volage” explained in Brassey’s 1936. “The general inference is that while aircraft do constitute a practical method of attacking surface warships, they only become a serious menace when their numbers, range and striking power exceed some arbitrary figure in

relation to the defensive equipment of these ships." Critically for the Royal Navy, the serious menace in this instance could be none other than its own command as the FAA’s fighter-arm had become virtually combat-inefficient within any conceivable battle scenario where the opponent enjoyed land-based or carrier-borne fighter support.

Existing 1939 FAA fighter types stood very little chance of competing with modern European Axis fighters such as the German Messerschmitt 109 (34: left) and the Italian Fiat G-50 (35: right).

Whereas the Royal Navy’s aircraft-carriers represented the operational trump-card for the service over its carrier-less European opponents, for much of the interwar period their physical location in either a fleet or squadron tactical setting rendered them extremely vulnerable to attack from the very vessels which they were supposed to target. As “Observer” commented in Brassey’s 1938, the Royal Navy’s senior tacticians were still divided over how the Fleet’s carriers should be properly incorporated into the wider force setting; the competing merits of close protection versus an escorted ‘stand-off’ position some 30-40 miles from the battleline. Within the Fighting Instructions, however, there at last emerged the acknowledgement that the Fleet’s aircraft-carriers must operate in a detached fashion once combat was joined, though they were expected to remain as part of the battle-line when cruising. The critical future consequence of the Admiralty’s pre-existing preparedness to permit the aircraft-carrier to remain in the proximity of a surface engagement, and indeed

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46 “Volage”, ‘British Naval Air Progress’, BSY 1936: 108. *Based upon the contents of their respective articles, it is clear that the likes of “Securus”, “Volage” and other anonymous correspondents were serving RN officers.

(during the 1920s) become an active participant, will be found in the designs of the four *Illustrious*-class carriers which had been authorised for construction in 1936. Once operational in wartime, these ships sported armoured flight-decks and interiors – a concept that was intended to allow the vessels to withstand bombs *and* surface gunfire, but at the ultimate cost of a greatly reduced aircraft complement. This outcome meant that a single carrier within a battle-squadron faced a far tougher task if fielded against a similarly-equipped Japanese force during the course of operations in the Far East.\(^\text{48}\)

Given the comparatively small size of its aircraft-carrier complements, the RN required the presence of strong land-based air support to supplement its activities wherever possible, especially in the execution of long range anti-submarine and convoy-support missions. This had become a divisive issue between the Admiralty and the Air Staff in the early 1920s when the Balfour Committee resolved to place the control of all land-based naval air support in the hands of the RAF.\(^\text{49}\) By September 1939 RAF Coastal Command (as it was now known) found itself in a particularly sorry state. With the Air Staff immersed in their pursuit of a strategic bombing deterrent, Coastal Command’s resources amounted to a handful of flying-boat squadrons and some inadequate light bomber units which were equipped with converted trainers such as the Avro Anson. Despite the excellence of the Short Sunderland flying-boat as a convoy-defence and anti-submarine platform, too few were in service to meet the Admiralty’s needs. Until the RAF could be persuaded to assign fighters and some of its more capable medium and heavy bombers for coastal service, the Royal Navy lacked the capacity to provide effective protection measures beyond British coastal waters, leaving the majority


of convoys bereft of such assistance for the balance of their dangerous passages.\textsuperscript{50} This resulted in the RN having little option but to assign elements of the Fleet’s aircraft-carrier assets for the performance of these tasks, thereby exposing the larger carriers to the increased risk of submarine attack in a convoy-protection setting.

\begin{center}
\textbf{RAF Coastal Command stalwarts; the Short Sunderland (36: left) and the short-ranging Avro Anson (37: right).}
\end{center}

In spite of its severe drawbacks in the field of fighter interception the Fleet Air Arm did provide the necessary striking advantages that would be crucial in dealing with the faster surface forces of the Royal Navy’s European foes. As the American naval academic Herbert Rosinski surmised in his 1941 essay ‘Mahan and the Present War’, “minor” sea-powers such as Germany and Italy had rejected Admiral Alfred Mahan’s long-standing concept of the decisive battle.\textsuperscript{51} The Japanese, however, remained committed to the waging of the \textit{Kantai Kessen} (decisive battle) to the west of the Marshall Islands as the great climax of a naval war against the United States, especially in the event of an American fleet-scale incursion as theorised by Hector C. Bywater in 1921. For reasons which are substantively addressed whilst exploring the rise of the Imperial Japanese Navy and its air-arm in the next chapter, historians such as John Ferris and Paul Kennedy have correctly adjudged the IJN to be superior to the Royal Navy in many respects as the 1930s progressed. By 1939, however, the Japanese were manifestly ill-equipped to supplant Britain as the supreme global naval


\textsuperscript{51} H. Rosinski, ‘Mahan and the Present War’, \textit{BSY} 1941: 203.
power. At present the reader’s attention is directed towards the two most immediate threats to Britain’s maritime position. Though the Kriegsmarine and the Regia Marina were well shy of the combined strength wielded by the RN and France’s Marine Nationale, both Axis navies possessed the material and tactical potential to cause major headaches for their Allied opponents.

Despite being the smallest of the Axis navies, the Kriegsmarine posed by far the widest geographical challenge to Britain’s global naval position. In the event of war the Germans could undertake operations from the Barents Sea to the Pacific through their employment of a four-pronged offensive capability that was perfectly tailored to the needs of a guerre de course. This course of action included the utilisation of surface warships, armed merchant-raiders, U-Boats and land-based aircraft. The Kriegsmarine's big ships exercised a range of significant advantages over their older British counterparts, possessing superior speed, range and fire-control apparatus. In the case of Germany's three pocket-battleships, a massive cruising range of 26,000km allowed for these vessels to operate throughout the Indian Ocean with the aid of pre-positioned tankers and supply ships. Armed merchant-raiders were another source of discomfort for the British Empire as a whole given their ability to undertake raiding and mining sorties as far east as the Central Pacific and astride Australia's coastlines. German U-Boats also enjoyed the benefit of limited British interwar preparations for a submarine-based offensive against convoy traffic, a factor which has been highlighted

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53 ‘Comparison of the Strength of Great Britain with that of Certain Other Nations as at January 1938’, CAB/24/273-0021: 3-4; H. Rosinsky, ‘German Theories of Sea Warfare’, *BSY 1940*: 97-100; Bennett, *Naval Battles of World War Two*: 68.
within the majority of the histories. And if employed in the anti-shipping role the Luftwaffe's range of modern medium-bomber designs was well suited for carrying out attacks with bombs, mines and aerial torpedoes. Should all the limbs of Germany's offensive sea-borne capability be competently co-ordinated, the Royal Navy would be hard-pressed to maintain the security of Britain's vulnerable maritime lifelines.

Fortunately for the British the Kriegsmarine suffered from a series of deep-seated political and administrative maladies which effectively prevented the Germans from properly exploiting their advantages. Since Hitler's accession to full executive and titular power in August 1934, the nature of relations between the various branches of the Wehrmacht had become increasingly dominated by personal friction and intrigue at the highest levels. As head of the Reich's economic Four Year Plan, the Luftwaffe and much else besides, Hermann Goering refused to countenance any naval authority over the Luftwaffe. Goering steadfastly opposed Grand-Admiral Eric Raeder's advocacy for an independent naval air-arm and successfully lobbied Hitler to delay and eventually postpone the completion of the newly-launched aircraft-carrier Graf Zeppelin. This course of action robbed the Kriegsmarine of the enormous advantage of possessing a carrier which could support raiding sorties by surface warships within the North Atlantic. Hitler's preoccupation with waging a future series of land campaigns in Europe also impacted upon Germany's naval fortunes on the factory floor. In spite of the Fuhrer's grandiose Plan Z, a scheme to eventually eclipse the Royal


Navy's superiority through the construction of a greatly-enlarged battlefleet, the Germans entered hostilities with only a fraction of the resources available to the RN. Until such time as U-Boat production received official priority within an economy that had been placed on a full war-footing, the Kriegsmarine could never exercise its full potential, though it did possess sufficient initial means to inflict heavy losses upon British merchant commerce.

One of the Kriegsmarine's chief convoy-destroyers; the pocket-battleship Admiral Graf Spee (left) and the ill-fated aircraft-carrier Graf Zeppelin (right) immediately following her launch in December 1938.

In the absence of a large-scale German fleet presence, the Royal Navy would be compelled to prevent sorties by individual or paired surface warships through their interception within the North Sea before they could 'break out' into the North Atlantic shipping lanes. With the provision of adequate reconnaissance from RAF Coastal Command, the composition of an interdicting battle-squadron despatched from Scapa Flow could be tailored to achieve the destruction of the enemy ships with the minimal apportionment of available resources. In the Mediterranean, however, the Admiralty confronted a more traditional form of maritime adversary. Under Mussolini's patronage the Regia Marina had emerged as a formidable fighting force equipped with fast and well-armed modern warships. Its latest Littorio-class battleships which eventually reached service in 1940 were far superior in most respects to their British counterparts although they lacked radar equipment. The Italians also possessed a large submarine arm, and the elite Decima Flottiglia MAS naval special-forces would prove

to be deadly efficient when tasked with attacking surface targets within heavily-defended harbours.\textsuperscript{57} For air support the Regia Aeronautica fielded a range of bombers that were competent performers in an anti-shipping role. Operating from airfields in southern Italy, Sicily and North Africa, Italian aircraft were capable of interdicting both hostile merchant traffic and offensive operations undertaken by the British Mediterranean Fleet in the vicinity of Malta and Sicily.\textsuperscript{58} To repel any incursion by the French Marine Nationale from the west, naval and air forces were concentrated at La Spezia and Sardinia.

In a similar fashion to the Luftwaffe, the Regia Aeronautica's strike elements were liable for assignment elsewhere in support of ground forces, and its dedicated maritime assets were largely confined to reconnaissance aircraft. Italian aeroplanes were also plagued by a lack of high-performance engines which often hindered their combat effectiveness.\textsuperscript{59} However it was through the combination of geography and naval strategy that the Regia Marina came to suffer its most critical weakness. Both Mussolini and the Italian Naval Staff had refused to sanction the construction of an aircraft-carrier capability because they believed that the ready accessibility of airfields would adequately provide for the demands of fleet air support. And by 1938 the Italians were pursuing an overall operational strategy known as \textit{Plan B}, a strictly defensive outlook which emphasised the existence of a 'fleet-in-being' at the expense of a more aggressive posture which had been discarded. Instead of utilising its considerable advantage in speed and manoeuvrability as an offensive tool, the Regia Marina's principal task became the defensive shield for Italian convoys plying between metropolitan ports,\textsuperscript{58}


\textsuperscript{58} W. Baumbach, \textit{Broken Swastika: The Defeat of the Luftwaffe}: 132.

Sicily and North Africa. By permitting its warships to operate in this defensive setting the Italian Naval Staff were in effect providing the opportunity for the Royal Navy to assume the initiative as the aggressor in the case of a fleet or squadron-scale engagement. And in the absence of Italian fighter support, the Fleet Air Arm's torpedo-bombers were positioned to cripple the faster Italian warships, placing them under a subsequent hail of surface gunfire.

The refurbished Italian battleship Conte di Cavour (40: left) and a restored ‘Maiale’ (Pig) (41: right), a submersible vehicle which was utilised with much success by the Regia Marina’s elite MAS special-forces.

The British would not find themselves alone in waging the impending European war at sea. Generous support in the form of cruisers, destroyers and other light craft was to be proffered by the Dominions, and the Royal Navy also enjoyed the companionship of France’s not-inconsiderable Marine Nationale. Spearhead by two brand new Dunkerque-class battle-cruisers, the French possessed powerful cruiser and destroyer arms, though the carrier Bearn proved to be too slow for offensive naval-air operations. Aside from augmenting the RN’s strength in the Atlantic, the French Mediterranean Fleet represented a powerful counterweight to the Regia Marina. A sizeable volume of historical opinion has concluded that the presence of French naval forces in the Western Mediterranean not only secured an important buffer against Italian incursions towards the vital British naval base at Gibraltar but also provided the British with the opportunity to rapidly despatch some of their assets in the Eastern Mediterranean to Singapore via Suez. Unfortunately for the Marine Nationale, the

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high quality of its surface forces and submarines could not disguise the largely substandard quality of its land-based air support. The French aero industry had descended into chaos during the course of 1937 as a consequence of nationalisation, with strikes and woeful productivity delaying the service debuts of the bulk of the Armée de Air’s most potent fighter and bomber designs.62 And with two new carriers yet to be launched, the French were wholly committed to surface-to-surface operations unless their warships were absorbed within British battle-squadrons.

![The splendid French battle-cruiser Dunkerque (42: left), and the converted aircraft-carrier Bearn (43: right).](image)

Alfred Mahan believed that the most effective means through which a paramount naval power would seize the command of the sea in wartime lay with its possession of what has become known in the nuclear age as a first-strike capability. In August 1914 the Royal Navy’s Grand Fleet possessed this advantage upon both quantitative and qualitative bases and was ideally credentialed to force the early decisive engagement which Mahan had advocated, crushing Germany’s High Seas Fleet in one fell swoop.63 In September 1939 the RN’s battlefleet no longer exercised this capacity. Even with the assistance of the Marine Nationale, the material limitations of the British battline would seriously impede any attempt to wage a pre-emptive surface fleet action against either the Germans or the Italians in circumstances where the enemy would likely possess overwhelming land-based air superiority. The Fleet Air Arm, however, conducted a series of exercises throughout the

1920s and 1930s which had instead targeted airstrikes against warships at their roadsteads. And as the results obtained from a simulated RN carrier sortie at Singapore in February 1937 amply demonstrated, a surprise attack with concentrated carrier airpower at the outset of hostilities could deliver an annihilating blow against any hostile fleet.\textsuperscript{64} Failing this the Admiralty would be compelled to resort to Mahan’s alternate dictum, namely the combination of offensive blockade and attrition, in which the carrier air-weapon retained its secondary status within fleet and squadron-scale operational tactics but remained an unmatched force when deployed against the RN’s European opponents.

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With the war in Europe approaching its ninth month, the First Lord of the Admiralty, Winston Churchill, outlined his concept of British naval supremacy to the House of Commons on 11 April 1940:

When we speak of command of the seas, it does not mean command of every part of the sea at the same moment, or at every moment. It only means that we can make our will prevail ultimately in any part of the seas which may be selected for operations, and thus indirectly make our will prevail in every part of the sea.\textsuperscript{65}

\textsuperscript{64} Thursfield, ‘British Naval Air Progress’, \textit{BSY} 1938: 145-146, Till, \textit{Airpower and the Royal Navy 1914-1945}: 142-143.
Churchill’s words echoed the reality which every Great Power fleet had been forced to confront in the aftermath of the Washington naval limitations regime. Until such time as their respective industrial apparatus became fully mobilised on a war footing, the major navies could ill-afford to wage a profligate war at sea. And as the opening chapters of the thesis have illustrated in detail, the Royal Navy especially could only retain its paramount global status by utilising cunning execution instead of brute force. As the reader shall come to observe, the concept of the ‘fleet-in-being’ would be extensively employed, particularly to the east of Suez as had been increasingly advocated since 1935.\(^6^6\) Given the degraded power of Britain’s battleline, the Admiralty possessed little alternative but to rely upon the Fleet Air Arm as its pre-emptive battlefield strike weapon. Yet this need did not portray an interwar commitment towards airpower as the apex method for achieving operational dominance, but instead reflected a means through which the inadequacies of the RN’s capital-ships could be sufficiently minimised in opposed surface combat.

Until the advent of the carrier-borne monoplane in the mid-1930s the FAA had succeeded in maintaining touch with the Americans and Japanese in the escalating evolution of the air-weapon at sea. However the Admiralty had failed to appreciate the necessity for obtaining air superiority above the Fleet through the provision of adequate single-seater fighter cover whereas the flexibility of its offensive aerial strength remained limited in the absence of a dedicated dive-bombing capability aboard the majority of its aircraft-carriers. In the event of war against Germany and Italy these weaknesses were manageable, if only just, because neither opponent possessed the consistency of available air support that would be required to permanently neutralise the influence of the Royal Navy in either the Atlantic or the Mediterranean. Against Japan, a nation which over the course of two decades had come to

develop an extremely powerful carrier-borne and land-based naval air arm, a far grimmer outlook lay in store. In the event of a showdown with an opponent that commanded such a formidable assembly of aerial firepower, the Royal Navy’s limitations as a contemporary fighting force stood to be ruthlessly exposed in a manner without precedent in the service’s lengthy and illustrious existence.
Chapter Three

Niitaka Yama Nobore: the Imperial Japanese Navy, 1920-1941

As his charges proceeded along their stealthy eastward course through the murk and squalls of the bleak North Pacific on 1 December 1941 the commander of Japan's aircraft-carrier spearhead received a flash coded signal from Imperial General Headquarters (IGHQ) in Tokyo. Niitaka Yama Nobore (‘Climb Mount Niitaka’) instructed Vice-Admiral Nagumo Chuichi to proceed with a surprise aerial attack on the morning of Sunday 7 December against the United States Pacific Fleet at Pearl Harbour. Meanwhile within a myriad of roadsteads across South-East Asia and the Central Pacific, bulging troop transports were weighing anchor, en-route to a series of invasion objectives stretching from Wake Island to the Malayan peninsula; massed bomber and fighter formations squatted ready upon the aprons of Formosan and southern Indo-Chinese airfields. An acrimonious and at times violent relationship with the Imperial Japanese Army, frequent internal factionalism and the material restrictions imposed by the need to preserve its existing stocks of fuel oil and aviation gasoline had not succeeded in dissuading the IJN from seeking a truly remarkable triumph. And whilst Nagumo's carriers steamed towards the onset of their subsequent two-ocean rampage, the fleet’s biggest battleships continued to swing serenely upon their moorings within the Inland Sea. Given the geographic immensity of an initial assault which stretched from Hawaii to Singapore, and the daunting necessity for the precise coordination of a multitude of separate operations over such vast distances, Japan's aero-amphibious blitzkrieg staked a deserved claim to be regarded as the single greatest offensive endeavour in recorded military history.
Through substantiating the contention that the Royal Navy surrendered its command of the sea in early April 1942 because Britain almost wholly lacked the operational means to contend with Japanese naval airpower, the present work presents an interpretation which remains largely invisible within the post-war historiography. Whereas the histories have generally cast the shadow of Nagumo’s Kido Butai as a temporary though alarming distraction, none have ventured so far as to associate the final demise of British naval supremacy with the innate helplessness of the RN when it steamed into the new arena of opposed carrier warfare. Understanding how and why Japan’s naval-air advocates were able to contrive such an imposing carrier-borne and land-based aerial capability does not rest upon a base appreciation of command-and-control, strategy, tactics and operational resources alone. By exploring these aspects individually, the wider montage reveals a unique coalescence of technology, pragmatism, patriotic pseudo-mysticism and militarist geopolitics which guided the evolution of these formidable instruments within a fundamentally unstable governmental environment. And it is through the recollections of the IJN’s senior surviving participants that the Western observer comes to absorb the complexity of Japanese naval thinking and practice; the wholehearted desire to pursue the offensive at all costs with almost no strategic, tactical or material margin for error.¹ Yet in spite of these inherent flaws, Japan’s premier strike weapons wielded a level of destructive power that could only be overcome by an equivalent commitment to the aeroplane at sea within the United States Navy.

¹ *note: with reference to the outline of Japanese source material within the Introduction, it should be emphasised that post-war interrogations of Japanese military participants by officers of the United States Strategic Bombing Survey (USSBS) were undertaken to obtain firsthand technical information regarding the wartime configuration and operation of the Imperial Japanese Navy. In all footnote references to USSBS material, Japanese participants are referred to by first name first, family name second (as formatted within the documentation itself).
(1) Boundaries of the Japanese Empire in Asia, 1942.
Command and Control

On 7 December 1941 the command and control of the Imperial Japanese Navy resided in a multi-level structure under the supreme leadership of Emperor Hirohito. As the Generalissimo of Japan’s armed forces, the Emperor exercised his authority through a Supreme War Council, known from 1937 onwards as the Imperial General Headquarters - Government Liaison Conference. This body in turn referred to the Imperial General Headquarters which represented the interests of both services, and counted amongst its membership the Army and Navy Chiefs of General Staff, the War Minister and the Navy Minister. Subordinate to the IGHQ were the Naval General Staff and the Navy Department; the former being responsible for all operational tasks whilst the latter’s remit was largely restricted to administrative functions. Subordinate to the Naval General Staff, the Combined Fleet served as the umbrella strategic and tactical instrument for six major fleet commands including the carrier-borned First Air Fleet and the land-based Eleventh Air Fleet. Like their British and American counterparts, both the Naval General Staff and the Navy Department fell under the delegated authority of the Navy Minister, whose presence conveyed the outward impression of the IJN being subject to the dictates of cabinet-government and the Japanese Diet (parliament) as had remained the case in Britain and the United States. Unfortunately for the cause of government oversight as understood within the Western democracies, the 1889 Meiji Constitution failed to provide a credible platform for this to occur.

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In describing the considerable range of guidance and material assistance which the Royal Navy had provided to the IJN since the latter’s formation in 1869, Arthur Marder has noted that this influence did not extend to concepts of civil-military relations. Although the Meiji Constitution provided for a Western-style parliamentary system, its framework had instead reinforced the authority of the traditional warlord military factions by placing the armed services under the direct authority of the sovereign as legislated under Articles XI and XII of the constitution. This enabled the Imperial Japanese Army to assume the dominant role in national politics and it was only by means of imperial decree that an independent Naval General Staff became established in 1903. Pursuant to these constitutional arrangements, civilian cabinet-government exercised no binding authority over the military, with the War and Navy Ministers being appointed from the ranks of serving officers. In essence the conventions and practices of Japanese government and administration were based upon the Prussian model as the IJA had chosen the Prussian state as its exemplar throughout the post-1850s reconstruction of the nation’s civil and military institutions. Whereas Western histories have generally portrayed the emergence of ultra-nationalist sentiment in the early 1930s as

Two of Japan’s leading service politicians; General Tojo Hideki (left) and Admiral Yonai Mitsumasa (right). Tojo served as War Minister (July 1940 – October 1941) before becoming Japan’s first wartime Prime Minister, whilst Yonai served as Navy Minister (1937 – 1939) and Prime Minister (January 1940 – June 1940).

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4 Marder, *Strategic Illusions, 1936-1941*: 4; Ienaga, *Japan’s Last War*: 34.
the catalyst for Japan becoming a militarist state, the wherewithal for the dominance of the Army in national politics had been established over several decades with the enactment of the ‘Publication Law’ in 1893 paving the way for the subsequent legislative erosion of civil rights and liberties.5

Whereas it may be correct to suppose that the absence of executive government control over the armed services would benefit the Japanese Navy’s evolution as a first-line maritime power in certain respects, direct military subordination to the Emperor proved to be equally detrimental. With Hirohito consistently displaying a marked reluctance to impose his views upon the ‘advisory’ Supreme War Council/Liaison Conference, policy debates within this body were waged along service lines. Thanks to its higher standing in the political arena because of growing public support from ultra-nationalist organisations during the late 1920s, the Japanese Army usually got its way in the formulation of domestic public policy.6 Though the IJN as a fleet undoubtedly benefited from the continuation of its various ‘Replenishment Plans’ in the wake of the establishment of the Washington naval disarmament regime, the command structure under which it operated revealed a number of glaring flaws. Considering itself to be the sole guardian of all military and naval planning, the IGHQ refused to share its formulations with the civilian representatives within the Liaison Conference while concurrently refusing any advice or assistance in the field of naval strategy from the Combined Fleet’s senior commanders. And though the Navy Department’s influence had been supposedly negated through the creation of the Navy General Staff, Chihaya Masataka described the Department’s Military Affairs Bureau as the “centre of propulsion” for the

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6 Interrogation Nav. 38: Captain Tashikazu Ohmae 22.10.1945, USSBS No. 160: 177; Interrogation Nav. 13: Captain Watanable Yasuji 15.10.45, USSBS No. 96: 70.
Navy as a whole because of its overarching jurisdiction in the vital areas of procurement, supply and day-to-day fleet administration.\(^7\)

The absence of an effective third-party buffer between the respective Japanese armed services only served to exacerbate an increasingly volatile relationship between them as the 1930s progressed. Whereas disputes between the British services were usually confined to a slew of memoranda and bouts of tut-tutting within the echelons of higher command, the Japanese experience bore a greater resemblance to the settling of underworld scores in New York and Chicago. Violence and intimidation were often employed by young radical Army and Navy officers towards their conservative superiors, while a number of politicians were assassinated for 'crimes' such as supporting the Washington-London accords or seeking to pursue friendly relations with the Western democracies. Direct threats to the personal safety of Admirals Yamamoto (CIC Combined Fleet) and Yonai (Navy Minister) arose through the opposition of both officers to Japan's entry into the 1940 Tripartite Pact with Germany and Italy.\(^8\) Germany's naval attaché Vice-Admiral Paul Weneker noted in his post-war interrogation that planning cooperation between the IJA and IJN at the senior levels was only undertaken when absolutely necessary, whilst endemic corruption existed at many administrative levels within the IGHQ command structure. And above the everyday hurly-burly of inter-service relations lay a fundamental schism in strategic thinking between both institutions; the Army's commitment to the pursuit of imperial expansion on the North Asian mainland being at odds with the Navy's plans for the seizure of critical resources in South-East Asia. The major


\(^8\) '47th Liaison Conference, August 16, 1941' in Ike (ed.), *Japan’s Decision for War*: 121-123; Ienaga, *Japan’s Last War*: 43; Marder, *Strategic Illusions, 1936-1941*: 101.
consequence of this divide was the constant threat of deadlock in ongoing policy deliberations.⁹

Rebel Japanese troops (46: left) in Tokyo during the 1936 ‘February 26 Incident’ in which an ultra-militarist revolt by junior Army officers was foiled, however a number of moderate Japanese politicians and senior military figures (47: right) such as Takahashi Korekiyo (front-left) and Baron Saito Makoto (front-right) were assassinated by militarist hit-squads.

Quite aside from descending into increasing conflict with Army militants, the Navy’s command structure suffered from a number of serious internal divisions which further weakened the service’s position within the wider Japanese political landscape. From the signing of the Washington Treaty in February 1922 a major rift had developed between the so-called ‘Fleet’ (Navy General Staff) and ‘Treaty’ (Navy Department) factions. A number of Staff officers denounced the agreement as a national disgrace and publically berated the then-Navy Minister, Kato Tomosaburo, for agreeing to sign it. With Tomosaburo’s death in 1923 the Fleet faction gained increasing influence over the service as a whole.¹⁰ Then in 1933 the appointment of the pro-German Osumi Mineo as Navy Minister triggered a large-scale purge in which numerous senior admirals were denounced and cashiered as supporters of the treaty regime and Western-orientated in their outlook. This event highlighted an open breach within the officer corps on geopolitical grounds as many junior-grade officers were beginning to

reject their traditional links with the Royal Navy in favour of new bonds with the German and Italian fleets. Indeed many young officers had joined the “bandwagon” as Oi Atsushi described the surge in patriotic public support for the nationalist-militarist movement and this momentum lead to another split within the senior ranks in 1939, this time over Japan’s proposed admission to the Tripartite Pact.\(^{11}\) The signing of the Pact in September 1940 represented another victory for the radicals and a further distancing of the Navy from its long-standing British exemplar.

If the radicals within the IJN were determined upon the relinquishment of British traditions and practices which had been established at the Etajima Naval Academy since 1888, one philosophical bond remained firmly in place. The concept of *Kenteki Hissen* or ‘Fight the Enemy on Sight’ lay at the heart of the Navy’s philosophy, for the Japanese both admired and sought to emulate the Royal Navy’s principle of taking the fight to the enemy as quickly and decisively as possible. This concept fitted easily with the existing ideal of *Nihon Seishin*, the ‘Japanese Spirit’ which emphasised Japan’s moral and spiritual superiority over her more sophisticated Western opponents, and in turn created what Arthur Marder has described as the “Tsushima-Jutland syndrome” within the Navy’s senior leadership.\(^{12}\) Aside from the individual impacts of these philosophies upon operational, tactical and material initiatives as will be addressed shortly, their presence created what Ohmae Toshikazu considered to be an over-emphasis “on the offensive in our naval thinking and our War College training.” For the IJN the consequences of an ultra-offensive mentality were ultimately disastrous in two central respects. Firstly the command structure totally ignored the need to secure wartime trade and

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commerce through the imposition of a convoy system; indeed a separate Escort Fleet command did not eventuate until 1943. With no effective means for protecting the critical conveyance of raw materials, most especially fuel-oil, the Japanese merchant marine would be systematically massacred by American submarines throughout the course of the war.

