Worthy of better Memory: The Royal Navy and the defence of the Eastern Empire 1935 - 1942

Volume 2 of 2

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Abbreviations

ABC-1	American British Staff Conference No 1
ACNS	Assistant Chief of Naval Staff
ADB	American Dutch British
AMWIS	Air Ministry Weekly Intelligence Survey
ASV	Air to Surface Vessel Search Radar
CAS	Chief of Air Staff
CIGS	Chief of the Imperial General Staff
CinC	Commander in Chief
CNO	Chief of Naval Operations in the US Navy
COS	Chiefs of Staff
DRC	Defence Requirements Committee
DCNS	Deputy Chief of Naval Staff
D of P	Director of Plans
DMI	Director of Military Intelligence
DNI	Director of Naval Intelligence
EF	RN Eastern Fleet
FAA	Fleet Air Arm
FEA	Far East Appreciation
FECB	Far East Combined Bureau
Force G	RN Task Force comprising battleship HMS Prince of Wales and escorts
Force H	RN Task Force established mid-1940 to guard Western Mediterranean
Force Z	RN Task Force renamed from Force G on 8 December comprising the
	battleship HMS Prince of Wales, battle-cruiser HMS Repulse and escorts
FSL	First Sea Lord and Chief of Naval Staff
GC&CS	Government Code & Cypher School
IJN	Imperial Japanese Navy
IJNAF	Imperial Japanese Naval Air Force
IJAAF	Imperial Japanese Army Air Force
JIC	Joint Intelligence Committee

JPC	Joint Planning Committee
JPS	Joint Planning Staff
JN25	Japanese Navy Cypher
KGV	King George V class battleships
NEI	Netherlands East Indies
NID	Naval Intelligence Division
OIC	Operational Intelligence Centre
PM	Prime Minister
R-class	Royal Sovereign class battleships
RAF	Royal Air Force
RN	Royal Navy
SIS	Secret Intelligence Service
USN	US Navy
VCNS	Vice Chief of Naval Staff
WIR	Weekly Intelligence Report

Additional Abbreviations used in References

ADM	Admiralty
AIR	Air Ministry
AT	Admiralty Telegram
CAB	Cabinet Office
CCA	Churchill College Archives, Cambridge
FO	Foreign Office
IWM	Imperial War Museum
JM	Japanese Monograph
NMM	National Maritime Museum, Greenwich
PREM	Premier
TNA	The National Archives
UCI	University of California Irvine Libraries
WO	War Office

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Chapter Five

Royal Navy readiness for a war with Japan in mid-1941: Intelligence and capability

The previous two chapters have explained why the defence of the Indian Ocean became an increasingly important factor in British strategic calculations during the first half of 1941, and how US determination to prioritise the Atlantic over the Pacific obliged the RN to resurrect the concept of an Eastern Fleet to ensure adequate security against Japanese intervention in the war. The next chapter argues that, for a number of reasons, the midpoint of the year marked a watershed for both Britain and the US in their perception of the risk from Japan and the start of a series of moves on both sides that led inexorably to confrontation at the end of the year. This chapter therefore examines the RN's intelligence picture of the naval risk posed by Japan in mid-1941 as it became both possible and necessary to contemplate deploying significant reinforcements to the East. It also looks at the overall resources and capabilities available to the RN from which those reinforcements would need to be drawn.