The wholesale slaughter of Japan’s mercantile resources, which so drastically curtailed the operational scope of the Navy’s endeavours through a lack of fuel-oil, came to represent but one limb of this reckless obsession with the offensive at sea. The second is to be found in what Vice-Admiral Kurita Takeo subsequently described as the lack of “a sure touch, a sure treatment of plan-making” within the ranks of the Navy General Staff. Numerous Western accounts have seized upon the Japanese penchant for over-elaborate battle planning with Donald Macintyre providing this sage summary when referring to the fateful Midway campaign in June 1942:

The ingenious and elaborate Japanese plan, with its division of the fleet into a number of independent task forces, could only justify its disregard of the principle of concentration of force if secrecy were preserved and surprise was achieved.

Macintyre’s interpretation highlighted the fundamental weakness within a command system whereby individual fleet commanders were prevented from exercising influence over IGHQ.

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and Naval General Staff planning procedures. These inherent disconnects will be seen as effectively compromising the IJN’s capacity to utilise the Combined Fleet’s naval and aerial capabilities to their fullest extent, though this malady would not become clearly evident until May 1942 during the Coral Sea engagement. For the present, however, the core failings of Japan’s naval command were largely subsumed against a backdrop of strategic policy which if sensibly executed held out the prospect of an incredible success against American and British naval might.

A Japanese freighter (48: left) being sent to the bottom by an American submarine on 21 March 1943, whilst the IJN’s failure to implement effective convoy-protection and anti-submarine measures during the 1930s also cost many valuable warships; the 72,000 ton super-carrier IJN Shinano (49: right) was sunk by submarine attack on 29 November 1944 during her maiden voyage.

**Strategy**

In spite of the prevailing factionalism within its ranks, the Imperial Navy’s leadership remained committed to a perimeter-defence strategic posture for the balance of the interwar period with the theory of the *Kantai Kessen* as its centrepiece. The Japanese concept of the decisive battle emerged in the writings of the IJN’s two foremost naval strategists, Akiyama Shinshi and Sato Tetsutarō, with Akiyama’s early 1900s publication *Kai Sen Yomu-Hei* (‘Essential Instructions on Naval Battles’) becoming the strategic bible for the Navy’s senior
As Vice-Admiral Ozawa Jisaburo explained in his post-war writings, from 1905 onwards the United States became regarded as Japan’s foremost future naval adversary by the Navy General Staff and by 1920 planning had been set in place for a Jutland-style confrontation to the east of the Philippines. This engagement was thought to be the logical consequence of initial amphibious attacks against Guam and the Philippines that would bring the USN’s Pacific Fleet steaming to the aid of these distant dependencies in much the same manner as the Tsar had despatched the Baltic Fleet to Port Arthur during the 1904-1905 Russo-Japanese War. Not until 1938 did the Japanese begin formal planning (and only then in the most perfunctory fashion) for the possibility of waging a simultaneous naval war against the United States and Britain. Yet as Captain Watanabe Yasugi noted in his post-war interrogation, pre-war instruction at Etajima did cater for this possibility:

In Japanese tactics we were told when we have two enemies, one in front and one in the back, first we must cut in front by sword. Only cut and not kill, but make it hard. Then we attack the back enemy and kill him. Then we come back to front enemy and kill him. Watanabe’s blunt interpretation of the solution to Japan’s probable two-ocean dilemma neatly illustrated the IJN’s chosen strategic formula as it existed at the outbreak of hostilities with the Western powers in December 1941. War with the United States would commence with a surprise attack against the USN’s Pacific Fleet at Pearl Harbour by the Kido Butai’s massed carrier-borne spearhead. Immediately subsequent to this attack the IJNAF’s land-based

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Eleventh Air Fleet (*Koku Kantai*) was to perform two critical tasks, to seek out and destroy any British capital-ships and/or aircraft-carriers based at Singapore, and to annihilate American aircraft at Clark Field some sixty miles to the north of Manila. Once these targets had been neutralised, the Combined Fleet’s resources were to lend their support to a series of aero-amphibious thrusts through the Central and South-West Pacific and the Indonesian archipelago. With the boundaries of the newly-conquered Southern Resources Area secured, the Combined Fleet would meet and defeat any attempt by the Royal Navy to intervene from the Indian Ocean before reversing course and finally settling its score with the Americans in the long-planned Kantai Kessen, with a subsequent negotiated settlement securing Japan’s new imperial frontiers.

Admiral Sato Tetsutaro (50: left), one of the IJN’s foremost war-planners, the masterful Admiral Yamamoto Isoruku (51: centre) who advocated the surprise attack against Pearl Harbour and commanded the Combined Fleet at the outbreak of hostilities, and Vice-Admiral Nagumo Chuichi (52: right), the commander of the IJN’s fearsome Kido Butai carrier strike-force.

Now the fact that the Imperial Navy had managed to grab the reins of Japan’s strategic policy at the eleventh hour should not be interpreted as the outcome of a long-standing systematic enterprise on its part. For as Ohmae Toshikazu and other Japanese participants have

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suggested, planning for a naval-centric war in East Asia had only commenced in 1938 with periodic revisions until final approval had been granted by the IGHQ Liaison Conference in November 1941. Instead the vicissitudes of geopolitical fortune from June 1940 onwards had created the circumstances for a major U-turn. With the signing of the Tripartite Pact and the subsequent conclusion of a non-aggression treaty with the Soviet Union, the Imperial Army had readily surrendered its primary ambition to combat the Soviets. So the IJN in fact found itself able to grasp the initiative in policy-making through the ultimate establishment of an Axis alliance which the majority of the Navy’s most senior officers had come to view with intense vexation during the interwar period. At first glance the Navy planners’ belief in the establishment of an imperial perimeter defence which stretched from the Malay Barrier through New Guinea, the Admiralty, Gilbert and Marshall Island chains to the frigid wastes of the Aleutian Islands provided Japan with a formidable network of defences against any anticipated Allied counter-attack. If the existing Western presence within South-East Asia and the Pacific could be rapidly overcome, the fortification of these strongpoints would make Japan’s new-found economic gains practically unassailable.

The peculiar geography within the assigned perimeter of the Southern Resources Area presented the most powerful argument in favour of the IJN’s chosen strategy. To the west of Rabaul the various access points to the waters beyond the Malay Barrier were both narrow and well-covered by a myriad of airfield sites, providing the Japanese with the priceless advantage of localised land-based air cover whereas their opponents would be compelled to seize territory in order to furnish a similar level of support. Within the Japanese Empire’s

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19 Interrogation Nav. 38: Captain Tashikazu Ohmae 22.10.1945: 176; ‘66th Liaison Conference, November 1, 1941’ in Ike (ed.), Japan’s Decision for War: 201-207.
20 Interrogation Nav. 34: Commander Chikata Nakajima 21.10. 1945, USSBS No. 139: 144; ‘Imperial Conference, November 5 1941’ in Ike (ed.), Japan’s Decision for War: 233; Interrogation Nav. 13: Captain Yasugi Watanabe 15.10.45: 66-70.
eastern boundaries lay a series of island chains that could be rapidly utilised by the Navy’s warships and aircraft in the event of a retaliatory thrust by the Pacific Fleet, and the positioning of these islands enabled the construction of several concentric rings of defence for the security of Japan itself.\(^{21}\) Any American or British attempt to force this lengthy perimeter with substantial naval forces would likely entail the risk of entering seas and straits that were festooned with a veritable hornet’s nest of aircraft, warships, submarines and mines. However the negotiated annexation of southern Indo-China in July 1941, a major jumping-off point for the Navy’s initial southward thrust, and the resulting American embargo upon Japanese oil supplies will be seen as placing an important caveat over the fortunes of the perimeter strategy as a whole. With its existing fuel reserves standing at eighteen months full supply as of November 1941, timetabling the process of assault and consolidation became the critical issue.\(^{22}\)

Sato Ichiro’s assertion in *Brassey’s 1927* that the Japanese Navy’s strategic posture was strictly defensive rang true when it came to the issue of fuel-oil supplies, for even the IJN’s pre-war exercise regime suffered from cutbacks as a result of shortages. This lack of a guaranteed well-head supply source stood as the major impediment to any attempt by the Combined Fleet to enforce its supremacy beyond the proposed imperial boundaries.\(^{23}\) Unless the Navy’s principal objective, the oilfields within the Netherlands East Indies, could be successfully secured, further naval and air activity would be severely curtailed, thereby exposing the Empire’s perimeter and interior defences. In his submission to a Liaison


\(^{23}\) Sato, ‘The Naval Policy of Japan’, *BSY 1927*: 79-80;
Conference meeting on 23 October 1941, the Chief of Naval General Staff Admiral Nagano Osami warned the assembled military leadership that the Japanese fleet was already consuming an hourly average of 400 tons of fuel-oil, so offensive action could only be undertaken within the next few months. Creating additional pressure for the IJN’s planners, the general state of Japan’s existing Pacific defences was poor. Chihaya Masataka chronicled a litany of uncompleted works at vital strongpoints in the Caroline, Marshall and Mariana Island chains in part due to the reluctance of the Japanese government to openly contravene the prohibitions of the Washington Treaty regarding the fortification of advanced bases. Further complicating the situation, Japan’s merchant marine did not possess the capacity to simultaneously support offensive activity, convey captured resources and provide for the urgent upgrading of existing Pacific facilities.

Aside from these structural weaknesses, the essential problem for the Japanese lay in the actual luring of the USN into this labyrinth so that it could be engaged and destroyed. Under the pre-April 1941 planning regime, opinion remained divided as to whether the Americans would launch an immediate effort to relieve the Philippines, or if a more systematic ‘island-by-island’ campaign was to be adopted. From the American perspective, Hector Bywater had warned that when “the United States relieved Spain of the Philippines, she gave hostages to fortune in a sense that the American people never fully realised.” Sensibly the Americans had removed the concept of an early advance under that nation’s Plan ORANGE war protocols during the mid-1930s and those Japanese officers who had assumed the length of a Pacific conflict to be in the order of two to three years were proven correct in one sense; this

24 ‘59th Liaison Conference, October 23, 1941’, Japan’s Decision for War: 186.
being the period before the USN was ready to mount a full-scale naval counter-offensive.\textsuperscript{27} Despite the possibility of a destructive blow at Pearl Harbour, Admiral Nagano warned his IGHQ colleagues that there was “no set of steps that would guarantee our checkmating the enemy” and Yamamoto had expressed similar fears given his first-hand knowledge of American industrial expertise. Therefore the scale of devastation wrought upon the Pacific Fleet at the outset would have to be such that the United States was presented with no option other than to seek an early settlement, creating the necessary time required for the securing of Japan’s future strategic position.\textsuperscript{28}

Whilst the USN’s Pacific Fleet had occupied the forefront of Japanese strategic thinking throughout the majority of the pre-war era, the presence of the Royal Navy came to be regarded as somewhat less menacing. By 1939 the Navy General Staff had correctly assumed that the RN would be unable to initially assemble a large fleet in Far-Eastern waters because of the evolving situation in Europe, allowing the IJN to destroy any advance force based at Singapore before dealing with a subsequent British fleet presence in the Eastern Indian Ocean.\textsuperscript{29} Although he was persuaded to assign a separate escort force for the protection of troop convoys during the passage to their assigned Malayan beachheads, Yamamoto believed that the squadron which the Admiralty eventually despatched to Singapore in November 1941 would be located and destroyed by the elite land-based 22\textsuperscript{nd} Air Flotilla flying from Indo-Chinese airfields. Once the Indonesian archipelago had been secured, the Kido Butai was to replicate its activities over Hawaii with similar airstrikes against the main British fleet


\textsuperscript{28} ‘50\textsuperscript{th} Liaison Conference, September 3, 1941’ in Ike (ed.), \textit{Japan’s Decision for War}: 129-131.

\textsuperscript{29} Marder, \textit{Strategic Illusions, 1936-1941}: 325-327; ‘Imperial Conference, November 5 1941’, \textit{Japan’s Decision for War}: 233.
anchorages at Ceylon.\textsuperscript{30} The presence of this particular force, most often referred to in Western histories with reference to its exploits at Pearl Harbour, held out the prospect of a greater opportunity which the majority of post-war publications have failed to acknowledge. If the Navy General Staff were of a mind to allow the Kido Butai to consistently operate as an independent fleet, Japan’s entire naval situation stood to be immeasurably advanced in spite of its existing logistical maladies.

Two of the IJN’s important anchorages in the Central Pacific; the vast atolls at Truk in the Caroline Islands (53: left), with shipping under attack by USN aircraft during Operation HAILSTONE on 17 February 1944, and Eniwetok (54: right) in the Marshall Islands as viewed from space.

\textbf{Tactics}

From the time of the IJN’s creation as a national navy in 1869 its officer corps had recognised the fact that in the absence of industrial superiority, Japan would have to match the larger Great Power fleets through qualitative supremacy. Ozawa Jisaburo set out the formula which the Japanese sought to adapt in the form of the equation $F \propto M \times E \times S$. Fighting strength ($F$) was to be determined by the combination of mechanical strength ($M$), efficiency ($E$) and mental strength ($S$).\textsuperscript{31} In concert with the positive effects of the significant range of training and technical assistance which had been provided by Britain, America and

\textsuperscript{30} Agawa, \textit{The Reluctant Admiral: Yamamoto and the Imperial Navy}: 267.

France since the 1870s, this equation came to the fore during the 1904-1905 Russo-Japanese War. The combination of the one-two punch which still characterised the IJN’s strategy as of December 1941, namely the initial surprise attack and a resulting decisive battle, had been revealed with devastating force at Port Arthur (February 1904) and Tsushima (May 1905). In both engagements the Japanese forces clearly demonstrated their capacity to carry out a series of lightning thrusts into the heart of the respective Russian fleets by utilising superior reconnaissance, signalling, mobility and available firepower. For the first time in naval history Admiral Togo Heimachoro’s fleet at Tsushima utilised wireless as a means for co-ordinating its rapier cuts into the slower Russian formation, fatally handicapped as it was by the presence of a chaotic procession of obsolete warships that were no longer fit for first-line service.32

Whereas the Russians, like the Chinese before them in the 1894 Sino-Japanese War, were not in the same class as the other Great Power navies, the Japanese had nevertheless demonstrated their mastery of surprise and speed, particularly in the prosecution of night engagements. Ozawa regarded this emphasis upon night operations as “a very favourable method for the side which had the [numerically] weaker force”, and the IJN took especial note of the havoc that could be caused by torpedoes within a close-combat environment.33 Yet the development of Japanese tactical doctrine continued to follow the same pattern as that favoured by the Western navies during the 1920s, with the battleline remaining as the core of the Imperial Navy’s fighting strength. Led by Vice-Admiral Koga Mineichi, the so-called ‘battleship faction’ continued to exercise a powerful influence even after the success at Pearl

33 Interrogation Nav. 55: Vice-Admiral Jisaburo Ozawa 30.10.1945, USSBS No. 227: 226; Marder, Strategic Illusions, 1936-1941: 319.
Harbour. In his informative post-war essay, Oi Atsushi described the rationale behind this thinking with regard to the development of the monster battleships *Yamato* and *Musashi* during the 1930s:

The fact that the Japanese Navy had *Yamato* and *Musashi* is believed to be partly, if not primarily, responsible for making the Japanese admirals so obsessed with a “battleship first” idea. Then why did the Japanese navy build these mammoth battleships? Because the superiority of the U.S. Fleet over the Japanese naval forces was so great that the Japanese Naval General Staff…tried to discover various sorts of tactical methods to reduce this U.S. superiority before a final fleet encounter was fought.34

In step with its Western counterparts the IJN throughout the 1920s considered the aircraft-carrier to be an auxiliary to the battlefleet for scouting and striking purposes. As one of Japan’s foremost interwar advocates of naval airpower, Ozawa’s commentary upon the interaction between battleship and carrier clearly highlights the tactical weaknesses of this relationship prior to 1934:

In usual cases the carrier division used to stay, generally as a group, within the visibility limit of the battleship group on the latter’s noncombat side. Its aim was to give air cover over the latter as well as over itself, in addition to its own mission of attacking the enemy. Another reason for keeping the carrier

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division quite near the battleship group was not to let it separate from the main force, while making flexible movements as a carrier group in accordance with the prevailing wind, lest it should be offered a chance of being attacked separately. But this school of tactics had a disadvantageous aspect which before long was uncovered through further subsequent studies. This disposition of a carrier division in fact contained the battleship’s movement too; the latter came to lose its flexibility of movements for the decisive engagement. Moreover on many occasions both the battleship group and the carrier division were simultaneously discovered by the enemy, thus increasing the chance of the vulnerable carriers being attacked [by] almost 100%. The method of giving one fighter cover over both the battleship group and the carrier division also proved not so effective.\textsuperscript{35}

The super-battleship IJN Yamato (\textsuperscript{55}: left) which along with her sister-ship IJN Musashi were the largest battleships ever constructed (72,000 tons). She was eventually sent to the bottom (\textsuperscript{56}: right) on 7 April 1945 during Operation TEN-GO, a futile suicide sortie against American shipping off Okinawa, having been attacked by over 300 American carrier-borne aircraft.

Whereas the Japanese aircraft-carriers had been organised into separate divisions (each division containing two carriers together with screening forces) since 1928, it was not until 1934 that studies were undertaken as to the feasibility of carriers acting independently from the battlefleet. Yet until April 1941 each of the carrier divisions continued to be attached to a corresponding battleship division. In adopting this course through the latter half of the 1930s the Japanese were pursuing a similar line of thinking to the USN which had been likewise experimenting with independent carrier-air tactics whilst still placing its carriers at the disposal of the battleline.\(^{36}\) In April 1941, however, the efforts of Ozawa, Yamamoto and Admiral Inoue Shigeyoshi were rewarded with the creation of the First Air Fleet which in due course became known as the Kido Butai. And since Yamamoto’s appointment as Commander-in-Chief of the Combined Fleet in 1940, intensive exercises had also been conducted with the combination of carrier-borne and land-based air power as the latter had been regarded since 1932 as a critical means of offsetting Japan’s numerical inferiority in surface warships.\(^{37}\) The formation of the Kido Butai represented the first occasion in naval history where a naval power had determined to field all its principal carrier assets within a single striking instrument. Furthermore, at the outbreak of war the IJNAF’s land-based Eleventh Air Fleet deployed the elite Genzan Air Corps, a veteran of Chinese operations and the most powerful specialist day/night anti-shipping unit then in existence.\(^{38}\)

The absence of consideration by both Japanese and Western sources as to the outcome of an early engagement between the Kido Butai and the Pacific Fleet at sea does leave a gap in history’s understanding of this remarkable naval-air force. Whereas the utilisation of aircraft


and submarines for reducing the American fleet before the set-piece decisive battle has highlighted the multi-dimensional nature of Japanese planning and tactics, an attack mounted by Nagumo’s carriers in the absence of Combined Fleet held out the prospect of an appalling disaster for the USN. Had the Japanese sought to conduct their southern thrust without an initial strike against Hawaii, a clash between these forces would have exposed the Pacific Fleet with its carriers providing support to the battleline as a slow-moving target for the IJNAF’s crack naval aviators. A concentrated airstrike mounted against an ill-prepared American opponent with its carrier assets divided and which did not yet possess aircrews with combat experience contained all the ingredients for a potential massacre. The total loss of a number of big ships at sea with a corresponding escalation in casualties outside the shallow depths of Pearl Harbour could have instigated the knockout blow that Yamamoto and his subordinates were attempting to achieve. One of the principal reasons why the staccato encounter between the RN’s Eastern Fleet and the Kido Butai off Ceylon in April 1942 assumed such importance was because these skirmishes were the only occasion upon which Nagumo’s independent carrier force clashed with a fleet-scale opponent.

The presence of the carrier spearhead provided the necessary mechanical strength to defeat Japan’s Western adversaries, yet this represented but part of the equation within the IJN’s mindset for achieving naval supremacy. Operational efficiency and mental strength were likewise considered to be prerequisites, and in the arena of field command both Japanese and Western sources have emphasised the lack of quality leadership at this level. Whereas the Japanese accounts have emphasised the enforced retirement of officers for pro-Western sympathies as a major catalyst, Marder and Fuchida have highlighted what the former described as “the absence of independent rational judgement” as a flaw in both naval and
national character. It shall become evident in the following chapters that whilst the British and Americans produced a series of gifted fleet commanders such as Cunningham, Somerville, Halsey and Spruance, the IJN remained somewhat limited in this field. Ozawa was considered to be a standout as an accomplished fleet tactician, though doubts existed over the competence of Nagumo, which are addressed more fully in Chapter Six. At the subordinate fleet levels, however, leaders including Mikawa Gunichi and Tanaka Raizo were responsible for some of the Navy’s most notable Pacific successes, especially in the conduct of night engagements. Both Oi and Takata Toshitane believed that the combination of a lack of high-quality officer cadets and the inherent conservatism of their superiors to be the principal reason why there were fewer Japanese officers possessing expertise at fleet command and subordinate levels than within their Allied counterparts.

Vice-Admiral Ozawa Jisaburo (57: left), the IJN’s foremost carrier fleet tactician, Vice-Admiral Mikawa Gunichi (58: centre) who routed the Americans and Australians in a night action at Savo Island (Solomons) on 9 August 1942, and Rear-Admiral Tanaka Raizo (59: right), commander of the famed ‘Tokyo Express’ night resupply force during the 1942 Solomons campaign.

39 Marder, Strategic Illusions, 1936-1941: 286; Fuchida & Okumiya, Midway: The Battle that Doomed Japan: 285.
Marder and Macintyre have independently concluded that the standards of Japanese seamanship were generally excellent, with the former noting that the IJN’s petty officers were the best of their kind with outstanding specialist skills in many areas. This level of competence has been largely attributed to the ferocious training regime which the Combined Fleet undertook during the interwar period in spite of the restrictions imposed by fuel shortages.\(^{41}\) The simulation of actual battle conditions in training (including the frequent use of live ammunition) honed the Navy’s crews with an extra edge in their skills, yet this policy was not without considerable cost. Peacetime exercises resulted in a high number of casualties amongst sailors and aircrews with numerous fatalities sustained during exercises in a typhoon during 1936; moreover the training regime for the IJNAF produced a highly experienced first-line cadre but very little in the way of trained reserves. However many within the armed-services leadership believed that through rigorous training the “moral spirit of Japan, the land of the Gods, will shine on this occasion”, as Army Vice Chief-of-Staff Tsukada Ko emphasised at a Liaison Conference on 1 November 1941.\(^{42}\) The concept of mental superiority became enshrined within this notion of Japanese spiritual leadership, emphasised as it was through the cult of Bushido where self-sacrifice for the Emperor became recognised as the highest national virtue. This belief structure persisted throughout the course of the war, eventually creating the rationale for the official adoption of Kamikaze suicide tactics in late 1944.\(^{43}\)


Operational Resources

Japan’s impressive pre-war array of capital-ships, heavy cruisers, light cruisers and destroyers reflected a combination of British and indigenous design influences. The former trend was most visible within the four capital ship and numerous light cruiser classes that were constructed during the pre-Washington period whilst both cruiser and destroyer concepts in the post-1922 period indicated a sharp shift towards wholly Japanese naval architecture. Responding to the limitation of capital ship numbers, the IJN commenced development of a series of heavy cruiser and destroyer classes which were designed to be superior to anything that the Western navies could field, albeit with a considerable element of fudging in respect of the official tonnage limits imposed upon these classes of vessel.\textsuperscript{44}

Construction of Japanese heavy cruisers continued unabated during the 1930s, and the refusal of the IJN to share design details of their new Furutaka class heavy cruisers with the Royal Navy in 1926 led to a hefty scaling-back of design co-operation between both fleets. The most notable shift in Japanese thinking towards qualitative superiority came with the construction of the massive Yamato class super-battleships in the mid-1930s. Equipped with enormous 18-inch guns, the Yamato class could outshoot any capital-ship afloat whilst packing a formidable array of anti-aircraft weaponry. So secret was the process of design and construction for these ships that the British considered early reports of their size to be exaggerated, whereas the USN remained almost entirely ignorant of their operational specifications until the end of the war.\textsuperscript{45}


\textsuperscript{45} Marder, Strategic Illusions, 1936-1941: 8; E. Altham, ‘Foreign Navies’, BSY 1938: 30; Interrogation Nav. 9: Vice-Admiral Kurita Takeo 16-17.10.1945, USSBS No. 47: 52; Interrogation Nav. 72: Vice-Admiral Miwa Shigeyoshi 10.10.45, USSBS No. 366: 294.
Differing design philosophies on display: the British County-class heavy cruiser HMAS Canberra (60: above left) as compared with the Japanese Takao-class heavy cruiser IJN Takao (61: above right). (62: Below): the fearsome Type 93 ‘Long Lance’ torpedo; several of which devastated HMAS Canberra, sunk during the disastrous Battle of Savo Island in which three USN cruisers were sent to the bottom by this weapon type.

Aside from the advantages of speed and size which the Japanese heavy cruisers and the lethal Fubuki and Kagero class destroyers enjoyed over their Western counterparts, the greatest of the IJN’s surface assets was the Type 93 surface-launched torpedo. Known as the ‘Long Lance’, these formidable liquid-oxygen powered weapons were carried aboard all Japanese cruisers and destroyers with many of the pre-Washington light cruisers being refitted as large torpedo boats.46 Possessing similar dimensions to a modern cruise missile, the Long Lance could reach speeds of 40 knots and possessed a maximum combat range of up to 24 nautical miles; the approximate equivalent of the primary surface batteries aboard capital ships. These torpedoes were wakeless because of their volatile fuel mixture and their massive warheads could easily tear apart any warship up to the size of a heavy cruiser (10,000 tons) with a

single hit, whilst Allied capital ships and carriers were also extremely vulnerable against their striking power. Designed for use by submarines, the Type 95 torpedo was also capable of extreme speeds, yet the failure of the IJN to employ its submarine fleet in a commerce-raiding capacity proved to be a costly strategic blunder.\textsuperscript{47} Whereas British cruisers and destroyers were equipped with torpedoes, the American cruisers were not, and this contributed to a number of disastrous results for the USN throughout the Solomons campaign. As Japan slid towards defeat in late 1944, manned versions of the Long Lance were employed as \textit{Kaiten} suicide weapons.\textsuperscript{48}

Japanese advances in aircraft-carrier design were significantly aided in the early 1920s through the provision of sensitive RN technical data by Lieutenant-Commander Frederick Rutland who had been co-opted by the IJN in an elaborate espionage campaign to obtain British design secrets.\textsuperscript{49} The initial conversion of the fast capital-ships \textit{Akagi} and \textit{Kaga} had been followed in 1934 by the construction of the light carrier \textit{Ryuyo} and in the late 1930s with the commissioning of \textit{Soryu} and \textit{Hiryu} as purpose-designed fleet carriers. In 1941 the two \textit{Shokaku}-class vessels \textit{Shokaku} and \textit{Zuikaku} entered service; these ships were considered by many Western experts to be the most advanced carrier designs in the world prior to the entry of the American \textit{Essex}-class in 1943.\textsuperscript{50} Aided by the provision of tanker refuelling from 1927 onwards; the performance of \textit{Soryu}, \textit{Hiryu} and the two \textit{Shokakus} exceeded that of their British and American counterparts. Through the utilisation of similar turbine assemblies as those employed aboard the IJN’s latest destroyers, giving all four ships operational speeds of

\textsuperscript{47} Interrogation Nav. 72: Vice-Admiral Miwa Shigeyoshi 10.10.45: 293; Interrogation Nav. 64: Rear-Admiral Takata Toshitane 1.11.1945: 266.
\textsuperscript{48} O’Neill, \textit{Suicide Squads: The Men and Machines of World War Two Special Operations}: 188-189.
\textsuperscript{49} Ferris, ‘Student & Master’: 98-99; Till, \textit{Airpower and the Royal Navy 1914-1945}: 63.
33 knots or better, the Japanese had produced a series of vessels with excellent handling characteristics. This combination of speed and extended range allowed the Kido Butai to voyage beyond the boundaries of the Empire’s proposed defensive perimeter, thereby creating a formidable first-strike instrument.\(^{51}\) What is more, the employment of a force of this nature allowed the Combined Fleet to retain the majority of its older and slower battleships within Japanese home waters, with consequential savings for the Navy’s critical fuel reserves.

However Rutland’s treasonous disclosures to the Japanese apparently failed to prevent the presence of a serious flaw within all of the IJN’s pre-war carrier designs, with disastrous results in wartime. Unlike the majority of their British and American counterparts, the Japanese carriers incorporated the storage tanks for aviation gasoline (avgas) within the actual hull structure itself. As future experience would prove, even if a torpedo or bomb failed to detonate the avgas upon impact, the resulting concussion often fractured the tanks and their associated pumping apparatus allowing the fuel to vaporise and spread throughout the ship, thereby turning it into a floating time-bomb.\(^{52}\) Lack of armour protection, efficient ventilation and fire-fighting equipment created all the ingredients for a subsequent catastrophic explosion which invariably destroyed the ship with enormous casualties. Three fleet carriers and five of the Imperial Navy’s eight escort-carriers were sunk by this means following torpedo attacks by American submarines. This mode of attack also revealed another notable weakness in Japanese naval research, namely the failure to properly develop advanced electronic aids such as radar and associated anti-submarine warfare (ASW)


detection equipment. Both Japanese and Western sources have outlined the Navy’s desire to create a fleet that was almost entirely devoted to offensive activity at sea, resulting in the IJN’s ships lacking proper defensive capabilities which made the carriers and many surface warships especially susceptible to battle damage, a situation which likewise prevailed in the skies above.\(^{53}\)

The IJNAF owed much of its post-1919 development to another triumph of espionage, on this occasion through the provision of classified material by William Forbes-Sempill, otherwise known as Colonel the Master of Sempill. The leader of the RAF’s first ‘unofficial’ mission to Japan, Sempill handed over secrets whilst his compatriots provided the Japanese with first-rate tuition in a myriad of areas – establishing training facilities, instruction in flying procedures involving aircraft-carriers – the works. At the heart of the British Air Ministry’s tacit approval for the mission lay the desire to monopolise influence at the expense of the Italians and French, and thereby create a future market for British aviation firms such as Gloster and Handley Page.\(^{54}\) Yet it was the Japanese who played the British for fools by reaping all the rewards. Through the acquisition of brand-new infrastructure for developing their own indigenous designs, an enhanced understanding of aviation science and a doggy-bag full of licence contracts, particularly for the production of British-designed aero-engines, Japanese aircraft and their associated heavy and manufacturing industries were the principal beneficiaries. Throughout the course of the 1930s large industrial entities including Mitsubishi Johogyo, Nakajima Hikoki and Kawanishi Kokuki established a domestic monopoly, reinforced by government control over licensing and aircraft specifications in

\(^{53}\) Interrogation Nav. 55: Vice-Admiral Jisaburo Ozawa 30.10.1945: 226; Interrogation Nav. 64: Rear-Admiral Takata Toshitane 1.11.1945: 266.

1938. In a rare instance of general co-operation between the armed services, manufacturers were permitted to design and build aircraft for each service’s air-arm, with the larger firms generally producing a wider variety of aircraft types than their British counterparts.

By 1936 both Japanese armed services had sought increasing technical interaction with the Luftwaffe and the Regia Aeronautica, the Army’s air-arm (IJAAF) taking a particular interest in German and Italian design trends. Equipped with information and advice obtained from British, American and French firms, the IJNAF embarked upon a wholly indigenous path with Yamamoto’s establishment of a series of design teams upon his appointment as head of the IJN’s aeronautical Technical Division in 1932. The results of this ambitious programme began to emerge from 1936 onwards. Three new monoplane aircraft, the Type 96 fighter (Claude), the Type 96 attack-bomber (Nell) and the Type 97 attack-bomber (Kate), entered production in 1936, to be followed by the Type 99 bomber (Val) in 1939 and the Type 1 attack-bomber (Betty) in 1940. With the exception of the Claude, a sprightly little carrier-

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borne fighter which could easily outperform its mid and late-1930s foreign counterparts, the remainder of these types formed the backbone of the Navy’s carrier and land-based aerial arsenal at the outset of hostilities with the Western powers. Both the Kate and the Val were superior in virtually all aspects of performance over their existing British and American opposites and constituted the attack arm aboard all of the IJN’s large fleet carriers. As for the Nell and Betty, these two land-based attack planes were equally proficient weapon platforms for bomb and aerial torpedo payloads and each possessed a combat range that would only be exceeded by the massive American Boeing B-29.57

In late 1941 the United States Army Air Corps (USAAC) Far East Air Force command received a report from the American military attaché in Tokyo that provided performance details of a new Japanese fighter type. These were dismissed by one officer as a case of the attaché ‘drinking too much sake’, as the Americans (in common with the British) entertained a fairly low opinion of Japanese aviation as a whole.58 Given the increasing range of authorship which has addressed the various ethnocentric rationales for these Western observations, it is suffice to note that the underestimation of Japan’s aerial capabilities by the British especially, as it was largely their expertise that the Japanese had acquired and exploited, would prove to be a particularly fatal error of judgement. And none more so than for the unfortunate Allied pilots that would face the subject of the attaché’s information which had been so casually dismissed. The Mitsubishi Zeke naval fighter had first flown over China in 1940 and decimated its antiquated opposition. Designed by Horikoshi Jiro, this aircraft presented the greatest single threat to the Allied cause in the Asia-Pacific theatre

because of its enormous combat radius of 800 miles and its outstanding dogfighting capabilities and powerful armament. The presence of this aircraft would permit the IJNAF to establish a wide-ranging umbrella over any chosen area of operations, enabling the carrier and land based attack planes to strike with impunity and establish absolute air supremacy as required.

Yet this outstanding duralumin machine and the crack pilots who flew it also stood as markers for the inherent weaknesses within Japanese naval aviation which were to eventually cost it so dear. Like their colleagues in the field of warship development, the IJNAF’s designers sought every offensive advantage for their charges. This came at the expense of such crucial items as protective armour, self-sealing fuel tanks and adequate defensive gunnery for bombers and attack planes. Even a sustained burst of light-calibre machine-gun fire could down a Zeke, and the Betty later became known as the ‘one-shot lighter’ for its propensity to quickly explode when struck by cannon or tracer ammunition. While soever the Japanese retained their superiority in pilots and aircraft performance, losses could be kept to an acceptable minimum. They had to be, because the acceptable minimum within the IJNAF was far less than elsewhere, a consequence of the gruelling training processes which cost the lives of many trainees. No extensive reserves had been prepared and growing losses began to be taken because of poor work practices involving maintenance and delivery crews. And unless the ongoing programmes for the due replacement of the Zeke and its compatriots were executed efficiently, the Navy’s aircrews would eventually be facing a wide suite of vastly superior Allied aircraft types. No such renewal occurred and on 19 June 1944

the IJN paid the brutal price when almost its entire carrier-borne air arm was massacred by the USN’s F-6 Hellcat fighters above the Philippine Sea.

(65-66: Left to right): the superlative Zeke fighter designed by Horikoshi Jiro, and the slender Nell long-range attack plane which could deliver either torpedoes or bombs in its anti-shipping role.

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The wholesale destruction of the Japanese naval airpower in a single day had been administered by the United States Fifth Fleet, the largest assembly of naval-air and surface firepower in the pre-nuclear age. This unstoppable instrument was the product of an industrial juggernaut that Japan could never hope to master. For Fuchida Mitsuo’s observations regarding Japanese irrationality rang true in each of the four aspects of the IJN which have been examined. Instability and conflict within the structure of command and control, a strategy for the seizure and maintenance of an imperial perimeter in the absence of adequate logistical support, the reluctance to abandon the battleship’s role as the final tactical arbiter and the provision of air and naval forces entirely engineered for the offensive placed Japan’s naval ambitions upon a precipice from the outset. No margin for error existed in the event of any substantial operational setback. Yet at the same instant, the Imperial Navy possessed the
methods and means, most especially in the form of the Kido Butai, for delivering blows of such magnitude as to annihilate any opposing fleet or squadron, with dramatic consequences for the determination of naval supremacy. And some two years before the disaster of the ‘Great Marianas Turkey Shoot’, Japan’s air-naval blitzkrieg would reach its zenith in the Eastern Indian Ocean and emphatically impose just such an outcome. However in the final months of 1939 Japanese planners were as yet mere interested bystanders at the onset of global naval war.
Chapter Four

Broad oceans, narrow seas: the test of war against Germany and Italy, September 1939 – April 1942

4.45am; 1 September 1939. Absent a formal declaration of war, Adolf Hitler authorises the commencement of Operation *Fall Weiss*.¹ Fifty-three German divisions commence their attacks at various points on the Polish frontier whilst airstrikes are mounted against airfields and communications; the pre-dreadnought battleship *Schleswig Holstein* shells the Polish naval arsenal at Westerplatte. Following the expiry of the Anglo-French ultimatum on 3 September, RAF Bomber Command mounts attacks against German warships at Wilhelmshaven; strikes on 4 September inflict only minimal damage as the unescorted bombers are savaged by the Luftwaffe’s fighter defences.² Within ten months the Germans sweep all before them, eventually controlling the Atlantic coastline from Norway to the Spanish frontier. Italy’s entry as an active belligerent on 10 June 1940 expands the naval war to the Mediterranean where the Royal Navy must confront the Italian fleet without French support. Fearful that the Axis navies would seize control of the Marine Nationale’s Mediterranean Fleet in the wake of France’s capitulation, the Royal Navy destroys or neutralises French warships at their North African bases on 3 July. With the daunting prospect of conducting a naval war that shall extend from the Barents Sea to Bass Strait, by November 1940 the Admiralty’s efforts to sustain British naval supremacy have become, in the judgement of Herbert Rosinski, “the dominant fact of the present conflict.”³ To achieve

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¹ ‘Case White’.
³ Rosinski, ‘Mahan and the Present War’, *BSY 1941*: 204.
this objective against its European opponents, the RN must be capable of prevailing in an
unprecedented diversity of operational situations, and doing so with persistent frugality.

First published in the 1941 edition of Brassey’s, Rosinski’s essay ‘Mahan and the Present
War’ proffered an analysis of Alfred Mahan’s concept of naval supremacy and the
applicability of Mahan’s ideas throughout the first year of hostilities in the European theatre.
A German scholar whose expertise extended throughout the fields of military and naval
affairs as well as international relations, Rosinski journeyed to Britain in 1936 after he was
barred from lecturing in Germany because of his Jewish ancestry. He lectured at Oxford until
1939 and having been briefly interned as an enemy alien, subsequently relocated to the
United States and secured an academic position at Princeton before becoming the principal
military analyst for the ‘Voice of America’ in 1944. Post-war, Rosinsky became a member of
the American Council on Foreign Relations in 1955 and a member of Britain’s Institute for
Strategic Studies in 1962. 4 Though his essay has been largely forgotten within the post-war
historiography, its contents fleshed out the fundamental methods through which command of
the sea was being contested, whilst exploring to what extent the “indivisibility of the sea” had
been affected by technological advances on land with especial reference to the influence of
shore-based airpower. 5 Commencing with an overview of Mahan’s core ideals as addressed
by the author, the current chapter commends four of Rosinski’s subheadings as a relevant
contemporary template which illustrated the daunting complexity of maintaining Britain’s
command of the sea within the diverse tactical environment of a modern naval conflict.

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4 E.M. Cherpak PhD., Register of the Herbert Rosinsky Papers (Newport RI: Naval Historical Collection, 1988)
http://www.usnwc.edu/Academics/Library/RightsideLinks/Naval .
In terms of its structure, the essay in question initially addressed Mahan’s general tenets regarding the conduct of war at sea before moving to the experience of conflict from September 1939 until approximately October 1940. Rosinski commenced by noting that the one-hundredth anniversary of Mahan’s birth (1940) marked the climax of a process in strategic naval thought that had been in train since the end of the Great War. He explained that whilst Mahan’s concepts of maritime strategy were still revered in ritual, they were no longer regarded as a major influence upon British and American naval thinking, whereas the Germans and the Italians have come to regard him as an “outdated old fossil” whose teachings favoured the imposition of Anglo-American sea power. Rosinski then proceeded to examine what he considered to be Mahan’s limitations as a strategist, in particular the theorist’s reluctance to integrate his insights into “a systematic analysis of the whole complicated and paradoxical structure of naval warfare.” The important distinction which Rosinski made was that Mahan understood the concept of sea power, but not “superior sea power” whereby the inferior belligerent was rendered helpless from the outset of hostilities. And in framing the range of issues to be addressed in his essay, Rosinski stated that his analysis did not extend to Mahan’s wider interpretations of the relationship between command of the sea and the concept of homogenous nation-states for which he (Mahan) had been denounced by “economic” historians throughout the course of the 1930s.6

Rosinski then turned to Mahan’s two central strategic principles, the indivisibility of the sea and the supremacy of sea power over land power. In the first instance he set out Mahan’s dictum that a sea power was always advantaged over its land competitors because of its ability to traverse unfortified and borderless seas and oceans. Mahan’s concept of maritime supremacy revolved around the offensive use of naval power; the requirement to either fight

an immediate battle or impose a blockade so as to force the opponent into battle. In setting out Mahan’s interpretation the author noted that throughout the course of naval history the inferior power had been compelled to retaliate by the employment of *guerre de course* (a war on trade) against the superior power’s lines of communication, a course of action that could never be entirely neutralised, but which was insufficient to wrest naval supremacy from the opponent’s battleline. In turning to the supremacy of sea power, Rosinski explained that the superior mobility of warships provided the opportunity for the maritime state to exhaust its opponent’s superior resources by forcing campaigns in distant theatres as had been the case in the Russo-Japanese conflict of 1904-1905. He further contended that the RN’s dominance in the seventeenth and eighteenth centuries had arisen through its ability to isolate the weaker European sea powers by cutting their overseas communications, although this did not extend to the United States because the concentrated base of American strength lay beyond its effective reach.

Whereas Rosinski acknowledged that Mahan’s basic principles explained the rise and maintenance of the British Empire, he asserted that in the absence of a proper analysis, Admiral Alfred Tirpitz had based Germany’s pre-Great War naval strategy upon what he (Rosinski) described as Mahan’s over-generalisation of sea power. In Rosinski’s view the error in Tirpitz’s thinking was to attempt to gain parity with the British by way of bluff through the construction of a ‘fleet in being’ which would be strong enough to paralyse the Royal Navy’s Atlantic dispositions. Subsequent naval failure in the Great War led to Germany’s repudiation of Mahan in the post-war era, with Italy following a similar path. It is

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8 Ibid: 197.
relevant to note that Rosinski referred to the Italian embrace of qualitative superiority in combination with Fascism’s cut of willpower, an analogous situation to that which existed in Japan although the Japanese still sought to achieve their aims through the fighting of a decisive battle against the United States Navy. In his summation of the emergence of ‘new’ strategic theories through the course of interwar years, the author asserted that Germany and Italy would not pursue maritime supremacy but seek instead to inflict as much damage as possible upon British sea communications as both Axis nations believed that modern weapons systems, particularly airpower, would limit naval warfare to a guerre de course alone. Rosinski regarded this concept as unrealistic and sought to disprove it within his subsequent interpretation of the wartime situation.

**Chronology of European Theatre Naval Events: September 1939 – April 1942**

**1939.** 3 September: Winston Churchill appointed as First Lord of the Admiralty; 17 September: aircraft carrier *Courageous* is sunk by a U-Boat; 14 October: battleship *Royal Oak* is sunk by a U-Boat; 13-17 December: Battle of the River Plate.

**1940.** 17 February: seizure of the German supply ship *Altmark* in Norwegian waters; 9 April-8 June: Norwegian campaign; 28 May-5 June: evacuation of Dunkirk; 10 June: Italy enters the war; 3-4 July: French Mediterranean Fleet neutralised by Force H; 9 July: first escorted convoy to Malta, Battle of Calabria; 17 October: first U-Boat ‘wolfpack’ attack against Convoy SC7; 11 November: FAA airstrike against Taranto cripples the Italian battleships *Littorio, Caio Duilio* and *Conti de Cavour*; 27 November: Battle of Cape Spartiveno.

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10 Rosinski, ‘Mahan and the Present War’, *BSY 1941*: 204.
11 C. Salmaggi & A. Pallavisini, 2194 Days of War – An illustrated chronology of the Second World War (London: Windward, 1977): 17-230. *Please note that the supplied chronology is provided as a date reference guide only; it is not included as an abridged narrative of the events in question.*
1941. 11 January: Fliegerkorps X (Luftwaffe) commences operations from Sicily; 15-16 March: German battle-cruisers Scharnhorst and Gneisenau sink sixteen merchant ships from various dispersed convoys; 28 March: Battle of Cape Matapan; 29 April-3 May: evacuation of Greece; 14-29 May: Battle of Crete; 20-27 May: pursuit and sinking of the German battleship Bismarck; 21 August: first RN convoy to Russia; 13 November: aircraft-carrier Ark Royal is sunk by a U-Boat; 25 November: battleship Barham is sunk by a U-Boat; 17 December: First Battle of Sirtre; 18-19 December: Italian naval special forces cripple the battleships Queen Elizabeth and Valiant in Alexandria Harbour; 20 December: first employment of an escort-carrier, Audacity, for convoy protection (Convoy HG76).

1942. 11-12 February: the ‘Channel Dash’ by the German battle-cruisers Scharnhorst and Gneisenau from Brest to Wilhelmshaven; 20-23 March: Second Battle of Sirtre.

‘The Present War’

For Rosinski the present lay in the period of hostilities prior to November 1940 as his original authorship of the essay occurred during the weeks which followed Italy’s initial offensive against Greece in October of that year. whilst these observations were certainly limited in terms of overall timespan, the structure of his analysis developed an ever-widening series of contemporary assessments as to the future conduct of the war at sea. Under the first of the analytical subheadings, Rosinski outlined the principal factors which stood as obstacles to the Royal Navy maintaining its command of the sea. These included the respective policies of the Axis navies to avoid a major naval battle and seek instead to interdict Britain’s lines of communication, the deleterious impact of reductions to the RN’s strength throughout the interwar years, and Germany’s rapid conquest of the Atlantic seaboard. The author’s

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12 * no reference to the specific date of authorship is provided by Rosinski in the subsequent publication of his work in Brassey’s 1941.
observations mirrored Churchill’s interpretation whereby the Fleet “had to face enormous and innumerable duties rather than an antagonist”, a clear reference to the understandable reluctance of the numerically inferior Kriegsmarine to attempt to engage the British in a set-piece engagement. There can be little cause for disagreement with these broad assertions as they clearly addressed the fundamental problems which the Admiralty confronted at the outbreak of war, and the post-war histories have articulated a similar range of conclusions; Stephen Roskill noting that the situation demanded “flexibility in the application of [British] maritime power and the concentration of its instruments.”

In turning to the operational methods which he believed were responsible for the Royal Navy’s success, the author assigned pride of place to the range of technical devices that were effectively co-ordinated with existing weaponry through superior quality operational leadership. Rosinski’s inference regarding new technologies which were necessarily “shrouded in mystery” undoubtedly referred to the development of radar, ASDIC and other means of remote detection, all of which would indeed play an enormous role in securing Allied success in every maritime theatre. Radar provided the crucial edge in the detection, re-detection and sinking of the Bismarck in May 1941 as it had done so for the British at Cape Matapan in March of the same year. The combination of radar, ASDIC sonar detection and airpower has been widely acknowledged as the key factor in the final defeat of the Kriegsmarine’s U-Boat campaign in mid-1943 whilst Admiral Sir James Cunningham believed that a different complexion upon the “air bombing menace” arose from the employment of radar aboard aircraft-carriers as it provided a far more co-ordinated

deployment of the FAA’s protective fighter screens.\(^{15}\) Whereas the Germans too had pursued radar and radio detection-finding technology during the 1930s, their research in these particular fields never succeeded in matching that from across the Channel. This inability to achieve scientific parity with the Allied powers did not necessarily reflect a lack of ability on the part of the German scientists, but rather the dysfunctional nature of decision-making within the Third Reich itself.

The scientific development of new technologies within the Nazi state suffered at the hands of the same byzantine power apparatus that frustrated the German armaments industry as a whole. In post-war interviews and published works, Albert Speer, Grand Admirals’ Eric Raeder and Karl Doenitz and Luftwaffe General Werner Baumbach individually expanded upon a range of impediments, especially the effects of intriguing on the part of senior leaders such as Goering and Himmler to gain Hitler’s favour for their pet armaments projects. Baumbach additionally recalled that Hitler, in disallowing a pre-war proposal for a separate naval Luftwaffe, explained his decision by stating that ‘no one is in a position to say that he will fight with land aircraft on land and with naval aircraft at sea’, an echo of the sentiments expressed by Lord Trenchard a decade before.\(^{16}\) Yet the German scientists, admirals and technocrats were not alone in being pestered, prodded and frustrated by head office. When it came to the means and methods of waging war, Winston Churchill was a dedicated naval


enthusiast (which Hitler wasn’t), carrying his experience of a second stint as First Lord of the Admiralty into Downing Street when he became Prime Minister. The extent of Churchill’s prime ministerial influence within the Admiralty at both the strategic and tactical levels has remained a contentious topic in historical circles throughout the post-war period, highlighted by a particularly gruff exchange of published views between Stephen Roskill and Arthur Marder over this issue.¹⁷

Successful British advances in submarine detection technology resulted in the increasingly effective use of a range of anti-submarine weapons including the ‘Hedgehog’ forward-throwing bombs (67: left) against U-Boats, whilst the low prioritisation of maritime patrol and strike aircraft denied the Kriegsmarine the widespread assistance of advanced designs such as the Junkers 290 (68: right).

Though the substance of the dispute between these historians lay in the veracity of their respective primary sources when addressing the issue of relations between Churchill and the Admiralty, it was the operational-level commanders who bore the collective brunt of this decision-making process. Churchill’s direct intervention in military affairs mirrored that of both Hitler and Stalin, yet Churchill did not contradict professional advice as readily as Hitler in particular. On the question of the Admiralty’s influence over events at sea, Roskill made the salient point that unlike the Air Ministry and the War Office, the Admiralty exercised both administrative and operational control over the RN so there can be little surprise

regarding its persistent encroachment at the tactical level.\textsuperscript{18} This became an object of resentment amongst senior fleet commanders such as Cunningham, Somerville and Sir John Tovey, who succeeded Admiral Sir Charles Forbes as CIC Home Fleet in the wake of Forbes’s sacking for his alleged poor performance in the ill-fated Norwegian campaign. Somerville was compelled to face a Board of Inquiry over his conduct during the Battle of Cape Spartiveno because of the apparent necessity to placate those in authority who were impatient for decisive results. Cunningham too had his difficulties. In a letter to the then-First Sea Lord, Sir Dudley Pound, he complained of feeling “rather harassed” by Whitehall and the Admiralty as it did not appear that either entity fully appreciated the difficulty of carrying out offensive operations in the absence of sufficient screening vessels and naval-air reserves.\textsuperscript{19}

Yet in spite of this at-times fractious relationship between the senior and subordinate levels of command, the Royal Navy’s operational success against its German and Italian opponents arose largely through the quality of its fleet and squadron-level leadership. The principal commanders during the period under analysis, namely Cunningham (Mediterranean Fleet), Somerville (Force H) and Tovey (Home Fleet) achieved results because they understood how best to utilise the often minimal forces at their disposal. These admirals recognised the value of the air-weapon in modern naval combat, and were forthcoming in attributing British success in episodes such as Matapan and the pursuit of the \textit{Bismarck} to the presence of effective aerial reconnaissance and air-strike capabilities.\textsuperscript{20} It remains a tribute to their faith in

\textsuperscript{20} Tovey, Despatch LDNGZT 14.10.1947: 4853; A. Cunningham, Despatch 9.7.1940: \textit{Report of an action with the Italian Fleet off Calabria}, LDNGZT Issue 38273, 27.4.1948: 2644
\url{http://www.london.gazette.co.uk/issues/38273/supplements}. 
the FAA as a vital pre-emptive instrument that these positive outcomes were achieved with a minimum of available aircraft. Less than fifty aeroplanes participated in each of the events noted above, whilst Cunningham’s daring strike against Taranto in November 1940 involved just twenty-four Swordfish torpedo-bombers. In referring to the subsequent action off Cape Spartiveno, Somerville observed that it was desirable wherever possible that the carrier should act independently of the battleline, thereby providing some wartime conclusions for the pre-existing debate as to how aircraft-carriers would best ‘fit’ into the RN’s wartime tactical dispositions. In addition the majority of British admirals came to recognise that effective carrier-borne fighter support, a rarity within the first three years of hostilities, had become an absolute imperative when carrying out fleet or squadron-scale activities.  

The Italian battleship Vittorio Veneto (69: left) withdrawing from the engagement at Cape Matapan after being hit by an air-launched torpedo, whilst the German battleship Bismarck (70: right) was crippled by a similar attack which wrecked the ship’s steering and brought about her subsequent destruction in a lopsided surface battle with the RN’s Home Fleet.

Whereas Rosinski lauded the impact of new technologies in the RN’s successful prosecution of operations prior to November 1940, he remained convinced that the role of the battleship remained unchallenged, as did Churchill, the Admiralty and its fleet commanders. In engaging both the Regia Marina and the Kriegsmarine, the British admirals were committed to the interwar concept of integrated battle tactics, seeking to slow down their quarry with airstrikes before the final blows at the hands of the accompanying surface forces. At Matapan Cunningham sought to initiate these strikes at a maximum range of fifty miles so that his capital ships and cruisers could quickly close the range and attack Admiral Angelo Iachino’s fleet before it had the chance to utilise its superior speed and escape. However Cunningham, Somerville and Churchill also bemoaned the fact that the Fleet’s ‘R’-class battleships in particular were incapable of making effective contributions in such circumstances because they were too slow to maintain touch with their own forces let alone the enemy’s. Though

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22 Rosinski, ‘Mahan and the Present War’, *BSY 1941*: 205.
the strike against the Italian battleships at Taranto confirmed the fact that capital ships could be sunk by aerial torpedo attacks, the crippling of the three vessels took place whilst they were secured in a relatively shallow anchorage. As of 9 December 1941 no capital-ship had been sunk at sea by aircraft alone, and this remained the case throughout the course of European hostilities until the sinking of the battleship *Roma* by an air-launched German guided missile on 9 September 1943.

‘Limitations of Air Power’

Turning to the question of airpower in isolation, Rosinski commenced his assessment of its limitations by asserting that whilst the use of the air-weapon had modified certain aspects of sea warfare, it had not succeeded in shaking the foundations of naval strategy. The author subsequently addressed the issue on three bases, namely: 1) the employment of aircraft in coastal and offshore waters, 2) the value of aerial reconnaissance and 3) his qualified concession that the attainment of naval supremacy now depended upon a solid partnership with “a not too profoundly inferior air force”.24 Notably, however, his interpretations regarding airpower were apparently confined to land-based air activity alone, as he made no reference to either the employment or relative effectiveness of the aircraft-carrier in British naval operations. Yet this omission was understandable in one sense, as prior to October 1940 the aerial contribution of the Fleet’s carriers had been negligible in terms of damage inflicted upon the Axis navies. Instead, the initial outcomes of carrier sorties were comprehensive disasters; the loss of *Courageous* whilst hunting U-Boats without an adequate screening force and the sinking of *Glorious* by the German battle-cruisers *Scharnhorst* and *Gneisenau* during the Norwegian campaign through a similar lack of surface protection. In the latter instance

the Glorious, absent aerial reconnaissance for reasons which have never been ascertained, had been ambushed by the German ships before her torpedo-planes could be launched and was sent to the bottom with less than fifty survivors from more than 800 personnel aboard.\footnote{Thursfield, ‘A Naval Chronicle’, \textit{BSY} 1940: 51; O. Stewart, ‘Air Operations and the War at Sea’, \textit{BSY} 1941: 102; D. Macintyre, \textit{The Battle of the Atlantic} (London: Severn House, 1975): 30; D. Brown, \textit{Carrier Operations of World War II: The Royal Navy}; 13, 18.}

\begin{figure}[h]
\centering
\includegraphics[width=0.4\textwidth]{image1.png} \hspace{0.02\textwidth} \includegraphics[width=0.4\textwidth]{image2.png}
\caption{(71-72. Left to right) HMS Courageous sinking after being torpedoed by U-29, whilst HMS Glorious was sunk in an ambush by Gneisenau (right) and Scharnhorst.}
\end{figure}

Should the Royal Navy have forfeited its capability to provide effective surface cover for both its big ships and vital merchant convoys, it would have likely lost the war at sea itself. Within a pre-war memorandum from the British Chiefs-of-Staff concerning the protection of wartime trade, the authors noted that a balance needed to be drawn between the needs of the Fleet and those of convoy protection when it came to the allocation of screening vessels such as light cruisers and destroyers.\footnote{‘The Protection of Trade, 1937’, Doc. 447 in Hattendorf & Ors (eds.), \textit{British Naval Documents 1204-1960}: 781.} Waging a conflict which involved differing operational strategies placed an enormous strain upon the RN’s capacity to provide the necessary protection for both entities. Whereas the events off Norway and Dunkirk did not include the loss of any of the Fleet’s capital-ships or aircraft-carriers to air attack, the heavy casualties which were sustained within British destroyer squadrons, along with alarming cruiser and destroyer losses during subsequent operations in the Mediterranean, seriously diminished the
Royal Navy’s ability to protect both its fleet units and convoy traffic. Fortunately for the Admiralty this conundrum in the Mediterranean did not assume terminal proportions as Werner Baumbach recalled:

At quite an early stage England’s position in the Mediterranean could have become most precarious if there had been co-operation in those strategic designs between the German and Italian air forces – with expert leadership…But the complications of dual command in the Axis were always giving the British sufficient breathing space until American support arrived and sheer weight of material decided the issue in the Mediterranean.

Nevertheless the signs were clearly evident from the outset of hostilities that in the absence of sufficient fighter support, naval power as a whole would be severely compromised while operations were carried out within range of hostile land-based aircraft. And if the opponent could complement its aerial striking power with consistent high-performance fighter escort, the effects of this malady would be dramatically escalated. As Vice-Admiral Sir Bertram Ramsey commented in his despatch following the evacuation of Dunkirk, the massive concentration of the Luftwaffe’s available firepower literally overwhelmed the RAF to the point where the embarkation of troops had to be at first suspended and then limited to dawn and dusk in order to ensure the protection of the vessels involved. And Rosinski’s assertion that the effectiveness of aerial reconnaissance had not lived up to pre-war expectations

27 Cunningham, Despatch: LDNGZT 27.4.1948: 2644; Cunningham, Despatch: LDNGZT, 21.5.1948: 3119; J. Tovey, Despatch 20.5.1942: Convoys to North Russia 1942, LDNGZT Issue 39041, 13.10.1950: 5141 http://www.london.gazette.co.uk/issues/39041/supplements.
throughout the first twelve months of war proved to be substantially correct, a point that both the participants and the histories have acknowledged as a major impediment to the RN maintaining its blockading activities.\textsuperscript{30} His observations concerning the employment of the Luftwaffe in offshore commerce-raiding were similarly accurate, especially given the results obtained against the Atlantic and North Russian convoys. This again stands as an example of the value to be obtained in qualitative superiority, as a meagre handful of long-range Focke-Wolf \textit{Kondor} aircraft had succeeded in sinking almost 500,000 tons of merchant shipping by the conclusion of 1940, a factor that Churchill readily acknowledged within his post-war accounts.\textsuperscript{31}

By April 1942 the RAF bore physical testament to the credibility of Rosinski’s broad proposition that command of the sea resided in an effective partnership between a fleet and an air force, even if the air-arm was (at worst) modestly inferior. The central issue to be addressed here is whether the RAF met the author’s stated prerequisite, and if not, why did it eventually succeed? In support of his argument Rosinski cited the instance whereby the Royal Navy had maintained control over the Channel following the Dunkirk evacuation and a German maritime invasion of Britain had been prevented by the combination of sea command and adequate fighter cover.\textsuperscript{32} Within British coastal waters and the North Sea both the Fleet and the merchant convoys could generally rely upon a large fighter force together with the vast majority of the RAF’s bomber and reconnaissance elements. The situation in the Mediterranean, however, was another story. There is no hint to be found within


\textsuperscript{32} Rosinski, ‘Mahan and the Present War’, \textit{BSY 1941}: 206.
Cunningham’s despatch concerning the engagement at Matapan as to whether he intended relief or sarcasm to colour the observation that this had been “the first time [March 1941] that our bombing aircraft had co-operated with the fleet at sea.” If the latter, his attitude would have been entirely understandable because, until June 1942 at the earliest, the RAF’s material presence in the Mediterranean could only be described as profoundly inferior in respect of all classes of aeroplane, especially fighter aircraft.

Given the overwhelming superiority which the Luftwaffe and the Regia Aeronautica could exercise in the Mediterranean, the failure of both Axis air forces to decisively sweep away British and Allied shipping represented a costly own-goal on their part. Baumbach’s explanation concerning the perils of dual command represented but a portion of the answer, as he additionally noted that a sustained air campaign in the Eastern Mediterranean would have potentially dealt the British Empire a mortal blow by neutralising the Suez Canal as a transport and communications link. This point illustrates the critical problem which neither the German or Italian air staffs were able to manage, namely sustainability. Whilst the Luftwaffe’s elite Fliegerkorps X anti-shipping unit at times terrorised the British to the east of Sicily, the periodic dilution of its fighter and attack units for service on the Eastern Front seriously dented the unit’s capacity to press home its advantage to the fullest extent possible. Likewise the Italians suffered from pressing commitments in North Africa and did not similarly utilise their aerial resources as should have been the case. Accordingly the RN managed to maintain its presence at Gibraltar, Malta and Alexandria, but only just in the latter two instances. Yet the situation would begin to change from mid-1942 onwards, as the British produced increasing numbers of high quality fighters, and fighter-bombers such as the

33 Cunningham, Despatch, LDNGZT 29.7.1947: 3592.
Bristol Beaufighter and the de-Havilland Mosquito which, with American assistance, eventually exercised land-based air superiority throughout the European maritime theatre.

The chief aerial nemesis for the RN in the Mediterranean came in the form of the Junkers 87 dive-bomber (73: left), the fearsome Stuka which had terrorised its opponents during Germany’s blitzkrieg campaigns in Poland, the Low Countries and France. Operating with Fliegerkorps X, Stukas sank or damaged numerous British warships including the light cruiser HMS Gloucester (74: right), which was sunk during operations off Crete in May 1941.

Within a 1935 memorandum concerning the planning for a future war in the Mediterranean, the Admiralty’s staff planners predicted that it could be necessary to conduct operations from external locations ‘until the test of war can prove what the threat from the air really amounts to.’ In correspondence with Admiral Pound following the evacuation of Crete in May 1941, Cunningham drew the following conclusion:

As I have always feared, enemy command of the air unchallenged by our own Air Force and in these restricted waters with Mediterranean weather is too great odds for us to take on except seizing opportunities for surprise and exercising upmost circumspection.36

If Cunningham considered the presence of the Luftwaffe and the Regia Aeronautica to be a menace in the narrow waters of the Mediterranean, these air-arms were in reality a far less potent proposition than what the Royal Navy would encounter within the island geography beyond the Malay Barrier. Neither of the European Axis air forces possessed land-based bombers and attack aircraft with anything approaching the operational ranges of their Japanese equivalents. Neither possessed a fighter aircraft with the endurance of the Zeke, which could fly as far (or farther) than virtually all of the German and Italian medium-bomber types.\(^{37}\) And neither could sortie mass strikes by over three hundred dive-bombers and torpedo planes aboard six large aircraft-carriers. Whereas the Axis could at best obtain periodic air superiority above the seas and oceans of the European theatre, Japanese air supremacy beckoned in the Far East.

‘Sea Communications Maintained’

Rosinski’s analysis of the state of British sea communications as of October 1940 encompassed each of the principal fields in which the Royal Navy had been required to resist Axis efforts to sever Britain’s maritime lifelines. Commencing with an appraisal of the assault on British shipping in the Atlantic by Germany’s U-Boats, he proposed that new methods would need to be found to combat the submarine threat so as to prevent it from becoming a serious menace. In his comments regarding the relative success of surface raider activity, Rosinski assessed the impact of the Kriegsmarine’s warships as limited, far less effective than the activities of merchant raiders which had led Churchill to express unease over the state of British defences in the “outer oceans.”\(^{38}\) The author then turned briefly to the effects of German naval activity in the English Channel before discussing the reduced

\(^{38}\) Churchill, *Their Finest Hour*: 528.
effectiveness of the RN’s blockade because of the Reich’s access to resources through the outcomes of its European conquests and the application of the Molotov-Ribbentropp Pact between Germany and the Soviet Union.39 From this point he commenced a preliminary examination of the relative position of sea power within an evolving wartime environment that reflected the increasing dominance of land-based military mobility, an exercise that he expanded upon under the subsequent subheading. The principal question which arises presently, however, is whether the Royal Navy possessed the operational means to maintain its supremacy in defiance of an extended period of Allied strategic inferiority.

From the outset it is argued that the period between September 1939 and May 1942 should be regarded as the evolutionary phase of the conflict between the RN and the U-Boat. By May 1942 the combatants had acquired the necessary tactics and weapon types to prosecute their operational intentions; however neither side yet possessed the required volume of firepower to inflict a crippling defeat upon its opponent. From the Axis perspective the Italian submarine campaign contributed little, largely due to the provision of poor intelligence and operational tactics, together with a growing fuel shortage which had begun to limit all aspects of Italian naval operations from mid-1942. By contrast the Kriegsmarine’s U-Boats had sunk an estimated 4.8 million tons of merchant shipping by December 1940 and would sink an additional 8.4 million tons throughout the remainder of the specified period.40 Working in partnership with the long-ranged Kondors and on occasion raiding warships such as the heavy cruiser *Hipper*, the submarines profited from Doenitz’s introduction of wolfpack tactics in October 1940 when seven of their number sank half of the 34 ships in Convoy SC7 without sustaining any losses themselves. However, as Doenitz explained in a 1973 television

interview, less than half of Germany’s U-Boats were available for direct deployment on the convoy routes because of defensive commitments in various coastal locations and the production of new boats had not yet assumed a sufficient priority status within the Reich’s armaments industries thanks to Hitler’s preoccupation with the Eastern Front.41

Despite approaching defeat at the hands of the U-Boats in early 1943 the British were able to summon enough in the way of a technological advantage together with a growing number of escort craft and the assistance of the Canadian and American navies to eventually prevail. The Admiralty had commenced the war with the incorrect assumption that, even in the event of Germany conducting unrestricted submarine warfare, only limited attacks would take place outside British home waters.42 It then made a fatal blunder by employing hunter-groups in a vain attempt to track down U-Boats in the Bay of Biscay, which resulted in the loss of the fleet carrier *Courageous*. By the time at which Rosinski was applying pen to paper the U-Boats already constituted a most serious menace for the Admiralty, in part because the British had still to fully recognise the primary role of airpower in this field of operations. Thanks to two low-cost innovations, firstly the Catapult Armed Merchant (CAM) ships and then, in December 1941, the employment of a converted merchantman as the escort-carrier *Audacity* in Convoy HG76, the solution had been found. In partnership with the expanding resources of Coastal Command and American assistance in the form of very long-range B-24 Liberator bombers, the employment of escort-carriers and new aggressive anti-submarine tactics won the day.43 For in spite of Doenitz eventually winning Hitler’s approval for the

41 A. Cunningham, Despatch 19.3.1941: *Operation EXCESS*, LDNGZT Issue 38377, 10.8.1948: 4511 [http://www.london.gazette.co.uk/issues/38377/supplements](http://www.london.gazette.co.uk/issues/38377/supplements); Tovey, Despatch: LDNGZT13.10.1950: 5141; Doenitz, Interview with BBC Television 197; Kennedy, *The Rise and Fall of British Naval Mastery*: 303; Bekker, *Hitler’s Naval War*: 235-236.


prioritisation of submarine construction, by mid-1943 the Allied anti-submarine aerial umbrella had come to assume unchallengeable proportions.

A Hurricane fighter is launched from a CAM ship (75: left), whilst the escort-carrier HMS Audacity (76: right) revolutionised future convoy anti-submarine defences, although she did not survive her maiden voyage as part of the escort for Convoy HG76.

Rosinski’s reference to the lack of decisive results achieved by Germany’s surface warships against British sea commerce remained a credible assertion from November 1940 onwards although the Germans did conduct several successful Atlantic operations throughout the first six months of 1941. The neutralisation of the threat posed by Hitler’s big ships did not, however, arise from a stream of interceptions by the Home Fleet, indeed quite the opposite. The battle-cruisers Scharnhorst and Gneisenau, the pocket-battleship Admiral Scheer and the cruiser Hipper were all able to ‘break out’ from their North Sea bases unmolested and subsequently evade engagement with the British squadrons that pursued them. Yet thanks to the Admiralty’s practice of assigning the Fleet’s older battleships and aircraft-carriers to convoy escort wherever possible, the Germans exercised great caution in choosing their targets, often preferring to pick off ships that were steaming independently. Following the sinking of the Bismarck in May 1941 the Kriegsmarine’s raiding warships shifted their attentions to the North Russian convoy routes where combined operations with U-Boats and
the Luftwaffe inflicted serious losses in the latter half of 1942.\textsuperscript{44} However the German fleet always suffered from the disadvantage of not possessing aircraft-carriers. A number of post-war histories have rightly speculated how the course of the entire Atlantic campaign could have been dramatically altered had the \textit{Graf Zeppelin} accompanied these raiding sorties, as the German capital-ships in opposed surface combat were technically superior in many respects to their British counterparts.\textsuperscript{45}

\textbf{(3) Operation Rheinubung – the pursuit of the German battleship Bismarck, May 1941.}

Confronting a German battle-squadron which enjoyed the support of modern fighters and strike aircraft launched from the \textit{Graf Zeppelin’s} flight deck represented a potential nightmare which the Admiralty, most fortunately, did not have to contend with. Instead the vast majority of British surface actions took place within the Mediterranean against the Regia


Marina, itself a formidable opponent due to the large array of modern warships that were fielded by the Italians. Yet as explored previously, the Royal Navy’s integrated battle tactics provided the vital edge as the Italian fleet did not possess an aircraft-carrier and the Italian commanders invariably attempted to break off an engagement once they were made aware of the presence of a carrier within a British force. The positive results which the British obtained in the battles of Calabria and Cape Spartivento were achieved more through deterrence than the infliction of major punishment given that the high-speed Italian warships were virtually impossible to catch if they evaded the Fleet Air Arm’s torpedo attacks. Cunningham’s victory at Cape Matapan became the classic illustration of what the RN could achieve when the Regia Marina’s ships were decisively engaged as his battleships demonstrated their mastery of night surface battle through the combination of clever manoeuvring and radar-controlled gunnery at close range to sink three enemy heavy cruisers. Likewise the superiority of British tactics succeeded in repelling sorties that sought to interdict convoys in situations where the Italians held sway in both numbers and firepower.

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(4) The Battle of Cape Matapan, March 1941.

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Rosinski maintained that Germany’s disguised armed merchant raiders had accomplished more than the Kriegsmarine’s big ships during the first year of war, and in terms of bringing mischief to Churchill’s outer oceans this appraisal was justified. Less than a dozen of these ‘auxiliary cruisers’, each heavily armed with guns, torpedoes and mines, succeeded in generating havoc throughout both the South Atlantic and Indian Oceans. Prior to being sunk by the heavy cruiser Devonshire on 22 November 1941, the Atlantis had destroyed over 140,000 tons of shipping by preying on unescorted merchant traffic. Another raider, Pinguin, sank over 160,000 tons during a voyage lasting 357 days, sustained by a network of pre-positioned supply ships and tankers.\footnote{A. Willis, Despatch 8.12.1941, 29.12.1941: Actions Against Raiders, LDNGZT Issue 38349, 9.7.1948: 4009-4012 http://www.london.gazette.co.uk/issues/38073/supplements; Churchill, The Grand Alliance: 463.} Shells were lobbed into a British wireless station on Nauru, mines laid off Auckland and in Bass Strait, whilst combined operations with U-Boats in the South Atlantic produced rich pickings for these solitary hunters. The raiders also represented a deadly menace for unwary warships, the Australian light cruiser Sydney being sunk with all hands by the Kormoran on 19 November 1941. Eventually the Royal Navy’s patrolling cruisers were able to track down and destroy three of their number; only two of the remainder survived the war.\footnote{Churchill, Their Finest Hour: 525; G. Odgers, The Royal Australian Navy: An Illustrated History (Hornsby: Child & Henry, 1982): 88-94; Roskill, The Defensive: 277-280.} Whilst the overall level of damage wrought by these ships proved to be insignificant when compared with the carnage generated by the U-Boats, they were responsible for the RN having to assign valuable resources to the Empire’s peripheries in order to maintain control of the shipping lanes.

The activities of the disguised raiders provided a firm illustration of Rosinski’s contention that the Germans and the Italians had set out to inflict “at least the maximum destruction” upon British sea communications, rather than seeking to wrest command of the sea itself.\footnote{Rosinski, ‘Mahan and the Present War’, BSY 1941: 203.}
Sorties by Axis light forces against coastal shipping in the English Channel and the Mediterranean proceeded in a similar vein, with the Kriegsmarine’s motor-torpedo E-Boats creating a considerable volume of discomfort. The most noteworthy of these efforts came in the form of attacks mounted by Italy’s Decima Flottiglia MAS because the Italians, contrary to derogatory post-war impressions regarding their valour and commitment, were prepared in this instance to sanction a range of methods that were clearly semi-suicidal in nature. However the catalogue of assaults undertaken by the Regia Marina’s explosive motorboats and semi-submersible manned torpedoes could not redress the inherent disadvantage of a navy that remained entirely devoted to the concept of a fleet-in-being, nor could the Kriegsmarine hope to prevail in the Atlantic without the sustained fulsome coordination of surface, submarine and air assets.\textsuperscript{51} Stretched as it was, the Royal Navy retained its supremacy through the incapacity of the Axis navies to deliver a knockout blow, together with the Admiralty and its field commanders conjuring the required level of operational flexibility to counter the variety of sea-borne threats that were deployed against them. At the same instant the RN displayed its offensive capabilities in seeking to blockade German and Italian sea commerce, albeit with mixed results.

With the German occupation of Norway in 1940 and the Luftwaffe’s presence in the North Sea and the Norwegian Sea, the Royal Navy’s role in the active blockade of enemy shipping undoubtedly suffered a major setback. Sorties conducted by cruiser and destroyer flotillas yielded only modest results throughout the period in question, whilst a daylight attack against merchant shipping located at Kirkness and Petsamo on 12 September 1941 proved to be a

disaster for the FAA as it inflicted only minimal damage at the cost of over half the attackers being lost to defending fighters and flak. Attacks from Britain’s smaller submarine arm likewise yielded only modest results which were miniscule in comparison with those achieved by the U-Boats; by December 1942 the RN’s boats had sunk just 250,000 tons of merchant shipping – thirty-six ships in all. However better fortune was to be found in the Mediterranean where the combination of RAF and Fleet Air Arm operations, surface attacks and submarine activity decimated the Italian merchant marine, with the submarines alone sending an estimated 585,000 tons (195 ships) to the bottom. The solution for the initial lack of British success along the northern seaboard lay with the increasing strength of Coastal Command; by 1944 the RAF had throttled much of Germany’s iron ore shipments through the combination of minelaying and low-level strikes by Coastal Command’s fighter-bombers. Yet the overall effects of sea blockade against Germany were muted by the fundamental nature of the European conflict itself.

The German armed merchant-raider Atlantis (77: left), and her compatriot Kormoran (78: right) victualling a U-Boat in the Indian Ocean. Kormoran sank HMAS Sydney off the Western Australian coast, but was subsequently scuttled because of the heavy damage that she had sustained in the engagement.

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‘New Limitations on Sea Power’

For the purposes of the work as a whole it is necessary to determine the impact of the wider European conflict as conducted prior to April 1942 upon the Royal Navy’s capacity to wage war on a global stage. Under this final subheading Rosinski turned from his consideration of the naval war at the tactical level to the broader issue of the relationship between sea and land warfare, the second of Alfred Mahan’s core strategic principles. He commenced by expanding upon his contention that the Norwegian campaign demonstrated the modern difficulties which sea-power experienced when attempting to isolate land-based objectives by great naval campaigns, and predicted a similar fate for Greece should the Germans attempt a future land invasion. Rosinski utilised these examples in expanding his enquiry to an assessment of the relative power of sea and land warfare as a general principle, asserting his belief that the suzerainty of the sea power could be nullified through the domination of the European plain by mechanised forces and airpower. The final topic which he explored was the strategic difficulties which the British Empire would face in this new environment, especially the possibility of a titanic Asian struggle between land and sea which Mahan had foreseen within his writings. These aspects have been similarly addressed by historians in the post-war era, with Paul Kennedy’s appraisal serving here as a means to compare and contrast Rosinski’s wartime analysis with a more recent revisitation that encompasses the Second World War in its entirety.

When considering Rosinski’s observations concerning the situation in Norway and Greece the outcomes of both campaigns clearly supported the validity of his claims. In each instance the mobility displayed by the invading German forces, be it by way of airborne or

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54 Rosinski, ‘Mahan and the Present War’, *BSY 1941*: 208.
mechanised assault, could not be countered by naval intervention, and the participation of the RN in both episodes did not succeed in overcoming the formidable advantage which the Axis enjoyed in the skies. Yet to portray land mobility accompanied by airpower as the sole factor responsible for the diminution of maritime influence during the opening phases of the European war is an overly narrow interpretation. Whereas the Wehrmacht’s employment of blitzkrieg would be fully expected to steamroll ill-prepared opponents that relied upon horse cavalry and bicycles, this would not be the case where the opposition possessed larger numbers of tanks and mechanised vehicles, and a not dissimilar number of aircraft. Germany’s conquest of France, the pre-war bulwark of continental Allied security, came about as much through the inertia of the French government and its military leadership as through the Wehrmacht’s clinical battlefield execution. The general state of political and military atrophy which had plagued France throughout the interwar years produced a command structure that comprehensively failed to utilise the formidable array of mobile ground forces at its disposal, though the Luftwaffe held a definite edge over its French and British opponents. In this most critical campaign, innate stupidity did not enjoy the companionship of overly profound material inferiority.

There is no doubt that France’s surrender and the loss of support from the Marine Nationale stretched the RN’s resources to a far greater extent than it had previously experienced, thoroughly justifying Churchill’s assessment that Britain’s command of the sea (in material terms) could only be successfully orchestrated upon a selective basis. Both Rosinski and Kennedy rightly regarded the British blockade of German shipping as being diminished in its effectiveness because of Germany’s continental conquests; however the former’s belief that

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blockade would precipitate a food crisis as Germany would be burdened with captive peoples proved incorrect. This misunderstanding should be regarded as acceptable because as of October 1940 the Reich had yet to take substantial measures in curbing the problem by what A.J.P. Taylor described generally as “autarky without restraint”, specifically the systematic malnourishment of Occupied Europe. Yet even if Whitehall had exaggerated the effects of economic warfare being waged in this fashion (as Kennedy and many others have asserted), the Admiralty remained committed to distant blockade because it could not permit free access to the Atlantic shipping lanes for the Kriegsmarine’s warships and merchant raiders. However the RN in its pre-war planning not only acknowledged the need for a powerful Home Fleet to be positioned whereby it could intercept breakout attempts, but also the necessity for what it described as the ‘air counter-offensive’ to nullify the presence of the Luftwaffe itself. But by April 1942 the anticipated fulfilment of this strategy by the RAF had yet to bear fruit.

Following the fall of France the British options for waging offensive warfare against the European Axis powers were limited for the foreseeable future to air attacks against Germany and Occupied Europe and campaigning against the Italians in the Mediterranean and North Africa. With the benefit of hindsight, Kennedy has correctly identified the systematic Allied campaign of strategic bombing and tactical air interdiction as an entirely separate element of war, unlike Rosinski’s concepts which were understandably based upon the experience of blitzkrieg prior to October 1940. The effects of Allied air activity over Europe did not begin to inflict telling blows upon German armaments production until January 1944 (with the

60 Kennedy, The Rise and Fall of British Naval Mastery: 309-311.
introduction of effective long-range fighter escort for the bombers), and as such the Royal Navy had not received any significant benefits for its operations by April 1942 through this particular means. Because of its strategic significance as a critical artery for British sea communications, the Admiralty had always sought to maintain a one-power advantage in the Mediterranean since the eighteenth century, and with the onset of the Abyssinian Crisis of 1935 it had planned for a large naval presence in this theatre.\footnote{Doc. 446, \textit{British Naval Documents 1204-1960}: 779-780.} Fighting in the Mediterranean undoubtedly suited the RN’s long-standing aptitude for opposed surface combat although its methods were to be constantly tailored by the threat of hostile land-based air activity. And as the reader has observed, the political pressure to strike back at the Axis wherever possible led to the conduct of offensive sorties in often unfavourable tactical circumstances.

In spite of the Western Allies emerging triumphant in the Mediterranean, within the skies over Germany and through the eventual creation of the second front in Western Europe with the execution of Operation OVERLORD, the crucible for the ultimate Allied success in the wider European war lay upon the steppes of Russia. Within the post-war histories there exists an almost unanimous acknowledgement that Hitler’s maniacal ambitions were firstly broken and then subsequently extinguished by the overwhelming might of the Red Army. For the Royal Navy, the Eastern Front presented a double-edged sword. British aid to the Soviets in the form of northern convoys to Russia further elasticised the Fleet’s already stretched resources, especially in a combat environment in which the presence of German surface warships, bombers and U-Boats was complemented by climatic conditions that favoured the cause of successful convoy interdiction.\footnote{Baumbach, \textit{Broken Swastika: The Defeat of the Luftwaffe}: 89-90; Tovey, Despatch: \textit{LDNGZT} 13.10.1950: 5141-5143.} Yet the exertions of land campaigning in the East also led to the final diminution of the Luftwaffe’s offensive air capabilities elsewhere, as its
Kampfgeschwaden were increasingly consumed in epic ground confrontations such as Stalingrad and Kursk. As both Kennedy and other historians have recorded, the great struggle in the East led to the eclipse of Mahan’s concept of the dominance of sea-power. Control of the ‘heartland’, the core principal espoused by Mahan’s great theorist rival, the geopolitician Halford Mackinder, confirmed the necessary superiority of continental military power, albeit likewise in partnership with the air weapon.

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Though Rosinski’s and Kennedy’s interpretations were estranged by the gulf in time and circumstance that existed between them, both authors confirmed the maintenance of Mahan’s most fundamental strategic tenet – the need to ensure the integrity of the maritime power’s sea communications. And by April 1942 the Royal Navy had thus-far accomplished this; it had held the line despite incurring punishing losses at the hands of its European Axis naval opponents. However, one aspect of Rosinski’s commentary remains to be explored – the impact of the European conflict upon the fortunes of Britain’s broader imperial defences. Rosinski believed that the bastions of British imperial rule in Asia, most especially India, were now exposed to land attack by what he described as “new super war machines”. The inference to be drawn from this assessment is again the author’s positive analysis of the effects of blitzkrieg as had been exhibited during the opening twelve months of hostilities. History records that Rosinski’s interpretation proved to be incorrect, at least in part. Hitler’s

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63 Bomber squadrons.
desire to expand German hegemony beyond the Caucasus finally evaporated upon the Russian steppes and within the devastation of Stalingrad. Yet in the Far East from April 1941 there dwelt a super war machine, an instrument of destruction the likes of which the world have never seen. And in the early daylight hours of 7-8 December 1941 this machine unleashed the full fury of an aerial maelstrom that heralded the end of British naval supremacy in the twentieth century.
Chapter Five

Surrendering supremacy: Force Z revisited, December 1941 – March 1942

(79) Force Z being targeted by high-level bombing during the early stages of the Japanese attack on 10 December 1941. The battle-cruiser HMS Repulse (bottom left) has just been hit as the battleship HMS Prince of Wales (top right) takes evasive action.
As the capital ships H.M.S. *Prince of Wales* and H.M.S. *Repulse* departed the Singapore naval base at 1735 hours on 8 December 1941 a sense of foreboding permeated many of those who observed their movements from ashore. ‘Quos Deus vult perdere, prius dementat’ remarked Captain O.W. Phillips to a subordinate as they observed the vessels steaming slowly eastwards – *Those whom the Gods wish to die, they first make mad*.¹ This became an apt description for an ill-conceived expedition that sought to defy a clearly overwhelming hostile air and naval presence. The United States Pacific Fleet’s battleline lay shattered within its Pearl Harbour roadstead, the surrounding airfields sporting the scorched and twisted remains of dozens of fighters, bombers and reconnaissance aircraft. At Clark Field, sixty miles to the north of Manila, the principal elements of the U.S. Army’s Far Eastern Air Force had been bombed to the point of total annihilation. And upon the runways of RAF Malaya Command’s vital northern aerodromes there too resided the blackened detritus of wrecked and shot-up aeroplanes, guttered hangers and charred corpses. All of this bore mute testament to a litany of precision destruction ruthlessly orchestrated by Japan’s formidable naval and army air-arms. Yet just as Caesar had strode resolutely to the Senate upon a March day in a bygone age, Admiral Sir Thomas Phillips instructed Force Z to steam north by east towards the Gulf of Siam in spite of the dire warnings of impending peril that had both preceded and accompanied his squadron’s departure.

Arthur Marder’s utilisation of ‘Iliad’ as the title of the chapter within *Strategic Illusions* which explores the eventual sinking of Phillips’ capital-ships on 10 December 1941 is a noteworthy choice, as the fate of Force Z has emerged as an enduring fable in post-war memory.² Within a variety of relevant historiographies it has acquired a highly symbolic

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¹ Marder, *Strategic Illusions*, 1936-1941: 423.
² Ibid, Chapter XIV: 441-491.
flavour, coming to represent the eclipse of the battleship by the air-weapon, the eclipse of British naval supremacy and the eclipse of the British Empire itself. In the second of these instances, however, symbolism does not equate with substance. The current chapter will indeed contend that the Royal Navy could no longer maintain its supremacy in a narrow waters environment because of the superior employment of both land-based and carrier-borne airpower on the part of its opponent. Yet when taken in isolation, the circumstances which surrounded the disaster off Kuantan do not in themselves account for this outcome. The key factor which has emerged throughout the previous chapter is that the command of the sea in the Second World War could not be determined in a singular fashion, given the broad range of methods and capabilities that were required to conduct operations within markedly different geographical settings. In the present case, a reasoned interpretation can only be arrived at through the presentation of a practical hypothesis, in effect a best-case scenario, as the events themselves were not adequately indicative of the RN’s capacity to operate within the peculiar constraints of enclosed seas.

**Chronology of Far Eastern Events: December 1941 – March 1942**


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3 Salmaggi & Pallavisini, *2194 Days of War*: 183-222. *Note: this chronology has been provided for the same purposes as those applying to the chronology within the previous chapter.*

Debunking Force Z: the necessity for a counterfactual analysis

It is useful to commence this topic with a brief outline of the events that followed Admiral Phillips’s departure from Singapore on the evening of 8 December 1941. Seeking to interdict the Japanese invasion convoys which were disembarking troops at Singora, Patani and Kota Bharu, Force Z came under observation by enemy air reconnaissance at dusk on 9 December. Deprived of the element of surprise, Phillips determined to return to Singapore, however his ships altered course towards Kuantan following the receipt of a signal that the Japanese had commenced landing activities there. On arrival off Kuantan shortly after dawn on 10 December, the British found the invasion report to be false and at 1115 hours Force Z came under attack from land-based aircraft of the IJNAF’s Genzan, Mihoro and Miyauchi air corps. Prince of Wales suffered serious damage from two torpedo hits at 1144 which crippled her steering system, propulsion and electrical power, leaving her an easy target for further

\[4\] Kuantan is located approximately 130 miles to the south-west of the point that Force Z had reached when spotted on 9 December.
torpedo strikes. Repulse successfully avoided numerous attacks before she too was struck at 1225 by several torpedoes that caused her to quickly roll over and capsize, with 796 of her 1309 officers and crew being subsequently rescued. Prince of Wales lingered on until 1320 at which time she also foundered. Destroyers came alongside before she sank and safely disembarked 1285 of the 1612 personnel aboard, however Phillips elected to go down with his flagship. Of the eighty attacking aeroplanes, only three were shot down by anti-aircraft fire.⁵

(80-81: Left to right) The battleship H.M.S. Prince of Wales and the battle-cruiser H.M.S. Repulse – Repulse photographed as she departed Singapore on 8 December 1941. Note the camouflage pattern on Repulse’s hull and superstructure.

The material disposition of Force Z presents a particularly relevant contention in favour of disregarding the squadron (as it existed) as an accurate measure of British naval capabilities. Within his January 1942 memorandum concerning the sinking of the two vessels, Admiral Pound admitted that two capital ships and four destroyers did not constitute the Admiralty’s existing concept of a balanced fighting force, and the histories have invariably reached a

The sinking of the Prince of Wales and Repulse, 10 December 1941.

similar conclusion. Since the outbreak of hostilities with Germany, the composition of the Royal Navy’s various fleets and squadrons had assumed a particular character in terms of their dispositions whereby the force in question generally consisted of one or more capital ships supported by a single aircraft carrier, half a dozen cruisers and a screen of up to a dozen destroyers. Now as Marder, Russel Grenfell and others have highlighted, Force Z could have been brought up to strength by the addition of British and other Allied cruisers and destroyers which were in the vicinity of Singapore had Phillips delayed his passage north. And the histories have likewise noted the early withdrawal of the carrier Indomitable which had been

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ordered to Singapore but sustained hull damage in the Caribbean that required repairs. It is clear that Force Z only ever existed in embryo form as an active squadron, and the issue of its operational effectiveness when dealing with the wider question of naval supremacy cannot be adequately resolved without considering how it would have likely performed if present in fuller strength.

Indeed a number of the histories have addressed this point although only a few of these have considered the issue upon a wider geographical basis than the control of the South China Sea alone. Their published views have ranged from P.K. Kemp’s assertion that Force Z as it existed could have inflicted another Cape Matapan against Admiral Kondo Nobutake’s screening force, to Marder’s interpretation that a strengthened British presence within the Malay Barrier would have been eventually overwhelmed by Japanese naval might. Yet in most instances the volume of analysis pertaining to the subject has been quite limited. Even Malcolm Murfett, whose thoughtful assessment of the differing methods which were available for a more rigorous naval execution of the Singapore strategy is amongst the most informative of the available studies, does not address the potential combat outcomes in any particular detail. And it appears that none of the published sources have turned their minds to the subsequent intervention of the Kido Butai carrier force within the Indonesian archipelago, and the peculiar interaction of diverse tactical doctrines that such a confrontation would have entailed. In contrast to the prevailing historiographical practice whereby an analysis of Force Z’s potential capabilities has been invariably employed as a contextual device, a counterfactual exercise is the primary subject for exploration here. However this approach

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7 Marder, Strategic Illusions, 1936-1941: 422; Grenfell, Main Fleet to Singapore: 92, 96.
8 Kemp, Key to Victory: The Triumph of British Sea Power in World War II: 204; Marder, Strategic Illusions, 1936-1941: 506.
9 Murfett, “Reflections on an Enduring Theme; The 'Singapore Strategy at Sixty'”: 17-18.
can only be credible if a best-case alternative reflects a historically rational disposition of available British and Japanese naval and air assets and the employment of practicable operational strategies.

The absence of a practicable operational strategy for Force Z’s deployment in the Far East provides a further rationale why its substantive analytical value is limited. Churchill’s decision to utilise Phillips’ squadron as a means to deter Japanese maleficence in the Gulf of Siam through its presence as a “vague menace” did not constitute a rational disposition for deterring an amphibious operation that enjoyed the protection of powerful surface and air screening forces.\textsuperscript{10} Within the post-war histories there has been a widespread acknowledgement of this fact, and it is clearly evident from the tenor of Pound’s memorandum that the Admiralty was fundamentally opposed to Churchill’s initiative. Indeed within \textit{The Grand Alliance} Churchill conceded that Force Z could only exercise the vague menace that he hoped would negatively influence Japanese naval calculations by vanishing “among the innumerable islands”, and no definitive plan had been formulated for its operational utilisation as of 10 December 1941.\textsuperscript{11} What is noteworthy about the choice of deterrence as the squadron’s initial task is that the Admiralty had been compelled by Whitehall to undertake what was essentially a long-practised solution for peacetime imperial crises. Attempting to intimidate a nation which possessed one of the most formidable fleets on earth with a display of gunboat diplomacy that would have ordinarily been employed against smaller and less able miscreants represented a particularly culpable misjudgement on Churchill’s part. And to make matters worse, both Whitehall and the Admiralty clearly nominated an unsuitable fleet commander to implement the Prime Minister’s wishes.

\textsuperscript{10} Churchill, \textit{The Grand Alliance}: 524-525, 547.  
\textsuperscript{11} Doc. 469, \textit{British Naval Documents 1204-1960}: 848-850; Churchill, \textit{The Grand Alliance}: 547.
The behaviour exhibited by Admiral Phillips in seeking to engage the Japanese with an ill-balanced squadron in the absence of carrier-borne and/or land-based fighter cover has generated an equivocal interpretation within the post-war accounts. Whereas Phillips’s decision to undertake the mission in these circumstances has been rightly lamented, Roskill, Kemp and Marder are amongst others who have supported the notion that the admiral could not have elected to effectively ‘let the side down’ by failing to take action against the Japanese landings.\(^\text{12}\) However this line of reasoning should carry little weight when Phillips’s actions are compared with Admiral Cunningham’s response to the Crete crisis. Despite the necessity for the immediate evacuation of thousands of Commonwealth troops, Cunningham had refused to risk the deployment of his big ships within a combat environment where the enemy maintained overwhelming air superiority.\(^\text{13}\) Phillips’s service background and attitudes towards the air weapon will also be viewed as compelling reasons why he was largely unqualified for active command. He possessed no field experience, having been assigned to the Admiralty as Pound’s subordinate throughout the opening phase of the war, and he had steadfastly refused to digest any of the lessons which airpower had provided during this period. Perhaps the most damming critique of the admiral’s abilities will be found within subsequent assertions from both Roskill and Richard Hough that Phillips had been sent to the Far-East to in effect rid the Admiralty of his truculent conservatism which had consistently alienated his more experienced fighting colleagues.\(^\text{14}\)

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\(^\text{13}\) Cunningham, Despatch: \textit{LDNGZT}, 21.5.1948: 3103-3104.

Admiral Sir Thomas Phillips (82: left-centre) upon his squadron’s arrival at Singapore. Phillips subsequently sortied Force Z despite advice from Air Vice-Marshall Conway Pulford (83: right-centre, wearing dress cap) that no land-based fighter support could be provided by RAF Malaya Command.

When turning to the immediate material consequences of Phillips’s ill-advised sortie, Okumiya Masatake’s verdict succeeded in expressing the importance of this episode in its widest practical context:

The Battle of Malaya illustrated in the most forcible manner that a surface fleet without fighter protection was helpless under enemy air attack. The battleship, long the ruler of the seas, had been toppled from its dominant position and was now just another warship to be destroyed by aerial assault.15

As the first occasion upon which capital ships had been sunk by aircraft at sea, the symbolism and substance of the Force Z disaster was significant. Yet in spite of its obvious historical importance, this episode represented only a portion of the complex operational paradigm for a

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broader determination of naval supremacy as a whole. Within the Mediterranean especially, the interaction of air, surface and submarine activity had all formed part of this equation as did the skilful utilisation of the often numerically and materially inferior British forces involved. And Grenfell’s assertion that Force Z marked the end of an epoch of British naval dominance does not reflect the need to consider the exercise of command in the narrow seas as a distinctly different enterprise from that within the broad oceans.\textsuperscript{16} Basing a judgement of this breadth upon the fate of an ill-balanced squadron which lacked a rational strategy for its employment under the command of an inexperienced staff officer is as perilous an undertaking as that performed by Phillips’s squadron itself.

Before embarking upon the counterfactual analysis, it is necessary to briefly consider the place of the Force Z disaster within its broadest domain – that being the eventual fate of the British Empire. There is no disagreement with the generally accepted proposition that the sinking of the \textit{Prince of Wales} and \textit{Repulse} represented a particularly galling blow to British national and imperial prestige, most notably as part of the wider circumstances that surrounded the fall of Singapore. And there exists no contest with the prevailing trend in post-war historical thinking that has correctly identified Singapore as the most critically symbolic military episode in the Empire’s demise, reflecting in the words of Stuart Ward, John McCarthy and others, the failure of the ‘acid test on all the implied privileges of unlimited protection.’\textsuperscript{17} However it should also be borne in mind that Force Z came to represent but a further example of the immediate psychological impact which a major naval disaster inevitably generated. Within his account of the pursuit and destruction of the \textit{Bismarck}, Ludovic Kennedy recalled that for the British nation at large, the sinking of

\textsuperscript{16} Grenfell, \textit{Main Fleet to Singapore}: 209.
\textsuperscript{17} S. Ward, ‘Security: Defending Australia’s Empire’: 249.
H.M.S. *Hood* in May 1941 “was traumatic, as though Buckingham Palace had been laid flat or the Prime Minister assassinated, so integral a part was she of the fabric of Britain and her Empire.”\(^\text{18}\) Whereas the fate of Phillips’s big ships generated a similar reaction in the public forum, the substantive significance of their loss is likewise to be found within the material circumstances which surrounded their demise.

**Backhouse-Drax: composition and strategy**

Based upon the 1938 Backhouse-Drax model (as outlined in Chapter Two) for the provision of a balanced ‘flying-squadron’ to Singapore, the best-case Force Z would have initially consisted of the *Prince of Wales* and *Repulse*, the aircraft-carrier *Indomitable*, three heavy cruisers, four light cruisers and six destroyers. These dispositions are based upon the reasonable geographic availability of the additional cruisers and destroyers as of 10 December 1941 and the inclusion of the *Indomitable* which had been instructed to join the original squadron yet withdrew after she hit a sandbar shortly into her passage to Singapore. It is assumed in this instance that for strategic and tactical reasons which will be analysed shortly, Force Z would not contain American and/or Dutch warships – at least at first.\(^\text{19}\) The provision of convoy protection in the Indian Ocean represented the most suitable employment for a number of older British ships including the battleship *Revenge*, the aircraft-carrier *Hermes* and nine obsolescent light cruisers, all of which were based at Colombo. When addressing the potential upgrading of land-based air strength in Malaya and Singapore, however, the analysis can at best bring forward the reinforcements which arrived in Singapore from late December onwards including fifty Hurricane fighters and several


\(^{19}\) Chiefs-of-Staff Weekly Resume (COSWR) (No.119) of the Naval, Military and Air Situation from 0700 December 4th, to 0700 December 11th, 1941, TNA (UK): CAB/66/20/22; COSWR (No.120) of the Naval, Military and Air Situation from 0700 December 12th to 0700 December 18th, 1941, TNA (UK): CAB/66/20/24; Marder, *Strategic Illusions*, 1936-1941: 422.
understrength light bomber squadrons. Not even a modest level of assistance from the RAF could be supplied to the Far East until April 1942 because of competing strategic priorities elsewhere and the enormous distances over which air reinforcements had to be air ferried or conveyed by sea.20

From the Japanese perspective the analysis does not assume any significant alteration in the IJN’s historical dispositions for two reasons. Firstly the vast geographic range of localities to be targeted by aero-amphibious operations at the outset of hostilities did not permit the Japanese to be flexible in their dispersal of warships and aircraft until such time as the initial strategic objectives were achieved. And secondly, Japanese planning for a thrust into the Indonesian archipelago always envisaged the landings in Siam, Malaya and British Borneo to be the means for acquiring forward bases and airfields for a subsequent advance that would be covered by significant elements of the Combined Fleet.21 Furthermore Admiral Yamamoto had elected to entrust the neutralisation of the Royal Navy’s assets at Singapore to the 22nd Air Flotilla of the IJNAF’s Eleventh Koku Kantai (Air Fleet) based in southern Indo-China, with rapid support available from the 21st and 23rd Air Flotillas if required. Tasked with intercepting any British attempt to interdict the large troop convoys, Admiral Kondo’s Second Fleet consisted of two Kongo-class battleships, seven heavy cruisers, one light cruiser and fourteen destroyers. Once the small United States Asiatic Fleet had been forced to vacate the Philippines, the light carrier Ryujo and numerous cruisers and destroyers became available to either reinforce Kondo or to conduct separate operations within the approaches to

the Java Sea.\textsuperscript{22} Last and definitely not least, from February 1942 the Kido Butai could likewise join the action fresh from its recent rampage within the Pacific.

Given Japan’s immediate need to secure advanced bases so as to facilitate her major thrust into the Netherlands East Indies, the destruction of the Malaya-bound convoys represented the most practicable strategy for the British to pursue. The probable outcome for the Japanese in these circumstances would have been the necessity to regroup and significantly amend their tightly scheduled timetable, thereby providing a vital breathing space for the Allied nations to more effectively organise their defences to the west of the Philippines. Therefore the degree of success achieved by Force Z in the execution of these pre-emptive operations would likewise determine the fundamental nature of American-British-Dutch-Australian (ABDA) naval strategy to be employed within a wider subsequent campaign. The best prospects for inflicting a significant level of distress upon the Japanese lay in the conduct of coordinated attacks by the flying-squadron and land-based aircraft. As Commander-in-Chief, Far East Command, Air Chief Marshal Sir Robert Brooke-Popham had proposed a course of action known as Operation MATADOR which involved the utilisation of airpower and ground forces to repel landings in southern Siam. This strategy had been devised with the knowledge on Brooke-Popham’s part that no substantial RN presence was likely to arrive at Singapore before March 1942 at the earliest.\textsuperscript{23} Assuming, however, that the flying-squadron became available for deployment, a broader execution of MATADOR presented the setting for a British combined-arms triumph albeit with the need to vastly improve the tenuous inter-service relations that continued to prevail in the Far East at the time.


A successful repulse of the Japanese invasion forces required the effective involvement of land-based aircraft such as the Brewster Buffalo (84: left) and the Lockheed Hudson (85: right), both types being deployed in Malaya at the outset of hostilities on 8 December 1941.

In fact Brooke-Popham’s appointment as CIC Far East in October 1940 had been an effort on Whitehall’s part to do just that, and under his leadership there were improvements in relations between the three services. However the unfortunate Brooke-Popham possessed perhaps the most ambiguous command instructions for any British staff officer in the entire war as he could exercise no formal authority whatsoever over the Royal Navy, or over the Army and the RAF in the formulation of operational policy. Furthermore whilst he was given responsibility for initiating hostilities against the Japanese without prior Cabinet approval, his orders forbade a violation of Siamese neutrality in doing so. As Grenfell subsequently noted, Brooke-Popham had “the supreme political responsibility for provoking a war thrust upon him at a moment of acute international crisis”, a manifestly difficult adjudication to be made in circumstances where the British government did not wish to be cast as the aggressor. Yet prior to December 1941 he had established a conference system between the future ABDA partners which produced a viable structure for multilateral defence in the South-East Asian theatre. This included a proposal for cooperation between British, American and Dutch naval

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24 Brooke-Popham, Despatch on the Far East, CAB/66/28/33-0001: 5-6; Grenfell, Main Fleet to Singapore: 100.
forces which was discussed between Admiral Phillips and his American counterpart, Admiral Thomas Hart USN, when Phillips visited Manila on 5 December. Due, however, to the Japanese commencing their southern operations less than seventy-two hours later, no practical opportunity existed for the immediate formation of an integrated Anglo-American naval presence within the South China Sea.25

The assembly of Dutch warships within a multinational Force Z as of 8-10 December 1941 represented a similarly unrealistic prospect. As the conduct of the Battle of the Java Sea came to demonstrate, the hasty incorporation of vessels and personnel from a navy which employed a different language and signalling systems produced operational difficulties that could not be overcome without adequate preparation, undisturbed as it were by Japanese naval or aerial intervention.26 For the purposes of a combined-arms pre-emptive strike in circumstances where the enemy deployed a powerful covering fleet and the advantage of land-based air superiority, a homogenous squadron represented the only means for achieving the required tactical precision to gain success. Indeed the addition of the Netherlands East Indies as an active ally presented the Royal Navy with a much wider problem as it would be eventually compelled to operate within the expanses of the Indonesian archipelago as a whole. Whitehall’s original decision in August 1940 to support the Dutch had been based upon the assumption that no practical assistance could be provided beyond the use of Singapore as a base for the repair and re-victualling of Dutch ships.27 The modest additions to Force Z which

are proposed in the current analysis would have done little to alleviate the ultimate fate of the Indies which, in the absence of a massive injection of Allied naval power, were gravely exposed to invasion because of the need to defend the complex network of northern entrances to the Java Sea.

When considering the inevitable fall of the Netherlands East Indies, the eventual sacrifice of the ABDA squadron in the Java Sea engagement has been rightly regarded within the histories as a largely fruitless loss of valuable ships in a doomed attempt to delay the final Japanese landings on Java itself. Yet even if the Allied navies could not maintain their command of the archipelago’s seas, a delaying strategy executed by an enhanced ABDA presence would not have been entirely devoid of merit. The Japanese landings at Balikpapan on 24 January and Palembang on 14 February 1942 were occasions upon which the Allied forces involved could have inflicted far greater damage if they had been better resourced given the favourable tactical circumstances which prevailed in both instances. As Captain Ihara Mitsugo noted in his post-war interrogation, the general level of ABDA resistance was so light that he could make no informed judgement as to how the IJN would have coped with a more capable opponent.\(^{28}\) However an additional delay of week or more in the IJN’s timetable provided the potential for further resource denial schemes to be put into effect, namely the destruction of the well-heads and refineries that the Japanese were committed to seizing intact. Should the Allied vessels have retired to Ceylon or Australia with this particular task accomplished, Japan would not have enjoyed ready access to the fuel-oil

\(^{28}\) Interrogation Nav. 68: Captain Mitsugo Ihara 10.11.1945, \textit{USSBS} No. 331: 275-276.
which she desperately required to augment her minimal reserves; a factor that the Japanese leadership thoroughly appreciated and likewise feared.\textsuperscript{29}

**Outcomes: Force Z returns to sea**

The South China Sea emerged as the stage for the first test of British naval supremacy in the Far East, and summarising the prospects of the flying-squadron model, Malcolm Murfett has posed the fundamental question as to the likely effectiveness of its presence there:

> Did it offer something better? On its own the “flying squadron” represented a highly mobile, rapid-response force, but even with a carrier present it was hardly sufficient to anything other than act on the defensive once it reached the Straits of Johore.\textsuperscript{30}

Murfett’s commentary will be viewed as correct in a general sense where he refers to the probability that an enhanced Force Z would have inevitably assumed a defensive posture upon its arrival at Singapore. However this strategy did not necessarily preclude the squadron from undertaking sorties to intercept Japanese aero-amphibious operations in circumstances where a defensive British success could be realistically obtained. Force Z in its historical form did not possess the required strength to achieve this though Phillips had correctly believed that if he could break through Admiral Kondo’s protective cordon and assault the invasion areas, the Japanese transports would be at his mercy as they disembarked their

\textsuperscript{29} ‘36th Liaison Conference, June 30, 1941’ in Ike (ed.), *Japan’s Decision for War*: 74; ‘59th Liaison Conference, October 23, 1941’, *Japan’s Decision for War*: 186.

\textsuperscript{30} Murfett, ‘Reflections on an Enduring Theme; The 'Singapore Strategy at Sixty”: 16-17.
troops into waiting barges. For the counterfactual squadron to succeed where Phillips failed, three critical outcomes were required. Firstly Kondo’s Second Fleet had to be neutralised. Secondly the three Japanese troop convoys would have to be substantially destroyed. And thirdly, some effective tactics for countering the IJNAF’s crack 22nd Air Flotilla needed to be devised.

For the purposes of the analysis it is assumed that Admiral Somerville held command over Force Z as he did subsequently with the Eastern Fleet, with Commodore John Collins RAN exercising detached command of the squadron’s cruiser element. Collins had served with distinction in the Mediterranean and commanded the RN’s China Squadron in December 1941. In the absence of any marked intervention by the 22nd Air Flotilla, the chances of the British squadron dominating an engagement against Kondo’s fleet were reasonably even. With the presence of the Indomitable and the possession of radar there was little to prevent Somerville from engineering a Matapan-style engagement as Kemp and others have suggested. The most promising tactics to adopt were for Indomitable’s Albacore torpedo-planes to hit Kondo’s force before the two British capital-ships joined the fray; meanwhile Collins’s cruisers would detach and undertake a high speed interception of the convoys in accordance with the RN’s prevailing Fighting Instructions. Both the Prince of Wales and Repulse possessed heavier calibre main armaments than the Japanese Kongos and as such they outranged the Japanese as both forces converged. Somerville’s big ships would essentially act to ‘stand-off’ Kondo, either preventing his ships from interceding in the subsequent attack by Collins’s cruisers against the convoys, or forcing the retirement of the

31 Layton, Despatch, LDNGZT 26.2.1948: 1237.
32 Admiral Somerville has been chosen as the hypothetical commander because he assumed command of the Eastern Fleet in March 1942. As commanding officer of the China Fleet, Commodore Collins was on station at the time of these events.
Southern Fleet through inflicting heavy casualties upon it. In either instance the preparatory sinking or crippling of one or more of Kondo’s big ships by Indomitable’s aircraft presented the most likely basis for this necessary British victory.

Without at least some successes achieved on the part of the Albacores, Force Z faced a particularly stiff fight. In a post-war interview, Kondo recorded his fear that Phillips would execute a similar detaching manoeuvre to that outlined above, as he believed (incorrectly) that the British squadron had been accompanied by three light cruisers. If the FAA’s torpedo-planes could not slow the Southern Fleet, the superior speed of the Japanese force made any profitable detachment of the British and Dominion cruisers highly unlikely. Although lacking radar the IJN’s cruisers and destroyers were a menacing proposition especially at night as they enjoyed the benefit of skilled lookouts and high-quality optics together with excellent support in terms of reconnaissance and target spotting from the numerous seaplanes that were carried aboard each of the heavy cruisers. Commodore Collins’s despatch regarding the Java Sea engagement contained reports from several of the senior ABDA participants that repeatedly highlighted these particular areas of Japanese strength. And those same cruisers and destroyers were armed with ‘Long-Lance’ torpedoes, which were to inflict such heavy Allied losses in both the Java Sea and throughout the future night surface battles of the drawn-out Solomons campaign. When considering the skills of the respective commands, Somerville and Collins held the advantage largely because of their extensive operational experience in the Mediterranean. This was a confrontation that either Force Z or the Southern Fleet could win; the result ultimately hinging upon the inherent tactical and meteorological ambiguities which have invariably permeated naval actions.

34 N. Kondo, ‘Some Opinions Concerning the War’ 28.2.1948 in Goldstein & Dillon (eds.), The Pacific War Papers: 303.
35 Collins, Despatch, LDNGZT 6.7.1948: 3937-3948.
Sir Robert Brooke-Popham (86: wearing sun helmet) in discussion with General Wavell. Brooke-Popham favoured an all-out air assault against the Japanese transports, executed in a similar manner to that employed by RAF Blenheim bombers (87: right) against Japanese supply vessels off Burma in October 1942.

Yet even if Somerville had been able to sink or expel Kondo’s battleships and heavy cruisers whilst Collins made a clean break for the transports, the destruction of the invasion convoys had to commence before Force Z’s cruisers arrived on the scene. From the outset of his appointment in the Far East, Brooke-Popham appreciated the vital necessity for launching airstrikes against the Japanese as soon as they had penetrated Siamese territorial waters.36 And in the early morning hours of 8 December RAF Malaya Command preceded to place this plan into operation. Unfortunately for the RAF the combination of poor weather, inadequate early-warning systems and fifth-column activity resulted in over half of its bombers being destroyed on the ground as they refuelled following their dispersal from Singapore to various aerodromes in northern Malaya.37 However at Kota Bharu a paltry twelve RAAF Hudson bombers succeeded in defying darkness and torrential rain to inflict heavy casualties upon the Japanese, sinking a large transport and numerous barges packed with troops. The fact that

these few aircraft could occasion a level of damage out of all proportion to their numbers firmly demonstrated the feasibility of Brooke-Popham’s approach. On this basis a successful large-scale sortie by the RAF possessed the undoubted potential to cause enormous losses amongst Yamashita’s disembarking units. For as Kondo subsequently indicated, the disembarkation of troops, equipment and stores took up to four days to complete, leaving the convoys dangerously naked to prolonged air attacks and the unwelcome appearance of hostile warships.\textsuperscript{38}

Upon three occasions throughout the Japanese offensive in the Indonesian archipelago, Allied warships were ideally positioned to directly assault loitering invasion convoys. In two instances the attackers were unable to press home their advantage because of poor tactical coordination and, during the third engagement within the Sunda Strait on 28 February 1942, a lack of ammunition as the cruisers U.S.S. \textit{Houston} and H.M.A.S. \textit{Perth} had not been adequately re-victualed following the Java Sea disaster the day before.\textsuperscript{39} A similar sortie off Siam by a well organised cruiser force would have most likely brushed aside Vice-Admiral Ozawa Jisaburo’s small close-escort screen and inevitably inflicted severe losses upon the defenceless transports.\textsuperscript{40} Achieving a decisive success, however, required the concurrent intervention of Commonwealth ground units advancing from northern Malaya to the invasion areas. Unless the Siamese airfields at Singora and Patani could be either occupied or rendered useless by air and naval bombardment, the redeployment of the Imperial Army’s 3\textsuperscript{rd} Air Division from Indo-China would take place with disastrous consequences for the subsequent

\textsuperscript{38} Kondo, ‘Some Opinions Concerning the War’, \textit{The Pacific War Papers}: 304-305; Okumiya, Horikoshi & Caiden, \textit{Zero}: 67.

\textsuperscript{39} *the two other occasions (1942) were the Makassar Strait (24 January) and the Bandung Strait (19-20 February).

defence of Malaya. Once the Japanese had established air superiority in the north they were in a position whereby the IJAAF’s fighter and bomber squadrons were able to provide effective support for the Army’s subsequent ground advances. And that is precisely what occurred during December 1941 and January 1942 as Commonwealth troops were shooed down the peninsula by incessant air raids mounted from these captured airfields.

The operational aspects analysed above are based upon the assumption that the IJNAF’s 22nd Air Flotilla would have been unable to intervene in a decisive fashion. The flight leader of the Genzan Air Corps, Captain Sonokawa Kameo, clearly outlined the exhaustive level of preparations for sorties against Allied shipping in the South China Sea, noting that the Japanese naval air arm played no active role in operations against Commonwealth ground forces. This represented a major departure from the situation that the Royal Navy had previously encountered in both the Atlantic and the Mediterranean whereby neither of the opposing Axis air-arms were dedicated air-naval entities, although the Luftwaffe’s Fliegerkorps X emerged as a highly proficient anti-shipping unit. Aside from the fact that the Japanese Nell and Betty bombers were capable of performing airstrikes as far south as Singapore Island itself, any attempted interception within a radius of 500 miles of Saigon brought Force Z under the umbrella of the 22nd Air Flotilla’s Zeke fighters. Whereas Marder, Grenfell and Geoffrey Till have contended that alongside available land-based fighter cover, Indomitable’s twenty-one fighters were capable of causing headaches for any unescorted Japanese bomber formations, they have not as readily contemplated the outcome

of an encounter where escorting Zekes were present. However Eric Brown’s expert observations provide the answer; the participating Hurricanes, Fulmars and Buffaloes would have been no match for the Zekes in air-to-air combat thanks to the superb flying characteristics of the Japanese machines being flown by elite naval aviators.\textsuperscript{44}

Herein lay the expression of a concept of air-naval warfare that the British had yet to encounter in the Second World War. It has frequently been the practice within the post-war histories that when referring to the Force Z disaster, the term ‘airpower’ is often employed in its widest context. Yet there exists a subtle distinction which historians have often overlooked, namely the differentiation between airpower as a whole and naval airpower as an individual entity. Unlike the European nations (and in common with the United States) the Japanese had never come to embrace the ideal of a homogenous national air force. As a result the IJNAF came to develop policies and operational doctrines that were focused upon the attainment of naval supremacy in combination with the Combined Fleet. Indeed as Oi Atsushi has discussed, the heavy pre-war investment made by the Imperial Navy in its land-based air assets reflected the need to compensate for the Fleet’s numerical inferiority in warships.\textsuperscript{45}

Equipped with long-range bombers and a fighter aircraft that could substantially outrange and outfight its opponents, the IJN had achieved the capacity to project not just forward air superiority, but forward air supremacy. Once ensconced on advance airfields the 22\textsuperscript{nd} Air Flotilla would command South-East Asian waters from Sumatra to the Philippines and from Saigon to Darwin. And it would shortly be joined by the 21\textsuperscript{st} and 23\textsuperscript{rd} Air Flotillas which had


recently demonstrated their capabilities over land by devastating Clark Field on the opening day of hostilities.\(^{46}\)

\[\text{A formation of Zekes (88: left), note the drop tanks (which provided additional range) being carried by each aircraft. The Zekes provided air cover for long range bombers such as the Betts (89: right), executing a torpedo-dropping run in the Solomons. This photograph provides the reader with an illustration as to how the sorties against Force Z were performed.}\]

In devising a credible response to this ominous situation it was extremely hazardous for the Royal Navy to exercise even the upmost circumspection as Admiral Cunningham had advocated in the wake of the Crete fiasco.\(^{47}\) Once the element of surprise had been lost, the counterfactual Force Z would have been either compelled to retire to Singapore or risk running the gauntlet of the 22\(^{nd}\) Air Flotilla in attempting to reach the invasion convoys. By electing to take the first option, Phillips may have been able to save his squadron if he had ignored the report concerning Kuantan and proceeded directly to Singapore.\(^{48}\) Whilst the best-case scenario did (in Murfett’s words) offer something better, it remained highly improbable that the requisite degree of sea, air and ground coordination would be achieved to utterly annihilate Yamashita’s disembarking units. The most advantageous result for the British resided in the prospect of dispersing Kondo’s Second Fleet and inflicting significant

\(^{46}\) Okumiya, Horikoshi & Caiden, Zero: 60.
damage upon the convoys through a pre-emptive RAF airstrike. However it is difficult to suppose that the Japanese would have been entirely prevented from seizing the Siamese airfields and immediately flying in the bulk of the IJAAF’s 3rd Air Division for subsequent ground support operations. The poor weather which had aided Phillips in the early stages of his mission also conspired to shield the convoys from accurate aerial reconnaissance; this became a major factor in preventing the RAF from concentrating its bombers in sufficient time to prevent the initial disembarkation of enemy troops.49

Even supposing that the British were able to fully repulse the Japanese landings, the likely future consequences for Somerville’s ersatz squadron and the ongoing defence of Malaya and Singapore were undeniably bleak. Once the fuller resources of the Combined Fleet were inevitably deployed to the west of the Philippines, the Royal Navy and its Dominion, Dutch and American allies could only hope to impose a delay of sufficient duration upon the Japanese southward thrust for the thorough destruction of the oil facilities and other vital plant and equipment to be substantially completed. Though the defenders in Malaya and Singapore would have doubtless been emboldened by a favourable outcome against the Japanese convoys, it is difficult to contemplate anything other than a repeat of the events in Greece whereby a successful German invasion followed the initial rebuff of the Italian forces involved. In the absence of the rather unlikely reinforcement of Malaya’s fighter defences by denuding RAF Fighter Command of most of its Spitfire squadrons, the better-trained and highly experienced Japanese ground forces would have eventually prevailed with the benefit of overwhelming air and naval support. Furthermore the defective defensive locations of RAF Malaya Command’s aerodromes within the north of the peninsula as well as the marked

lack of radar and other early-warning methods clearly played in favour of the advancing enemy forces. Yet the situation which prevailed in the wider expanses of the Indonesian archipelago presented an even more onerous conundrum for the mixed bag of ABDA forces there assembled.

Murfett’s concept of the flying-squadron becoming in effect a rapid-response force attains further merit when considering the disposition of Force Z in the aftermath of its opening engagements. Assuming that it somehow emerged more or less unscathed, the squadron would have a much larger geographic range to cover if the Admiralty had sought to expand its area of operations to include the Netherlands East Indies. Yet this additional burden should be regarded as unremarkable given the precedent set by Force H. In December 1940 Somerville outlined the responsibilities of Force H as they then existed; aside from controlling the Western Mediterranean against the Italians, the squadron was required to escort convoys to the Eastern Mediterranean, shadow Vichy French warships, hunt for raiders in the Atlantic, potentially conduct offensive operations against the Spanish and, secure the Indian Ocean “in certain other circumstances.” Now as Brooke-Popham and Marder have confirmed, the pre-war PLENAPS accords provided for a multinational response to Japanese aggression, though no specific operational strategy had been contrived. A preemptive British success against the IJN’s South China Sea expedition would have allowed for the maintenance of two such rapid-response instruments; Force Z itself and an ABDA collection fielding a minimum of one heavy cruiser, six light cruisers and a dozen or so

52 ‘Plans for the Employment of Naval and Air Forces of the Associated Powers’.
destroyers.\textsuperscript{53} If effective land-based air support were present, a concentrated well-organised ABDA force (supplemented by additional British and/or Australian cruiser reinforcements) constituted a potent threat to the Japanese – in theory at least.

As would have been the case in the Gulf of Siam, the key to any form of Allied success in the Netherlands East Indies did not lie within a campaign of drawn out attrition. Instead the most practicable strategy to be pursued was for the ABDA surface force to attack the Japanese as they landed at Tarakan and Balikpapan in Dutch Borneo whilst the Allied air assets would be concentrated on the airfields at Palembang in southern Sumatra. These were high priority targets for the Japanese as they were amongst the principal well-heads and refineries within the region.\textsuperscript{54} Once the surface force had undertaken its sortie it would retire to refuel at Surabaya, then destroy the base’s oil facilities and decamp to Freemantle or Colombo. At Palembang the RAF and its Allied colleagues could mount an all-out mass airstrike against the Japanese invasion shipping, inflicting as much damage as possible before evacuating their airfields and flying to Java. In supposing that Force Z still resided at Singapore, Somerville’s squadron may have provided assistance in the waters off Palembang, yet the requirement for his ships to be positioned for a further interception in the South China Sea would have probably precluded its participation to the east of the Sunda Strait. The ABDA command also possessed at least twenty American and ten Dutch submarines which were best employed against transport shipping, as the IJN’s convoy protection methods against submarines were extremely poor as was the quality of its anti-submarine weaponry.\textsuperscript{55}

\textsuperscript{53} Marder, Strategic Illusions, 1936-1941: 211. 
The outcomes of the actual engagements at Balikpapan (Makassar Strait) on 12 January 1942 and in the estuary of the Musi River to the east of Palembang on 14-15 February were the most profitable for the Allies throughout the first three months of the Asia-Pacific conflict. At Balikpapan a flotilla of four American destroyers sank four troop transports whereas RAF bombing and strafing attacks against the Palembang-bound convoy sank or damaged at least six transports and numerous barges, causing very heavy casualties amongst the transiting troops. With additional resources in each instance, even more substantial loss and damage stood to be inflicted upon the Japanese, further frustrating the steady advance of their operational timetables. And there existed compelling reasons why the enhanced ABDA squadron would have little choice but to subsequently withdraw from the theatre altogether.

Prior to its final showdown in the Java Sea on 27 February 1942, Admiral Karel Doorman’s cruiser squadron had been pursued from one end of the Java Sea to the other in a series of vain attempts to interdict various hostile convoys; inevitably it was frustrated by incessant air attacks from both land-based bombers and the light carrier Ryujo. It is unsurprising that Doorman’s squadron eventually suffered a crushing defeat as his crews were greatly fatigued by the necessity to remain on continuous action stations because of the constant round of air attacks. These not only targeted the ships at sea, but also continuously disrupted their refuelling and re-victualling procedures whilst in port.

Aboard the heavy cruiser H.M.S. Exeter, Petty Officer W.E. Johns witnessed the constant pressure which Japanese land-based airpower applied in the Java Sea:

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We were at Tanjong Priok, in Batavia, when orders came and we set sail on 25 February. We steamed in a constant state of first-degree readiness to Sourabaya, arriving off that port in the early afternoon and eventually anchoring at 1600 to a welcome of air raid sirens and Jap bombers. Senior officers had already been rushed ashore for an emergency conference and within three hours we weighed anchor and were at sea again.\(^{59}\)

Eight days before the Battle of the Java Sea, the clearest indication that the end of British naval supremacy within the narrow seas was at hand took place in the skies over Darwin. On the morning of 19 February 1942, a large formation of aircraft from four of the Kido Butai’s aircraft-carriers struck shipping and port facilities at Darwin with virtually no warning. Shortly thereafter, elements of the Koku Kantai’s 21\(^{st}\) and 23\(^{rd}\) Air Flotillas repeated the dose, this time revisiting the fate of Clark Field upon the town’s RAAF aerodrome. Whereas the significance of the raids as the first major attacks against Australian soil has prompted greater official recognition in recent years, one salient aspect of this episode has been barely acknowledged within the historiography.\(^{60}\) For Darwin also enjoyed the dubious honour of becoming the only Allied target to be struck by a large-scale coordinated attack from the IJNAF’s two premier offensive instruments.

It should strike the reader as somewhat ironic that the final key to the first stage of Britain’s forfeiture of naval supremacy resided in an airstrike against an Australian naval base. As


discussed within the introduction to this work, the Australian public forum has been dominated over the past fifty years by published and public criticism of British imperial defences in the Far East. The thesis has posed the question as to whether Whitehall’s decision not to send a ‘Main Fleet’ to Singapore should be considered an act of betrayal if the likely fate of the force dispatched was to be its virtual annihilation at the hands of the Japanese. And the circumstances which surrounded the raids on 19 February 1942 clearly demonstrated that any form of British naval presence which had the misfortune to encounter both the Kido Butai and the Koku Kantai en-masse would have faced probable obliteration. For since the first landings in Siam on 8 December 1941 the Royal Navy had, in Brooke-Popham’s words, been “fighting under conditions of which the British Empire had very little previous experience.”

Never before had the RN confronted the combined threat of a carrier-borne and land-based aerial spearhead, be it within the European theatre or at the outer peripheries of Britain’s imperial defences. And Whitehall’s deliberations over the composition of Force Z were tellingly characterised by the apparent inability of both Churchill and the Admiralty to contemplate such a fate for any scale of disposition they chose to undertake.

Aside from their reasonable availability, the fundamental basis for the composition of the British and Allied naval and air forces in this counterfactual exercise has been their historical capacity to offer the most effective resistance possible to Japan’s aero-amphibious onslaught. By adopting a similar range of tactics to those which the Royal Navy had executed with success in the Atlantic and the Mediterranean, it remains a credible proposition that a modestly enhanced British and ABDA naval presence could have occasioned serious losses upon the Japanese through a series of hit-and-run sorties. Yet it is equally the case that the only practicable strategic outcome lay with the withdrawal of the Allied forces involved once

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A formation of Japanese land-based bombers (90: left) photographed from the light cruiser HMAS Hobart as they bombed ABDA cruisers in the Java Sea, whilst the heavy cruiser HMS Exeter (91: right) narrowly avoided damage during a similar attack.

a comprehensive scorched-earth programme had been put in train. With its Zeke fighters inevitably providing air supremacy, the IJNAF’s bombers were able to exercise a degree of control over the battlefield that neither the Germans nor the Italians were capable of emulating.62 Given the additional pressure which the Imperial Army’s 3rd Air Division exerted upon RAF Malaya Command, there can be little doubt that the maintenance of British naval supremacy within the South China Sea would have been measured in days rather than months with a similar outcome for the ABDA forces in the Indonesian archipelago. In common with the Eastern Front, trading space for time represented the only common-sense approach for the Allies to pursue.

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When conducting his appraisal of the Royal Navy’s evolving tactical regime during the 1930s, Paul Kennedy sagely observed that the Admiralty dispersed its aircraft-carriers in the same fashion as the French had done with their armour in May 1940. And there exists a pertinent analogy which is capable of being drawn between these situations that extends beyond the issue of tactical disposition in isolation. The French Army’s attitude towards the employment of armour and aircraft reflected its continuing belief in the prevailing doctrines of the Great War, albeit in modified form. Likewise the Admiralty’s trust in the power of the battleline being the final arbiter in naval combat had remained largely intact, even following the considerable strides in airpower which had taken place throughout the period of hostilities prior to December 1941. The outcomes in both France and the South-East Asian theatre should be viewed first and foremost as a triumph of method for the respective Axis powers. For in spite of their best endeavours, the best-case Force Z and the ABDA squadron stood no realistic chance of substantially repelling an opponent which was fully prepared to embrace the opportunities that arose with the attainment of total air supremacy. However the expression of Japanese naval-air might within the Malay Barrier did not on its own constitute the final demise of British naval supremacy. This outcome would be ultimately resolved through the waging of a half-forgotten naval-air engagement within the broad expanses of the Indian Ocean.

63 Kennedy, The Rise and Fall of British Naval Mastery: 288.
Chapter Six

Supremacy surrendered: the Indian Ocean, 4 – 9 April, 1942

(92) The British aircraft-carrier HMS Hermes sinking by the bow on 9 April 1942 after being struck repeatedly by Japanese carrier-borne dive-bombers.
Upon the afternoon of Wednesday 8 April 1942 Admiral Sir James Somerville issued one of the most crucial orders in British naval history. Having spent the better part of the previous nine days conducting a fruitless search for a hostile force in waters to the south of Ceylon, Somerville’s Eastern Fleet proceeded to vacate its advanced base at Addu Atoll and withdraw to Bombay. This decision, which had been readily endorsed by the Admiralty later that same afternoon, undoubtedly spared numerous British warships and saved thousands of lives. Yet at the same instant it also marked the finality of British naval supremacy. Three hundred years of tradition and reputation were no defence against an opponent whose principal means of waging war at sea was virtually unchallengeable. For the Royal Navy possessed no credible means of repelling the enormous striking power that had been wielded throughout the preceding months by the aircraft-carriers of the IJN’s Kido Butai spearhead. In combination with Japan’s superb land-based naval air-weapon, the presence of the Kido Butai in the narrow seas and straits to the east of Sumatra had already extinguished the RN’s suzerainty within a closed-water operational environment. And with great common-sense the British eventually forfeited a unique oceanic opportunity to engage a fleet which had annihilated its previous targets through stealth as much as through strength. Had it done so, the Royal Navy stood to suffer a disaster of epic proportions, far surpassing any of its infrequent reverses throughout the previous centuries.

As has been addressed within the Introduction, the post-war historiography has generally interpreted this outwardly inconclusive engagement as a momentary occurrence, though a number of accounts have alluded to the ominous consequences for Whitehall had the Eastern

Fleet been destroyed. The histories have generally neglected to consider in depth the wider ramifications for British sea-power that arose from the peculiar circumstances which surrounded both the encounter itself and the subsequent withdrawal of Somerville’s warships to East Africa. Yet for the Admiralty, the Nagumo-Ozawa sorties generated an unprecedented confrontation with a unique disposition of hostile forces that were seeking to undertake coordinated offensive operations. This was the first occasion in naval history where both combatants fielded aircraft-carriers; a showdown between British aerial integration and Japanese aerial concentration within an operational environment where the Kido Butai did not enjoy the benefit of surprise. Commencing with a short outline of the events together with a brief commentary upon the potential outcomes of these raids for British and Allied grand strategy, the chapter analyses the key operational strategies and tactics which transformed a series of skirmishes into an episode that ordained the ultimate demise of British naval supremacy over the broad oceans. This in turn leads to an analysis of Stephen Roskill’s highly questionable assertion that given “two or three more fleet carriers in substitution for the old and cumbersome R-class battleships, a dozen more long-range reconnaissance aircraft and a few squadrons of shore-based torpedo-bombers, he [Somerville] could have challenged Nagumo with confidence.”

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Having compelled the Allied forces within the Netherlands East Indies to capitulate as of 8 March 1942 the Japanese now sought to crush any potential threat to the western perimeter of their newly acquired ‘Southern Resources Area’ whilst likewise protecting the flank of the Imperial Army’s advance into Burma. On 26 March the Kido Butai departed its forward base in the Celebes and steamed towards Ceylon under orders to neutralise the Eastern Fleet at its Colombo roadstead. Meanwhile on 4 April the Second Expeditionary Fleet under Vice-

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Admiral Ozawa sortied from the vicinity of the Andaman Islands into the Bay of Bengal, so as to provide Nagumo with distant support whilst simultaneously raiding enemy merchant shipping within the area.\(^3\)

(6) The engagement between the Eastern Fleet and the Kido Butai (First Air Fleet), 4 – 9 April 1942.

**First Air Fleet (Kido Butai) – Vice-Admiral Nagumo:** aircraft-carriers *Akagi, Soryu, Hiryu, Shokaku, Zuikaku*; battleships *Kongo, Haruna, Hiei, Kirishima*; two heavy cruisers, one light cruiser and eleven destroyers.

**Second Expeditionary Fleet – Vice-Admiral Ozawa:** light aircraft-carrier *Ryujo*; five heavy cruisers, one light cruiser, four destroyers and five submarines.

For their part the British had intercepted coded Japanese signals that indicated the strong likelihood of raids being conducted. On 24 March Admiral Somerville arrived at Colombo to assume command of the Eastern Fleet. Somerville’s plan was to avoid detection by Japanese reconnaissance seaplanes during daylight, then close upon Nagumo’s force at dusk with the objective of launching an integrated air and surface strike under the cover of darkness.4

**Eastern Fleet – Admiral Somerville:**

**Force A** - aircraft-carriers *Formidable, Indomitable*; battleship *Warspite*; two heavy cruisers, two light cruisers and six destroyers.

**Force B** - light aircraft-carrier *Hermes*; battleships *Resolution, Ramillies, Royal Sovereign, Revenge*; three light cruisers and eight destroyers.

Somerville wasted little time in assembling his available warships into two separate groups (Force A and Force B) and proceeded to the south of Ceylon in order to lay a trap for Nagumo, which he intended to spring on the night of 31 March – 1 April 1942. No contact eventuated and the Eastern Fleet retired to Addu Atoll in order to refuel and re-victual.5 This process had only been partially completed by 1630 hours on 4 April when Somerville received a sighting report that indicated the presence of a large Japanese force to the southeast of Ceylon. At approximately 0630 hours the following morning at least 125 carrier-borne aircraft struck Colombo. With the port having been cleared in anticipation of a hostile raid, damage was relatively slight. However Nagumo’s reconnaissance aircraft had detected the heavy cruisers *Cornwall* and *Dorsetshire* to the southwest of Ceylon and at 1340 hours a large force of dive-bombers attacked and sank both ships.6 Over the following two days both

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6 Fuchida & Okumiya, Midway: The Battle that Doomed Japan: 66-68.
fleets attempted to locate each other without success, with the Eastern Fleet returning to Addu Atoll whilst the Kido Butai steamed further eastwards. On 9 April as Somerville commenced his withdrawal from Addu, Japanese aircraft executed another dawn strike which targeted the Royal Navy’s facilities at Trincomalee. Whereas this attack again inflicted only limited damage, a subsequent sortie located and sank the light carrier *Hermes*, two escorts and two auxiliaries to the south of Trincomalee, whereupon Nagumo’s ships proceeded to retire to Japan via Singapore.\(^7\)

Meanwhile Ozawa had divided his fleet into three groups and commenced a series of air, surface and submarine attacks against unescorted merchant shipping within the Bay of Bengal. Over a period of five days from 4 April 1942 Ozawa’s raiders sent at least 100,000 tons of shipping to the bottom, in the process bringing Allied supply movements in the vicinity to a virtual standstill. These attacks also included air strikes from the light carrier *Ryujo* against various towns along the eastern Indian coastline, resulting in considerable panic amongst the civilian population. In his subsequent despatch to Whitehall, General Sir Archibald Wavell (CIC India Command) noted that this “was India’s most dangerous hour; our Eastern Fleet was powerless to protect Ceylon or Eastern India; our air strength was negligible.”\(^8\) These multi-pronged Japanese sorties, aided to a considerable extent by long-range flying-boats which were operating from advanced bases within the Andaman and Nicobar island groups, were almost completely unopposed. When Ozawa withdrew his ships to Singapore (in concurrence with Nagumo’s retirement), the uproar he had left behind came to seriously impede the flow of troops and supplies between India and Burma thereby further

\(^7\) COSWR (No.136) of the Naval, Military and Air Situation from 0700 April 2\(^{nd}\) to 0700 April 9\(^{th}\), 1942, TNA (UK): CAB/66/27/6-0001: 2-3; Okumiya, Horikoshi & Caiden, *Zero*: 94.

compromising British attempts to reinforce the Burmese theatre against the Imperial Army’s rapidly proceeding landward advance. As for the Eastern Fleet, it had been effectively expelled from all but the furthest western peripheries of the Indian Ocean.

From the outset it is readily agreed that the probable annihilation of Somerville’s command at the hands of the Kido Butai would have generated a major strategic crisis for the Allied powers. Arthur Marder, Eric Grove and Russell Grenfell are amongst others who have concluded that the severing of British sea communications in the Indian Ocean stood to isolate both India and China whilst simultaneously exposing Britain’s oil supplies within the Persian Gulf to the direct threat of Japanese naval interdiction. These consequences, which likewise included a potentially severe impact upon the capacity of the United States to provide vital Lend-Lease supplies to the Soviet Union through Iran, were undeniably drastic as the wider Allied presence on the Asian mainland may well have become untenable. Both Marder and Michael Tomlinson have referred to the impact of a major British disaster in the Indian Ocean as being a catalyst for widespread civil unrest within India itself, gravely compromising Whitehall’s efforts to reach a political settlement with the Indian National Congress in order to maintain India’s adherence to the Allied cause. And the histories have additionally speculated that a terminal blow to Churchill’s leadership was in the offing, given that the Prime Minister had already been subjected to a no-confidence motion in the Commons following the loss of Singapore and Tobruk. However the prospect of Britain

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being forced out of the war altogether should be treated with marked caution, absent a similar success from the Kriegsmarine’s guerre de course in the Atlantic.\textsuperscript{12}

Yet there existed an additional possibility which the histories have entirely overlooked, and would be considered by some to be highly fanciful. The idea that the IJN could have mounted a subsequent offensive sortie within the Atlantic cannot be sustained upon then-existing strategic grounds, namely the necessity for Nagumo’s and Ozawa’s ships to be re-incorporated into the Combined Fleet for its sought-after decisive battle with America’s Pacific Fleet.\textsuperscript{13} However there can be little doubt that the Japanese possessed the necessary capabilities to undertake such a daunting task. If the reader recalls the fact that Admiral Rojdestvensky had been able to coax a fleet of predominately barnacle-encrusted pensioners from the Baltic to the Straits of Tsushima, a similar trans-oceanic epic was not beyond the realms of a modern naval squadron accompanied by its own train of tankers and supply vessels. An expedition of this kind would have also benefited from the support of German raiders, supply ships and submarines, though actual operational-level cooperation between the respective Axis powers extended little further than isolated joint submarine missions within the Indian Ocean.\textsuperscript{14} And whilst the prospects of a Pearl Harbour-style airstrike against Scapa Flow were somewhat unlikely, it is not impossible to suppose that some form of operation utilising a scaled-down version of the Kido Butai could have wreaked havoc amongst Allied merchant traffic in the South Atlantic. For Nagumo’s force provided the Axis


\textsuperscript{14} Interrogation Nav. 72: Vice-Admiral Miwa Shigeyoshi, 10.10.1945: 298; Marder, Jacobsen & Horsfield, \textit{The Pacific War, 1942-1945}: 87; Taylor, \textit{The Second World War}: 135-136.
with a multi-hemisphere strategic capability which exceeded that of Germany’s U-Boats in terms of its concentrated striking power.

Two of the participants in the Operation C episode; the British fleet carrier HMS Formidable (93: left) photographed entering Sydney Harbour in 1945, and the Japanese light carrier IJN Ryujo (94: right) which served in Admiral Ozawa’s Second Expeditionary Fleet.

Operational Strategies

A major basis for establishing the critical significance of the Operation C raids resides in the unprecedented nature of the threat posed by the Nagumo-Ozawa sorties towards the most crucial of the Royal Navy’s global security obligations, namely the protection of British sea communications from hostile interdiction. To successfully confront this menace within an oceanic environment required what Churchill had nominated in April 1940 as the capacity of the RN to project its broader geographic control through the attainment in Grenfell’s words of “superiority at the decisive point.”\(^\text{15}\) In this instance both Whitehall and the Admiralty had elected to devise an operational strategy which provided for the interception of Japanese raiding activities within a vast ocean triangle between Aden, Singapore, and Simonstown. For their part the Japanese were pursuing the destruction of the Eastern Fleet in accordance with their ‘front-and-back’ approach for neutralising any British naval presence before seeking to

prosecute their decisive summit clash with the U.S. Pacific Fleet.\footnote{Doc. 469, \textit{British Naval Documents 1204-1960}: 848; COS Appreciation 31.7.1940, CAB/66/10/33-0001: 6; Interrogation Nav. 13: Captain Yasugi Watanabe 15.10.45: 65; Okumiya, Horikoshi & Caiden, \textit{Zero}: 91.} Whereas any encounter between the opposing forces would likely take place in circumstances which complemented Alfred Mahan’s belief in the indivisibility of the sea, the combination of pre-emptive detection and maximum fleet mobility became paramount. For unlike the situation in the Atlantic whereby the Home Fleet was greatly aided by favourable geography in attempting to intercept breakouts by the Kriegsmarine’s warships, no such advantage existed in the Indian Ocean where any stand-off blockade of the Malay Barrier inevitably exposed the Eastern Fleet to attack from the IJN’s land-based air flotillas.\footnote{Rosinski, ‘Mahan and the Present War’, \textit{BSY 1941}: 204.}

The genesis of this particular British strategic approach can be traced to Whitehall’s concession in late July 1940 that a major fleet could no longer be despatched to Singapore, and subsequently to Churchill’s August 1941 debate with the Admiralty over the proposed composition of Force Z. Prior to his eventual determination which committed Admiral Phillips’s command to exercising a futile deterrent in the South China Sea, Churchill believed that the combination of two fast capital ships and an aircraft-carrier would effectively contain any Japanese naval activities in the Aden-Singapore-Simonstown triangle.\footnote{COS Appreciation 31.7.1940, CAB/66/10/33-0001; Doc. 469, \textit{British Naval Documents 1204-1960}: 847-848.} However with the sinking of the \textit{Prince of Wales} and \textit{Repulse} in December 1941, British defensive efforts in the Indian Ocean were now focused upon the employment of aircraft-carriers as the primary means of counter-attack. Churchill noted that “the warfare of aircraft-carriers should be developed to the greatest possible extent. We are ourselves forming a squadron of three aircraft-carriers, suitably attended, to act in the waters between South Africa, India and Australia.”\footnote{Churchill, \textit{The Grand Alliance}: 580.} Yet this triangular defence plan remained predicated upon the belief that the
Japanese would commit only minimal surface forces; fast battleships or cruisers, perhaps with the support of a single carrier. An examination of the relevant correspondence which flowed between Churchill and the Admiralty, as well as the contents of Somerville’s intelligence estimates, indicates the absence of any belief on the part of the British that the Japanese would commit the bulk of the Kido Butai to undertake operations within the general vicinity of Ceylon.\textsuperscript{20}

Now as will be fleshed out under the following subheading, the Royal Navy retained the capacity to counter the Japanese if the IJN’s raiding force(s) air component had been limited to the little \textit{Ryujo} or the new light carriers \textit{Zuiho} and/or \textit{Shoho}. And had the Combined Fleet determined upon a purely surface gunnery-oriented force composition, the chosen British operational strategy for the Indian Ocean should be regarded as an appropriate response. Dating from its experiences in the Great War, the Royal Navy had demonstrated its aptitude for tracking down and destroying hostile modern warships which were engaged in oceanic raiding missions. The sinking of the \textit{Graf Spee} and the \textit{Bismarck} portrayed the ability of the Fleet’s hunting groups to successfully undertake this task, with the latter example confirming the value of integrated air/surface operations. However the inherent dangers in attempting to intercept a raiding force with outdated warships were graphically illustrated in November 1914 at Coronel where two obsolete British armoured cruisers were sent to the bottom with all hands.\textsuperscript{21} And during the pursuit of the \textit{Bismarck} and the cruiser \textit{Prinz Eugen} in May 1941, the much-venerated battle-cruiser \textit{Hood} blew up with only three survivors after sustaining hits that penetrated her unmodified deck armour and detonated the ship’s magazines.


\textsuperscript{21} Warner, \textit{Great Sea Battles}; 259.
Beckoning such a catastrophe, the Eastern Fleet’s ability to engage one or more Japanese forces resided in the ability of Somerville to somehow contrive an interception whilst handicapped with what the admiral described as his “miserable old battleboats”.22

The Japanese certainly held the upper hand when it came to the choice of available strategies. An expedition into the Indian Ocean proffered numerous entry points, be it the series of narrow straits which separated Sumatra, Java and the other peripheral islands of the Netherlands East Indies, or the Strait of Malacca separating Sumatra from Malaya. Having exited the Malay Barrier through one of these passages, a Japanese raiding force could utilise the ocean vastness to launch attacks against British sea communications from most points of the compass without the impediment of large land masses.23 Should this force seek to surprise the Eastern Fleet’s bases at Colombo or Trincomalee, it would do so with complete freedom of manoeuvre between Sumatra and the Maldives. For the British could not rely upon a network of friendly eyes to give advanced warning of a sortie as had occurred when the Bismarck steamed through the Skagerrak towards the Norwegian fjords. If the Eastern Fleet were to intercept such an expedition it would be compelled to rely upon long-range reconnaissance provided by RAF Catalina flying-boats from Ceylon or localised air searches from Somerville’s carriers to the south of the island. Yet the British possessed one advantage that remained unknown to the IJN, namely the secret base at Addu Atoll at the southern tip of the Maldives. Whilst still incomplete in April 1942, Addu provided the sole means for the

Eastern Fleet to flank any Japanese attempt to approach Ceylon from the south or southwest. 

If the geographic advantages which the Japanese enjoyed were not enough of a challenge for the Eastern Fleet to counter, the eventual composition of the IJN’s Operation C fleets presented the Admiralty with an entirely unique threat. The presence of a light carrier-cum-cruiser force to carry out merchant raiding, together with Nagumo’s five fleet carriers, constituted a disposition of warships that neither the Germans nor the Italians were able to assemble. Furthermore throughout both the Great War and the Second World War prior to April 1942, the Royal Navy had never been forced to contend with simultaneous co-ordinated missions by two fleets that were separated by over five hundred miles of ocean. These aspects of the Operation C raids have been consistently overlooked within the post-war histories, yet their very being surely indicated the application of a mode of naval warfare which could readily usurp British naval supremacy. The histories have rightly emphasised the sorry state of Somerville’s command, however in doing so they have appeared to downplay the impact of these events upon this basis, aside from their consideration of the wider strategic consequences as addressed above. The key factor within this line of thinking has been the general historical classification of the Eastern Fleet as a fleet-in-being, a categorisation that Somerville amongst others has clearly acknowledged. However there is compelling evidence to suggest that the substance of this classification should have been examined more thoroughly within the existing historiography than it has been to date.

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The fleet-in-being concept has been addressed at several stages within the preceding chapters with particular reference to the adaptation of this approach as general practice by Germany throughout the Great War and Italy from 1936 onwards. It has invariably been interpreted as a strategy to be adopted when in a position of weakness, be the malady a matter of momentary operational inferiority or the possession of a numerically inferior fleet as a whole. Admiral Somerville set out his understanding of the Eastern Fleet’s situation as of 4 April 1942 in these terms:

First and foremost, the total defence of the Indian Ocean and its vital lines of communication depend on the existence of the Eastern Fleet. The longer this fleet remains “a fleet in being”, the longer it will limit and check the enemy’s advances against Ceylon and further west. This major policy of retaining a “fleet in being”, already approved by Their Lordships [the Admiralty], was, in my opinion, paramount.26

Now the pertinent point that Somerville has conveyed here is the idea of ‘limit and check’, by either behaving as an out-and-out deterrent (as attempted in the case of Force Z) where presence alone constituted the threat to the aggressor, or mixing passive deterrence with Admiral Cunningham’s upmost circumspection in targeting the enemy at its most vulnerable points. Yet when considering how the Royal Navy had dealt with its European foes, is it

reasonable to suggest that Somerville’s actions were actually indicative of common RN practice?²⁷

If Herbert Rosinski’s contention that the Admiralty’s major strategic challenge resided in its ability to cope with the sheer scale of its global commitments as distinct from the threat of a single belligerent is accepted, the aforementioned proposition attracts considerable merit.²⁸

What the experience of the Royal Navy’s campaigns against the Germans and Italians clearly demonstrated is that a single powerful fleet had been inevitably compelled to undertake dispersed operations in a weakened state. In pursuit of the Admiralty’s desire to aggressively pursue hostile naval forces wherever and whenever the opportunity arose, circumspection became an absolute necessity where the circumstances required the disposition of available warships upon a minimalist basis. In spite of the advantages occasioned by the possession of aircraft-carriers, Somerville’s, Cunningham’s and Tovey’s reports and recollections revealed a litany of difficulties including dawdling battleships, the constant lack of sufficient screening vessels and gossamer-thin, land-based air cover.²⁹ Therefore if the concept of the fleet-in-being were based upon the need to avoid attrition wherever possible (as Somerville suggested in the case of the Eastern Fleet), this element of the definition can be rightly regarded as applying to the majority of operations in both the Atlantic and the Mediterranean.³⁰ And it remains a pertinent fact that the eventual composition of Somerville’s force represented the single largest concentration of capital ships and aircraft-carriers that the Royal Navy came to deploy against an active enemy fleet throughout the Second World War; another factor that has been regularly overlooked within the post-war historiography.

²⁸ Rosinski, ‘Mahan and the Present War’, BSY 1941: 204.
²⁹ Doc. 94, The Somerville Papers: 177-179; Doc. 102, The Somerville Papers: 200-201; Cunningham, Despatch, LDNGZT, 21.5.1948: 3103-3104; Cunningham, Despatch, LDNGZT 27.4.1948: 2643; Tovey, Despatch, LDNGZT 14.10.1947: 4848, 4855; Tovey, Despatch, LDNGZT 25.5.1948: 3169.
In this instance the fleet-in-being aspect has most frequently been associated with the condition of the Eastern Fleet’s R-class battleships which comprised the capital-ship element of Force B. Described by Churchill and others as little more than floating coffins, there is no disagreement with Somerville’s view that these vessels were a significant burden upon the fleet’s tactical flexibility as will be fleshed out in further detail shortly. But if the Eastern Fleet is to be considered an example of the quintessential fleet-in-being, how does this reflect upon the Admiralty’s other fleet and squadron-scale dispositions which involved the participation of battleships?

Table 4: Comparative features of Royal Navy battleships in the Second World War (pre-1943)

<table>
<thead>
<tr>
<th>Class:</th>
<th>‘R’-class</th>
<th>Queen Elizabeth</th>
<th>Rodney</th>
<th>King George V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (feet)</td>
<td>624 ft.</td>
<td>646 ft.</td>
<td>710 ft.</td>
<td>745 ft.</td>
</tr>
<tr>
<td>Displacement (tons)</td>
<td>33,500 t.</td>
<td>33,550 t.</td>
<td>38,000 t.</td>
<td>40,990 t.</td>
</tr>
<tr>
<td>Speed (knots)</td>
<td>21 kts.</td>
<td>23 kts.</td>
<td>23 kts.</td>
<td>29.5 kts.</td>
</tr>
<tr>
<td>Main Armament (inches)</td>
<td>8 x 15”</td>
<td>8 x 15”</td>
<td>9 x 16”</td>
<td>10 x 14”</td>
</tr>
<tr>
<td>Secondary Armament</td>
<td>14 x 6”</td>
<td>20 x 4.5” dual purp.</td>
<td>12 x 6”</td>
<td>16 x 5.25” dual purp.</td>
</tr>
<tr>
<td>Anti-Aircraft Armament</td>
<td>6 x various</td>
<td>14 x various</td>
<td>12 x various</td>
<td>12+ x various</td>
</tr>
</tbody>
</table>

These figures reveal that whilst the ‘R’s were inferior to both the Queen Elizabeths and Rodneys in most respects, the speeds of the three classes were sufficiently slow (by 1940s standards) to place all three on the endangered list. It should also be recalled from Chapter Four that the ‘R’ and Queen Elizabeth classes were equally susceptible to catastrophic damage from torpedo hits, as the fates of the Royal Oak and the Barham clearly illustrated. The central contention to be made here is that without the King George V-class, the Admiralty possessed a fleet of battleships which did not possess the aptitude for fast-moving modern naval warfare and this meant that outside of the Home Fleet, the RN’s peripheral commands were, as in the past, generally served common fare in terms of their battleship

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capabilities. As Somerville exclaimed in his correspondence, “Crock's cannot play centre-court tennis, and that's the answer.”

Two of the battleship participants in the April 1942 showdown between the Eastern Fleet and the Kido Butai – 
HMS Warspite (95: left) and IJN Haruna (96: right).

Yet when the essential character of the maritime war prior to April 1942 is considered, the reader is entitled to draw the conclusion that thus-far in the tournament the Royal Navy’s surface forces had yet to grace the main stadium. Whereas a significant proportion of its capital ships, cruisers and destroyers were materially inferior to their German and Italian counterparts, the RN had limited and checked its opponent fleets through the mixture of deterrence and targeted aggression. Indeed with the exception of the Kriegsmarine’s U-Boat campaign, the fleet-in-being concept will be viewed as guiding the fortunes of the three navies concerned. And in so doing, one only needs to reflect upon Whitehall’s obsessive paranoia with the activities of the battleship Tirpitz to realise that a fleet-in-being could assume a wide variety of sizes and capabilities. Much of the debate over the eventual composition of Force Z revolved around the presence of this single capital-ship, and the decision to deploy the Prince of Wales included several recall options for the King George V-class battleship should the Tirpitz have attempted a breakout into the North Atlantic whilst

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Phillips’s squadron was in transit to the Far East.\(^{34}\) In the absence of a Jutland-style slugfest, operational minimalism had become the new reality in the post-Washington era. However the advent of the Kido Butai provided the circumstances whereby just six ships possessed the necessary means to deliver overwhelming offensive force in the guise of mass aerial strikes undertaken by modern dive-bombers and torpedo planes.

**Operational Tactics**

In turning to the tactical dimension of the events off Ceylon, the starting point is the sighting of Admiral Nagumo’s force by an RAF Catalina piloted by Squadron Leader L.J. Birchall on 4 April 1942.\(^{35}\) Quite incredibly this glimpse of the Kido Butai represented its initial detection by enemy reconnaissance during the course of the Asia-Pacific conflict. The brief Morse signal to Colombo at 1630 hours that afternoon served to confirm the previous cypher intelligence which had indicated probable Japanese intentions in the Indian Ocean. Thus for the first time Nagumo would be seeking to attack an expectant opponent with the added concern of a hostile fleet close at hand. And once his aircraft reached their Ceylonese targets, they would not likely find the enemy’s fighter assets massed nonchalantly upon their runway aprons as had been the case at Pearl Harbour. Thanks in no small measure to the efforts of Admiral Sir Geoffrey Layton, additional airfields and radar facilities had been prepared to support approximately sixty fighters, and on this occasion the majority of these were Hurricanes rather than the pot-bellied Buffaloes that had formed the backbone of the RAF’s fighter defences in Malaya and Singapore.\(^{36}\) So instead of utilising stealth to annihilate its victims as had been the case at Pearl Harbour, Darwin and Tjilatjap (a Dutch port in southern

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\(^{35}\) Tomlinson, *The Most Dangerous Moment*: 81-82.

\(^{36}\) Grenfell, *Main Fleet to Singapore*: 164.
Java), the Japanese faced the prospect of a set-piece engagement against a fleet of similar size, though a decisive massacre of Allied warships remained in the offing.

Now if the employment of the Eastern Fleet as a fleet-in-being has seemingly downgraded the significance of these events off Ceylon, it has received considerable assistance through the fact that no major confrontation eventuated between the two fleets. Unlike the circumstances surrounding Force Z however, the operational signposts to emerge from this series of skirmishes were more than sufficient to confirm the presence of a form of offensive aerial firepower which the Royal Navy was manifestly unable to counter. Additionally the Eastern Fleet found itself under the command of one of the most skilful admirals to serve in the Second World War who actively sought to engage and sink as many of Nagumo’s ships as possible by employing all of his available strength (including the R’s). And for his part, Nagumo sought to devastate the British by firstly emulating his triumph at Pearl Harbour, then subsequently hitting whatever his reconnaissance aircraft spied at sea. The conduct and outcomes of the air strikes against the two detached RN formations could not have better demonstrated the differing nature of the doctrinal approaches which were pursued by both camps; the essential clash between integration and concentration. The fact that Somerville and the Admiralty eventually considered discretion to be the better part of valour mirrored what Churchill later described as a situation of great anxiety for the Royal Navy. And not forgetting, of course, the presence of Ozawa’s command in the overall execution of this unique two-pronged raiding expedition.

38 Churchill: The Hinge of Fate: 159.
The disaster which befell the Arctic convoy PQ-17 in early July 1942 has been remembered as one of the worst episodes of its type with twenty-three merchant ships sunk by a combination of the Kriegsmarine’s surface warships, U-Boats and the Luftwaffe’s Norway-based bombers. The same cannot be said about the accumulated historical interest in the destruction of the same number of ships by the IJN’s Southern Expeditionary Fleet. Yet Ozawa’s force succeeded in utilising convoy raiding tactics that were every bit as lethal as those employed by the Germans, with the addition of Okumiya Masatake’s air group aboard Ryujo for good measure. The importance of the Southern Expeditionary Fleet’s activities lay in the force’s composition and the joint (though detached) nature of its mission with the Kido Butai; not, however, in its capacity to defeat the Eastern Fleet. Had Ozawa’s ships encountered Somerville’s, withdrawal became their only practicable option because the British possessed more than sufficient firepower to counter the Japanese air and surface forces. Such a confrontation would have likely suited the RN’s use of integrated fleet tactics, with the aerial component having to achieve similar results to those obtained off Cape Matapan in order to slow down the faster Japanese vessels so as to bring them within gunnery range of Somerville’s battleships. If Operation C had been limited to Ozawa’s sortie alone, a successful British interdiction of the type of force which the Admiralty had planned for in the formulation of its Aden-Singapore-Simonstown strategy became a realistic endeavour.

Whilst still ignorant as to the disposition and composition of the Japanese forces on 30 March 1942, Somerville devised the following tactical regime which he would attempt to pursue several times over the course of the following nine days:

5. The enemy could approach Ceylon from the north-east, from the east, or from the south-east, to a position equidistant 200 miles from Colombo and Trincomalee. This would enable the enemy to fly off aircraft between 0200 and 0400 and, after carrying out bombing attacks on Colombo and Trincomalee, allow the aircraft to return and fly on after the first light (about 0530); forces could then withdraw at high speed to the eastward. I was assuming that the Japanese carrier-borne bombers could have approximately the performance of our Albacores.

6. My plan was therefore to concentrate the Battlefleet, carriers and all available cruisers and destroyers and to rendezvous…in a position from which the fast division [Force A] could intercept the enemy… and deliver a night air attack. The remainder [Force B] to form a separate force and to manoeuvre so as to be approximately 20 miles to the westward of Force A. If Force A intercepted a superior force, I intended to withdraw towards Force B.

7. On the supposition that the enemy adopted what I considered to be his most probable plan, it was certain that he would have air reconnaissance out ahead… The success of my plan depended on my force not being sighted by enemy air reconnaissance.  

Somerville’s report sheds light on the first of the tactical aspects to be addressed, namely the enormous disparity which existed between the Fleet Air Arm and the IJNAF in terms of their respective striking capabilities. His initial assumption that the Japanese aircraft were roughly

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similar in performance to the Fairey Albacore torpedo-bombers was replaced with the
following assessment some ten days later:

These Jap bombers certainly are the devil and we have to revise all our ideas.
You see we’ve never been up against carrier aircraft before…It’s a damned
unpleasant lesson we have to learn. My poor Albacores, Swordfish and
Fulmars are useless against the Japs unless we can catch them at night.\(^{42}\)

Herein lay the critical factor which placed the Royal Navy at such a disadvantage when pitted
against an offensively-minded, carrier-borne air armada. The Fairy Albacore, Somerville’s
principal strike weapon, was in the expert opinion of Eric Brown an anachronism that “would
pay the penalty for pedestrian performance and manoeuvrability coupled with inadequate
defensive armament.”\(^{43}\) And with no dive-bombers to expand the Eastern Fleet’s primary
aerial striking capacity beyond torpedo-bombing, the British were in very serious trouble if a
Midway-style punch and counter-punch engagement developed between both fleets. For the
Albacore, like its predecessor the Swordfish, was a ridiculously easy mark for the Kido
Butai’s formidable Zeke defensive umbrella. And if Somerville hoped for darkness to be the
Albacore’s salvation, Arthur Marder reminds us that the Japanese aviators were efficiently
schooled in the conduct of night operations.\(^{44}\)

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\(^{43}\) E. Brown, *Duels in the Sky*: 51.
\(^{44}\) Marder, *Strategic Illusions, 1936-1941*: 305.
The Aichi Type 99 ‘Val’ dive-bomber and the Nakajima Type 97 ‘Kate’ attack-bomber which comprised the Kido Butai’s strike elements, as compared with the Fairey Albacore torpedo-bomber (bottom left). Squadron Leader Birchall, whose initial reconnaissance report on 4 April alerted Somerville to the presence of Nagumo’s fleet.

The inferior numeric and technical state of the Eastern Fleet’s carrier air assets rendered the employment of the Royal Navy’s favoured integrated tactical approach as virtually suicidal when opposed to the concentrated firepower of the Kido Butai. Somerville’s desire to stay beyond the range of Japanese reconnaissance during daylight hours meant that the Eastern Fleet would have to rapidly close from up to three hundred miles, the approximate search radius of the seaplanes carried by the IJN’s battleships and cruisers. In doing so the pace of advance would be governed by the battleships, limiting the British to speeds of 23 knots or less. Over such distances the chances of intercepting the Japanese before dawn where tenuous at best, as the IJN’s ships could employ a 5 – 7 knot speed advantage to avoid contact if required. Depending upon the range between both fleets it is likely that at least some of the approach manoeuvre would have been required in daylight thereby exposing the Eastern Fleet

Collier, Japanese Aircraft of World War II: 59, 120.
to the increased danger of detection before it could reach effective range. It will be recalled that at Cape Matapan, Admiral Cunningham estimated fifty miles as the maximum effective range to commence airstrikes so as to place his slow battleships in a good position to subsequently engage the Italians with surface gunfire.\(^{46}\) To attempt a similar exercise against the Kido Butai would verge upon the insane unless the Japanese were totally oblivious to the presence of the Eastern Fleet through failures in their air search procedures.

Incredibly Somerville was favoured by the inability of Nagumo’s reconnaissance to locate the main body of the Eastern Fleet from 4 – 7 April as at different points his ships were approximately seventy to eighty miles shy of the Kido Butai.\(^{47}\) This lapse by the Japanese represented but one of several errors on their part, the most spectacular of which took place on 9 April when nine Blenheim bombers succeeded in penetrating the airspace over the IJN’s carriers. Unmolested to this point by patrolling Zekes, the bombers scored a few near misses in the vicinity of Akagi before vacating the premises, losing five of their number as they were chased away.\(^{48}\) Indeed the events of 4 – 9 April served as a classic naval example of the ‘fog of war’ in action, and a reminder that material superiority did not always guarantee success in battle. The Japanese were to find this out in a most painful fashion at Midway just two months later when the inferior American carrier contingent succeeded in surprising and sinking four of Nagumo’s carriers. Yet to draw a comparison between Ceylon and Midway which could favour the British cause is not a valid interpretation upon several bases. Firstly, because the three American carriers fielded at least twice as many aircraft each as did their RN counterparts. Secondly the Americans were able to mount two-dimensional airstrikes

\(^{46}\) Cunningham, Despatch, *LDNGZT* 29.7.1947: 3592.


against the Japanese with their dive-bombers and torpedo-planes. And thirdly, neither side sought to utilise an integrated air-surface tactical regime.

One will add to the list the fact that Vice-Admiral Raymond Spruance’s command (unlike Somerville’s) possessed sufficient modern fighter aircraft to pose a serious impediment to incoming Japanese airstrikes. Each of the British fleet carriers fielded a single squadron of Martlets, the export version of the Grumman F-4 Wildcat that Spruance possessed at Midway. Churchill had previously expressed his support for the “Grummans”, and urged the re-equipment of all of the Royal Navy’s carriers with this fighter type. However a paltry eighteen Martlets were not enough to master over one hundred Zekes, so even with the benefit of air warning radar, the FAA’s combat air patrol (including Sea Hurricanes and Fulmars) would be in a parlous state had Nagumo’s flyers launched an all-out assault against Somerville’s main body. In any event the two strikes which were delivered against elements of the Eastern Fleet were more than enough proof of what lay in store for the British. The Vals that dive-bombed and sank Cornwall and Dorsetshire achieved a 90% accuracy rate, the highest recorded for carrier-borne air attacks throughout the Second World War, and a number which verged upon the percentile average for modern ‘smart’ missiles and pilotless drones. Similar results were achieved against the Hermes and her consorts, though in both instances there were no defending fighters present. A particularly ominous aspect of these attacks arose through the fact that both had been executed by dive-bombers alone, with Nagumo’s equally dangerous Kate torpedo-bombers playing no role in either sortie.

HMS Cornwall (101: left) sinking after being pummelled by Vals on 5 April 1942. (102: Right) a Grumman Martlet fighter, two squadrons of which were present aboard the carriers Formidable and Indomitable.

In the following battles of the Coral Sea, Midway, the Eastern Solomons and Santa Cruz the Val-Kate combination succeeded in reducing the USN’s Pacific carrier arm to the point of extinction by October 1942, sinking three fleet carriers and crippling or damaging all but one of the remainder at various stages. However in the process the Japanese suffered the virtual elimination of all of their first-line aircrews, a consequence of carrying the fight to an opponent which fought with similar tactics, yet also held an overwhelming advantage in trained reserves and ever-improving aircraft types.51 By contrast the Royal Navy presented the Japanese with a combatant that remained wedded to the concept of battleline superiority, and employed a tactical regime that condemned the RN’s capital ships to destruction in the absence of adequate fighter cover. It is significant to note that Admiral Somerville consistently maintained his support for a combined-arms assault until 7 April, a decision which led to subsequent criticism from Admiral Sir Algernon Willis, the commander of the Eastern Fleet’s Force B. Yet at the same instant both Somerville and the Admiralty were perfectly aware of the Kido Butai’s spearhead qualities but chose to proceed with the tactics

which had succeeded in the Atlantic and the Mediterranean. Absent a comparable air striking force, the Royal Navy could not maintain its operational supremacy in this form of combat environment. Stephen Roskill, however, has asserted that with an improved Eastern Fleet, Somerville would have been saddling-up the short-priced favourite.

**Challenging Nagumo with confidence?**

Stephen Roskill has been justifiably regarded as one of the foremost post-war practitioners in the field of naval history. His multi-volume work, *The War at Sea 1939-1945*, placed him alongside Samuel Eliot Morison in producing one of the great narrative accounts of the twentieth century. And it is for this reason that Roskill’s assumptions regarding a clash pitting an Eastern Fleet in possession of four or five aircraft-carriers against the Kido Butai are difficult to fathom. Aside from presenting no direct evidence to support his theory, the author has failed to identify which tactical regime the British would have sought to pursue in the absence of the R-class, though it is most likely that he was referring to a straight-out carrier engagement in the Midway mould. Assuming at best the presence of the RN’s four modern fleet carriers then in service (*Formidable*, *Illustrious*, *Indomitable*, *Victorious*), the FAA would field an additional ninety aircraft, hence a total of 180 fighters and torpedo-bombers. This still left the British at least halfway short of the Japanese complement, absent the carrier *Kaga*’s ninety aircraft. The presence of the *Illustrious* and *Victorious* did not address the dearth of dive-bombers as they too possessed Albacores and Swordfish as their primary strike weapons. And whilst the Eastern Fleet’s fighter cover stood to be enhanced from thirty-three to approximately sixty in total, Nagumo still enjoyed almost a 3:1

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53 * IJN *Kaga* did not participate in the Operation C raids as she was undergoing maintenance in Japan.
advantage. Additionally the aircrews aboard *Formidable* and *Indomitable* were largely inexperienced as Somerville noted within his correspondence.\(^54\)

In a general comparison of the respective air-naval doctrines, Arthur Hezlet has stated that “the Japanese air groups were essentially a striking force of great range and power and fully capable of competing with shore-based aircraft”, whilst the FAA’s air groups “were the result of a policy of a fleet air arm designed to give air support to a battlefleet.”\(^55\) This policy of almost twenty years standing had provided the Royal Navy with smaller overall carrier aircraft complements, an essentially one-dimensional mode of attack (given the very small number of Skua dive-bombers which actually entered service), and limited single-seater fighter assets. From the material analysed in both the current and previous chapters the Japanese possessed the decisive advantage in aircraft design, numbers, attack modes and crew experience which tipped the scales in their favour. Even upon the basis which Roskill has suggested, it is difficult to accept that the Eastern Fleet could have prevailed in such an engagement although the inherent vagaries of battle cannot be discounted. Nor would the addition of a few squadrons of shore-based torpedo-bombers have necessarily improved Somerville’s position, as range (or lack thereof) became especially critical within an oceanic operational environment.\(^56\) As addressed within Chapters Four and Five the RAF did not possess sufficient advanced aircraft such as Mosquitos and Beaufighters that were capable of making a decisive contribution within the timeframe of these events, as British aero production priorities remained largely wedded to the escalating strategic bombing campaign against Germany.


The Bristol Beaufighter (103: left) and the de-Havilland Mosquito (104: right) were two fighter-bombers which would have caused the Japanese particular concern in both the South China Sea and the Indian Ocean, however neither had reached service in sufficient numbers as anti-shipping strike aircraft by April 1942.

Given the obvious material superiority which the IJN wielded over the Royal Navy in terms of its carrier-borne capabilities, the basis for Roskill’s conclusion may instead emerge at the command level. The relative capabilities of the senior fleet commanders provide a plausible explanation as Somerville’s abilities have been generally commended within the post-war accounts, whereas Nagumo’s competency has been heavily criticised. Amongst other Western historians, Roskill, Hezlet and Marder have duly noted Nagumo’s failure to destroy the Eastern Fleet, with Marder assessing the Japanese admiral’s abilities as “B-class” at best.57 Fuchida Mitsuo’s assessment of Nagumo and many of his senior colleagues is even more pointed. In a particularly blunt assessment Fuchida considered Nagumo to be an indecisive commander, in his view a major failing within the IJN’s officer corps as a whole.58 Much of the criticism which has been directed at Nagumo has focused upon his apparent blunder in failing to order a third airstrike at Pearl Harbour. Yet as Marder has recorded in his summation of the Operation C raids: “Although Nagumo did not annihilate the Eastern Fleet, he ensured, at trifling cost, that there would be no British counter-attacks on the Malay

58 Fuchida & Okumiya, Midway: The Battle that Doomed Japan: 145-149.
Barrier for two years.” Whilst Somerville’s overall combat record did undoubtedly surpass that of his opponent, the situation that existed in the Indian Ocean placed him in a position whereby the presence of extra resources would not have sufficiently alleviated the existing gulf in firepower and tactics to assure the RN of reasonable operational parity.

A third possibility resides in Roskill’s background as a serving naval officer in the Second World War. Marder recorded that Somerville, whose common-sense approach to naval warfare has been rightly acknowledged, believed that ‘the Japs are afraid of the dark so I must try and specialise in night attacks’. The dismissal of Japan’s military capabilities upon largely ethnocentric grounds by senior British officers in all three services has been increasingly highlighted within the historiography since the 1970s, with the defence of Malaya and Singapore standing out as the clearest example of this inability to recognise the excellence of Japanese aviation in particular. John Ferris’s incisive essay *Student and Master* has documented this aspect in particular detail, yet in common with many similar publications does not address the influence of this line of thinking upon the writings of historians with service backgrounds. The likes of Roskill, Hezlet and Grenfell were all senior officers, with Hezlet and Grenfell possessing extensive combat experience. It must be emphasised that their authorship does not disclose any apparent bias against the Japanese on these particular grounds; indeed all three have readily appreciated the IJN’s capabilities in the field of naval aviation and have likewise noted the existence of ethnocentrism as a paramount example of British misjudgement. However it is not beyond reasonable contemplation that as a member of a service which prided itself upon the traditional professionalism of its

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61 Ferris, ‘Student & Master’: 94-122.
operational leadership, Roskill subconsciously believed that the innate superiority of his fellows would have eventually prevailed.

Now in the absence of supporting evidence this contention cannot be properly maintained as anything more than mere supposition, in concert with Roskill’s pronouncement itself. Yet the fact remains that the neglect of the wider operational implications of the Nagumo-Ozawa sorties for the Royal Navy within the historiography does not allow the reader to test Roskill’s observations against a generally established interpretation. What is certain is that Roskill could not have based his views upon the subsequent course of the naval war in the Asia-Pacific theatre. By the time that the Eastern Fleet had returned in strength to the vicinity of the Malay Barrier in early 1944, the Kido Butai had become but a shadow of its former self. A rebuff at the Coral Sea, defeat at Midway and the attrition of the Solomons campaign had left it ill-equipped to fend off Admiral Spruance’s Fifth Fleet, and at the Philippine Sea from 19-20 June 1944 its fledgling aviators were decimated. Largely re-equipped with the latest American fighters and torpedo-bombers during the course of 1943, the Fleet Air Arm had at last reached a position where it would handle, with confidence, anything that the Japanese could have then thrown against it. However the RN no longer remained the supreme Great Power fleet upon the world’s oceans. Since June 1943 this mantle had passed seamlessly to the United States Navy as the great rebuilding of that nation’s maritime might reached its inevitable industrial crescendo, and a true Two-Ocean navy became a reality.

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Admiral Yamamoto Isoruku succeeded in encapsulating the impact of naval aviation when he stated that ‘the fiercest serpent could be overcome by a swarm of ants.’\textsuperscript{62} Tom Phillips came to experience the truth of Yamamoto’s wisdom on 10 December 1941 with fatal results. The Japanese themselves were subjected to the same experience during the battles off Leyte in October 1944 and the sinking of the super-battleship \textit{Yamato} on 7 April 1945, three years to the day since Admiral Somerville had ordered the Eastern Fleet to withdraw from the vicinity of Ceylon. This decision, taken for reasons of obvious operational inferiority, remains the only occasion upon which a senior British commander had sought to avoid a major fleet action throughout the course of the twentieth century. Within its 1939 \textit{Fighting Instructions} the Admiralty insisted that in the event of battle, “the British fleet will be brought into action and fought as a whole until the enemy’s fleet has been disorganised and broken up.”\textsuperscript{63} Somerville had set out to do this, confident that his aircraft could bring about similar results to those achieved by Admiral Cunningham at Cape Matapan in March 1941. Fortune favoured his unsuccessful endeavour, yet there is no disguising the outcome of these circumstances for Britain’s ongoing dominance of the high seas. Saddled with a fleet, a naval air-arm and a tactical doctrine which no longer satisfied the requirements for exercising command of the sea at the highest level, the events of 4 – 9 April 1942 ensured that a remarkable era had finally run its course.

Conclusion

As the Mikado’s representatives signed the instruments of Japan’s surrender aboard the battleship USS *Missouri* in Tokyo Bay on 2 September 1945, the United States Navy stood alone and unchallenged in its command of the sea. From early 1944 onwards the USN had successfully contrived the means to deliver overwhelming levels of lethal force both above and below the waves. Whether the assignment involved an opposed naval combat or the obligation to provide support for amphibious operations, no other fleet or land-based air arm could match the Americans for size and firepower. And whereas the USN’s submarine arm succeeded in exterminating Japan’s merchant marine with ruthless precision, American surface escorts were adept at effectively shielding their own convoys from Japanese submarines. Victory over the Imperial Japanese Navy became assured once American naval production reached full steam, and the introduction of the new *Essex*-class fleet carriers in mid-1943 permitted a series of gifted commanders to wage a wide-ranging campaign in the Central Pacific to destroy Japan’s Combined Fleet and devastate its land-based air support. In so doing the Americans demonstrated the fruits of their aptitude for bettering hostile technology on the basis of combat experience by unveiling a new carrier-borne fighter, the F6 Hellcat, which had been specifically designed to defeat the Japanese Zeke and did so handsomely.1 Beneath this umbrella the United States Pacific Fleet overcame its pre-1943 deficiencies and terrorised its way to the doorstep of metropolitan Japan, reducing the Combined Fleet to an immobile ruin in the process.

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For the Royal Navy, the disposition of the British Pacific Fleet as a virtual satellite of the USN’s 3rd Fleet throughout the Okinawa campaign (March – June 1945) and the subsequent air operations against the Japanese home islands confirmed its status as a subordinate maritime power. Less than a fortnight after the events off Ceylon in April 1942 the Admiralty acknowledged the need for the prioritisation of aircraft-carrier construction within its construction programme, with the First Lord noting that ‘the course of the war has demonstrated convincingly the large part that aircraft, properly trained, equipped and directed, can play in the conduct of the war at sea.’ The composition of the rejuvenated Eastern Fleet, which returned in strength to Ceylon in January 1944, reflected the primacy of the carrier-borne air weapon in the Admiralty’s thinking, and when the Pacific Fleet arrived off Okinawa in March 1945 its spearhead consisted of four fleet carriers with two fast battleship escorts. At this late hour, however, British naval supremacy had become a distant memory. In spite of an outstanding performance in executing its majority role in the eventual defeat of the German and Italian navies, the RN was found wanting at the highest level. The exploits of the Imperial Japanese Navy throughout the first five months of Far Eastern hostilities had raised the bar in air-naval warfare to an operational height that the British, both tactically and materially, could not hope to ascend when they had been required to do so.

The exploration offered here of the Royal Navy’s performance throughout the first thirty-two months of the Second World War has clearly identified the signing of the five-power Washington Treaty in November 1922 as the genesis for the final aerial eclipse of British naval supremacy in April 1942. Whereas rising international tensions had resulted in the effective abandonment of the Washington-London accords by 1937, the treaty regime came

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to shape the character of maritime operations during the pre-1943 period in two profound respects. Firstly, none of the signatories could attempt to prosecute a profligate war at sea until such time as their national industrial bases were sufficiently mobilised to undertake general naval rearmament. Thanks to the geographic enormity of its global defensive requirements, the British Admiralty especially would be compelled to exercise a strictly minimalist approach in the operational disposition of its warships once the conflict spread beyond the waters of the North Atlantic. And secondly, the generous tonnage ceilings for aircraft-carrier construction provided the British, the Americans and the Japanese with a unique pre-war opportunity to transform their battleship-centric naval doctrines by embracing carrier-borne airpower as the future summit of naval warfare.\textsuperscript{3} With its valuable experience in naval-air operations stemming from the Great War, the Royal Navy stood to become a leading exponent in the evolution of the air-weapon at sea. Yet for this to occur, its senior leadership would be required to undertake an unprecedented leap of faith by favouring the carrier airstrike instead of the battleship’s surface broadside.

Thanks to the combination of adverse policy initiatives and the continuous subordination of naval aviation within the RN’s interwar operational doctrine, the British missed their chance. The opening chapter established that three distinct policy streams from the 1920s bore the greatest long-term responsibility for the inadequate preparedness of the Fleet’s carrier air-arm at the outset of hostilities with Germany in September 1939. These were the subdivision of the Fleet Air Arm’s development under the 1923 Dual-Control (RN-RAF) system, the Admiralty’s determination to prioritise the readiness of its battleline at the expense of an upgraded aircraft-carrier presence, and the ongoing construction of the Singapore naval base. Plagued by inter-service acrimony and a continual lack of resources, Dual-Control ensured

that the FAA entered the European conflict saddled with critical shortages in quality aeroplanes, trained aircrews and maintenance personnel. Following Whitehall’s rejection of its ambitious construction plans within the 1925-26 Naval Estimates, the Admiralty had sought to preserve its capital-ship and cruiser strength above all else as its budgets were steadily pared to the bone from 1927 until 1932. Yet at the same time, both the Admiralty and Whitehall were prepared to continue funnelling vast sums into the Singapore project instead of taking the necessary steps to rehabilitate the RN’s rapidly aging first-line strength. Whereas it is difficult to fault Whitehall’s need to impose substantial cuts to interwar defence expenditure, London’s ongoing financial support for the Singapore base and the reckless nature of concurrent Admiralty policy-making cannot be so readily excused.

John Ferris and others have been undoubtedly correct in labelling the behaviour of the Sea Lords during the 1920s as arrogant because of the Admiralty’s desire to pursue naval expansion in the absence of any clearly defined overseas threat. Ferris in particular has likewise pointed to the most egregious of outcomes for the RN which flowed from the alienation of government support for its 1925-26 programmes – the enforced guttering of the Fleet’s shipbuilding base in the early 1930s. This left the service in a most precarious position as vital refits could not be administered to the majority of its existing capital-ships and aircraft-carriers before the onset of war. However Whitehall and the Air Ministry cannot escape legitimate censure over their conduct of the ‘bomber first’ policy position from 1934 onwards as this initiative succeeded in sharply curtailing the operational potency of both the Fleet Air Arm and RAF Coastal Command. Whereas there can be little doubt that the manufacturing priority afforded to RAF Bomber Command in the final years of peace did

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succeed in establishing the industrial foundations for mounting an ultimately devastating strategic bombing campaign against Germany, British naval aviation had been left by the roadside in the process. Such were the lack of dedicated land-based strike and reconnaissance squadrons (not to mention the complete absence of any modern single-seat fighters aboard the Royal Navy’s aircraft-carriers), the Fleet’s material frailties stood to be disastrously exposed should its opponents achieve consistent air superiority above the various maritime battlegrounds.

Moving to the incorporation of the air-weapon within the interwar RN’s operational doctrine and practices, the thesis has effectively conveyed the subordinate employment of aircraft as the means to enhance the striking power of the British battleline as distinct from evolving as a paramount strike instrument in its own right. When addressing the technical development of carrier-borne aircraft over two decades there is no disagreement with the views of Arthur Hezlet and Geoffrey Till in particular that the FAA kept pace with its foreign contemporaries until the advent of the monoplane configuration in the mid-1930s. The various Brassey’s correspondents were similarly accurate in their praise of British ingenuity when it came to advances in aviation metallurgy and aircraft performance during the biplane era. However the Admiralty’s determination to introduce multi-role fighter-reconnaissance aircraft, a policy which the Royal Navy alone persisted in pursuing following the outbreak of hostilities, effectively denied the Fleet Air Arm the presence of specialised fighter designs that would be the critical factor in securing its own airspace. And with the abject refusal of the Air Ministry to supply anything other than a miniscule dive-bombing presence aboard the RN’s aircraft carriers, the FAA entered the war as a torpedo-bombing/reconnaissance-centric air arm.

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Whilst this configuration did provide the Admiralty with a distinct advantage over the carrier-less German and Italian navies, a confrontation with Japan’s ultra-modern two-dimensional airstrike capability loomed as a gigantic mismatch that possessed the capacity to finally usurp Britain’s mantle as the supreme naval power.

Yet the Japanese, in common with their Western contemporaries, retained their belief throughout the interwar period that a major sea battle could only be resolved by capital ships. The utilisation of aircraft within the fleet tactics of the three major navies sought to gain an initial advantage for the battleline by eliminating the opponent’s air assets and wounding its battleships (as distinct from sinking them *en-masse*), thereby securing a critical tactical advantage in the paramount surface engagement to follow. The essential difference between the evolving practices of the British, as compared with those within the Japanese and American navies, was that the Royal Navy’s senior leadership continually favoured reconnaissance and target spotting as the primary functions of the Fleet Air Arm in an integrated naval-air environment. Despite the outcomes of a number of fleet exercises from the 1920s onwards which endorsed the potency of the torpedo-bombing option in particular, the Admiralty failed to evolve its dedicated airstrike instruments in both quality and quantity to a comparable level with its overseas competitors. Furthermore the RN’s belief in the close operational contact between its aircraft-carriers and the battleline had not diminished by 1939 as reflected in the provision of extra armoured protection for its new *Illustrious*-class carriers then under construction. By its inability to properly recognise the value of a detached air-striking force, the Admiralty had in effect engineered the circumstances for the destruction of its own aircraft-carriers if ever they were caught in company with a slow-moving battleship contingent.
The operational mobility of the Royal Navy’s octogenarian battleline loomed as a serious
detriment regardless of whether its participation assumed the proportions of a squadron or a
fleet-scale activity. Therefore without a successful preliminary intervention by the Fleet Air
Arm, the faster European Axis warships could evade their British opponents at will whilst
simultaneously drawing the British under the formidable umbrella of their respective air
forces should the RN mount a concerted pursuit. In dealing with the Japanese, however, the
threat to assembled British naval assets reached a far more dangerous level. The examination
of the rise of naval airpower within the pre-war IJN has confirmed the existence of a
dysfunctional military structure and a fixation with offensive warfare that almost completely
ignored the urgent need to secure Japan’s crucial maritime lifelines. Be it through the
abrogation of its convoy-escort capabilities, the misuse of its submarine fleet as a battlefield
support tool or the neglect of competent defensive systems aboard its warships and aircraft,
the Imperial Japanese Navy never possessed the capacity to displace the RN as the supreme
naval power. However through the employment of its advanced carrier-borne and land-based
air arms, the IJNAF was well capable of driving any British surface presence from the Far
East whilst inflicting catastrophic destruction in the process. For as long as the Japanese
enjoyed the unchallenged advantage of a massed aircraft-carrier spearhead, the interests of
the Royal Navy were best served by its substantive absence to the east of Suez.

Reference has been made at varying points throughout this work to the growing trend within
the post-war historiography to identify pre-war Western underestimation of Japanese fighting
potential upon ethnocentric grounds as a principal contributing factor in initial Allied
disasters such as the fall of Singapore. Yet whilst the historical legitimacy of this theme is
undeniable, the extensive documentation of Allied prejudices should not serve to obscure the
central aspect of Japan’s stellar rise as the trailblazer in naval aviation. Of the three major
maritime powers, the Japanese alone made their leap of faith in favour of the air-weapon as a matter of choice rather than necessity. Throughout the 1920s they had been prepared to quietly absorb the benefits of Western aero technology, and with the coming of the 1930s apply this knowledge within a well-resourced indigenous design environment. The IJN’s visionaries, who appreciated the future potency of the aeroplane at sea, encountered a similar level of resistance from conservative supporters of the ‘battleship school’ to that which existed within the British and American navies. And whilst these advocates such as Yamamoto Isoroku and Ozawa Jisaburo could not entirely dissipate the Combined Fleet’s appetite for a battleship showdown with the United States Navy, they did succeed in convincing the Naval General Staff that the formation of a carrier spearhead would provide an unprecedented advantage in pre-emptive striking power. What the Kido Butai proffered, however, was the first practical blueprint for the predominance of the aircraft-carrier as the pre-eminent weapon at sea.

As the Japanese and the Americans looked on as interested neutrals, the Royal Navy entered the test of war at less than full strength and with a wide range of formidable operational challenges to overcome. Denied the advantage of a decisive Allied presence in Europe following the fall of France in June 1940, the Admiralty had no choice but to disperse its forces with the upmost economy in the quest to fulfil the most vital of its obligations, namely the protection of Britain’s lines-of-communication. Herbert Rosinsky’s November 1940 assessment of European Axis maritime intentions proved to be substantially correct – the desire to wage a guerre de course in preference to a concerted campaign to seize the command of the seas via a direct challenge to the RN’s surface fleet. And in spite of

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7 Interrogation Nav. 64: Rear-Admiral Takata Toshitane 1.11.1945: 262.
8 Rosinski, ‘Mahan and the Present War’, BSY 1941: 204.
suffering grievous losses, the British were able to repel and eventually prevail in every aspect of naval warfare against their German and Italian foes. In each instance the RN demonstrated its ability to muster just enough in the way of technical and/or tactical superiority to eventually tip the scales in its favour, aided as it invariably was by the outstanding competency of its fighting admirals. Yet it remains the case that the service’s final success in the European maritime theatre could not have been achieved without substantial Dominion and American support (especially in the Atlantic against the Kriegsmarine’s U-Boats), and the welcome failure of its opponents to exploit their full operational potential, most especially in the air.

The European experience defined the RN’s capacity to meet and defeat the Axis nations in opposed naval combat. The employment of integrated fleet tactics had proven to be highly successful in the absence of an opposing aircraft-carrier presence, and these tactics served to offset the considerable disadvantage in mobility which plagued the majority of Britain’s battleline throughout the course of the war. However the disasters off Norway, Greece and Crete had graphically illustrated the helplessness of a Fleet Air Arm without the presence of modern single-seat fighters, as well as the perils of undertaking operations without sufficient land-based air support. Had the Luftwaffe and the Regia Aeronautica been consistently deployed in support of a concerted campaign to drive the Royal Navy from European waters, the British would have faced a crushing defeat, as the RAF, still licking its wounds from the Battle of Britain and otherwise preoccupied with its strategic campaign against Germany, could have offered only limited assistance. Rosinski’s reference to the necessity for a successful ongoing partnership between sea and land-based air had not transpired (on either

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side) within the Atlantic and the Mediterranean by April 1942. The Germans and the Italians paid the price for their possession of air-arms which were fundamentally earmarked for support of land operations. However the British would not enjoy this advantage when their ships steamed to the Far East, as the Japanese had assembled a modern dedicated naval air-arm that required no accompanying surface broadsides to achieve its offensive goals.

In November 1940 the Fleet Air Arm executed a major coup in sinking or disabling three Italian battleships at Taranto with just a handful of Swordfish torpedo-bombers. Equipped with knowledge of the British success, Japan’s Kido Butai employed over three hundred aircraft in blitzing Pearl Harbour on 7 December 1941. Three days later the Prince of Wales and Repulse were sent to the bottom off Malaya by the land-based 22nd Air Flotilla. This event marked the beginning of the end-game for British naval supremacy, for the opening four months of the Asia-Pacific conflict clearly illustrated the inferiority of the Royal Navy when confronted by Japanese air-naval supremacy within an enclosed-waters operational environment. Force Z itself cannot be regarded as an adequate best-case for the purposes of this enquiry because of its ill-balanced nature, the atypical circumstances of its disposition (as compared with usual British practice in the Atlantic and the Mediterranean) and the operational inexperience of its commanding officer. However the counterfactual analysis undertaken in Chapter Five, based as it has been upon the wider experience of British sorties in the Mediterranean and the outcomes for the ABDA forces during the Japanese conquest of the Indonesian archipelago, provides little comfort for the prospects of a properly-balanced RN disposition within these waters. Whereas a better resourced British naval and air presence could have undoubtedly offered far stiffer resistance to the Japanese invasion of Malaya,

10 Rosinski, ‘Mahan and the Present War’, BSY 1941: 204.
there can be no disagreement with Arthur Marder’s contention that Britain’s naval presence would have been inevitably overcome.\textsuperscript{12}

Yet the substance of Marder’s interpretation, in common with similar judgements from Russell Grenfell and Malcolm Murfett, does not convey the full enormity of the war-fighting apparatus which awaited a more credible response from the Royal Navy. Aside from the excellence of the IJN’s surface combat techniques, especially in terms of manoeuvre, equipment and supporting air reconnaissance which surviving Allied officers such as Commodore Collins have fulsomely recounted, this enclosed waters campaign provided a far more ominous insight into the full ambit of Japanese air-naval capabilities.\textsuperscript{13} The destruction of Force Z, the virtual obliteration of American air power in the Philippines and the attainment of air supremacy over the interior of the Malay barrier was almost entirely due to the IJNAF’s land-based air flotillas. However the bombing of Darwin on 19 February 1942 employed the combined talents of two air flotillas and air groups from four of the Kido Butai’s six aircraft-carriers. On the evidence of the skill with which Darwin’s shore facilities and local shipping were surgically dispatched, any form of Royal Naval disposition, be it squadron or fleet scale, faced a grisly fate. And at the core of Japan’s air-naval supremacy in this instance resided the capacity to totally dominate the skies over the chosen areas of operations. With the Zeke fighter, the Japanese were ideally equipped to achieve and maintain air supremacy, and do so with far greater consistency than either of their European Axis allies.

\textsuperscript{12} Marder, \textit{Strategic Illusions, 1936-1941}: 506.
\textsuperscript{13} Collins, Despatch, \textit{LDNGZT 6.7.1948}: 3937-3948.
Whereas Japan’s aero-amphibious thrust through South-East Asian waters emphatically portrayed the power of the IJNAF as a fighting instrument, the final act would be played out in the form of the first and only fleet-scale engagement between the Royal Navy and its one-time pupil. Off Ceylon in early April 1942, two fleets pursuing contrary doctrinal approaches stalked each other, briefly skirmished and then went their separate ways. In spite of the absence of a major confrontation, these events bluntly confirmed the fact that Admiral Somerville’s Eastern Fleet had barely escaped a cataclysmic end. In the two encounters between Somerville’s ships and Nagumo’s flyers, the Japanese dive-bombers had sent their unlucky victims to the bottom with terrifying precision. The classification of the British Eastern Fleet as a fleet-in-being cannot diminish the enormity of the episode, as Somerville had been initially determined to intercept the Kido Butai in a similar fashion to Admiral Cunningham’s conduct off Cape Matapan in March 1941. And in sharp contrast to its prior experiences, the Japanese force did not benefit from a surprise attack upon an unsuspecting opponent. Adding to the enormity of the odds facing the Eastern Fleet, Vice-Admiral Ozawa’s Southern Expeditionary Fleet constituted a form of commerce-raiding instrument which the British had never before encountered – the active combination of carrier-borne, surface and submarine assets. None of the Royal Navy’s previous opponents over four centuries had exercised anything approaching the relative degree of tactical and material dominance which the IJN here enjoyed over its former mentor.

En-route to attack Colombo on 5 April 1942, Commander Fuchida Mitsuo spied a formation of Swordfish torpedo-bombers through broken cloud cover:

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They were flying at a much lower altitude, and obviously had not noticed us. I quickly signalled Lieutenant Commander Itaya, the fighter group commander, who was flying to port, to close me…After a few moments, Itaya nodded and veered off to lead his fighters against the still unsuspecting enemy. The lumbering Swordfish, caught from above, were shot down to the last plane in one swift attack.\(^{15}\)

This incident represented but a pale reflection of the carnage which awaited the Fleet Air Arm had the Royal Navy, even in possession of its most modern fleet units, attempted to wage a battle against Nagumo’s spearhead. In spite of Stephen Roskill’s bold pronouncement of the confidence with which Somerville could have handled the Japanese under these circumstances, all the relevant evidence indicates otherwise. Without the favourable intervention of the vagaries of combat, the prospects for British success were virtually nil. In this situation the skills of Britain’s most gifted fighting admirals (be it Somerville or otherwise) could not have compensated for the disparity in offensive power which existed between these opposing navies. For all of its accumulated tradition and experience, the RN, similar to each of history’s dominant military machines, could not escape its limitations as a fighting force. And after almost three years in which it had fought on the edge with commendable success, these limitations had been reached.

In the aftermath of the April 1942 Operation C raids there existed three of Rosinski’s ‘superior’ naval powers – Britain, Japan and the United States – but no supreme naval

And by the conclusion of the Solomons campaign in November 1943, any remaining pretence of Japanese naval superiority had vanished. Disaster at Midway and a lengthy war of attrition in the Solomons had eliminated the vast majority of the IJN’s best and brightest, including Admiral Yamamoto and virtually all of the IJNAF’s experienced aircrews. By the time of the battle at Leyte Gulf in October 1944 the Japanese were forced to once again place their faith in their battleships as the Kido Butai possessed no more than approximately 100 partly-trained aircrews aboard its four remaining aircraft-carriers. All of Ozawa’s carriers and three of Japan’s battleships were sunk in the course of the various engagements which made up this largest naval battle in history, and the subsequent severing of fuel oil supplies meant that only the battleship Yamato sallied forth once more on 7 April 1945 on a futile suicide mission. And whilst both the Japanese and Western accounts have identified the various sources of this eventual downfall, one key aspect has often been overlooked. Off Ceylon the Kido Butai had operated as a wholly-independent first-strike instrument. By incorporating it as a portion of a much wider and more complex Combined Fleet disposition at Midway, Nagumo’s force was robbed of its most critical assets – anonymity and tactical flexibility – and paid the price for it.

The ultimate supremacy of the United States Navy, which had arisen through the enormity of America’s war-mobilised industrial muscle, complements John Ferris’s assessment that the ‘self-inflicted wound’ of British Admiralty policy in the late 1920s cost the Royal Navy any chance of maintaining its global command of the seas.\textsuperscript{17} The temporary dislocation of the military-industrial complex which the RN required to maintain its status was never entirely remedied, although it remains extremely doubtful that the British could have maintained pace

\textsuperscript{16} Rosinski, ‘Mahan and the Present War’, \textit{BSY 1941}: 194.

\textsuperscript{17} Ferris, ‘The Last Decade of British Maritime Supremacy 1919-1929’: 125.
with the Americans over the long term had the Admiralty’s industrial downsizing during the early 1930s been avoided. As Ferris has correctly asserted, the British fleet as a whole could provide adequate cover for its defensive responsibilities in the most general sense, but this did not extend to its fulsome deployment in isolated peripheries such as the Far East.\textsuperscript{18} From the standpoint of grand strategy, this interpretation remains virtually irrefutable. Yet the great lesson to be drawn from the conduct of the Second World War in its entirety is that the maintenance or seizure of military supremacy resided as much upon individual battlefields as it did on the factory floor. The climactic engagements at Stalingrad (July 1942 – February 1943) and Kursk (July 1943) crushed the Wehrmacht as the superior land power almost two years prior to the Third Reich’s final capitulation, with A.J.P. Taylor nominating the massive armoured showdown at Kursk as ‘the first time that the great army of National Socialist Germany had been beaten in the field.’\textsuperscript{19}

Stalingrad, Kursk, Midway and the Solomons campaign stood out as examples of decisive military change being generated by the decimation of the loser’s most potent fighting instruments in circumstances where both sides applied similar fighting methods. By contrast, the blitzkrieg destruction of the French army in June 1940, the successful British employment of escort carriers in the Battle of the Atlantic (dating from convoy HG-76 in December 1941) and the Kido Butai’s Indian Ocean sortie were all indicative of a rarer occurrence. In each of these instances, the determining factor became the disparity in method which existed between the particular participants. Just as the Macedonian phalanx, the tactical device which had propelled Alexander the Great to the Indian subcontinent centuries before, met its eventual come-uppance at the hands of the superior flexibility of the Roman cohorts, so the Royal

\textsuperscript{18} Ibid: 135.
\textsuperscript{19} Taylor, \textit{The Second World War}: 180.
Navy’s enduring belief in the battleline (with air support) foundered in the wake of the massed carrier spearhead. This remains the great weakness in judging the success and/or failure of a military power through an overriding historiographical emphasis upon its relative numerical strength and industrial capacity. As the RN had so emphatically demonstrated in the prelude to the events of early April 1942, supremacy at sea could be maintained by an aging fleet thanks to the combination of outstanding battlefield leadership and the capacity to summon the barest of operational advantages upon a shoestring disposition of available assets. And just as profoundly, supremacy could be snatched away by the employment of operational methods for which the incumbent possessed no effective counter.

In considering all of the evidence the reader is presented with three relevant alternatives for establishing the date of the surrender of British naval supremacy. The first is that the Royal Navy lost its command of the sea before a shot had been fired. The second is that the Royal Navy lost its command of the sea when the Eastern Fleet was forced to withdraw from the vicinity of Ceylon as of 7 – 9 April 1942. And the third is that the Royal Navy lost its command of the sea at an indeterminate point from January 1943 onwards when the United States naval presence eventually assumed unchallengeable proportions. The essential reason why the second proposition is most convincing is that naval supremacy can only be wholly determined in wartime, and therein through its active application. As the circumstances of the Second World War quite amply demonstrated, numerous pre-war notions regarding the future conduct of war were quickly shattered, and the sea proved to be no exception. No single weapon more profoundly shaped the course of the war at sea from 1939 – 1945 than the aeroplane. The British retained a superior fleet which laudably prevailed in its multitude of operational assignments; however the RN’s longstanding capacity to exercise paramount dominance in battle had come to an end.
If it is true that imitation is the sincerest form of flattery, then the United States Navy surely paid their Japanese adversaries one of the largest and most expensive compliments imaginable. The massive American fleet which steamrollered its way through the Central Pacific in 1944 and onto Japan itself in 1945 owed its origins to the exploits of the force that had journeyed from Hawaii to Ceylon as it confounded and terrorised its enemies through its supremacy in the skies. Japan’s utilisation of the massed carrier-borne air-weapon should be regarded as the single-most innovative advance in naval warfare prior to the advent of the nuclear age. And whilst Japan has been justifiably condemned for the bestial ill-treatment inflicted by her armed services upon Allied prisoners-of-war and the conquered peoples of Asia and Oceania, this should not obscure the fact that the Japanese achieved an outcome shared by no other naval power. Never before had the Royal Navy, the leviathan of sail and steam, been forced to decline a large-scale engagement because it lacked the operational method and means to compete with a numerically-similar opponent. Yet whilst the post-war historiography has cast its nets far and wide in enlarging our understanding of the RN as an institution of immense significance within so many different historical environments, the circumstances of its aerial eclipse remain in the shadows. Understanding this story fundamentally enriches our knowledge of both the twentieth-century Royal Navy, and the critical factors which shaped international naval policy and practices.20

20 *The author will be expanding upon his studies of the IJNAF’s carrier air-arm in a subsequent work which will explore the proposition that the Kido Butai constituted the most potent of all offensive fighting forces deployed by the Axis nations in the course of the Second World War.
Maps & Photographs

Maps

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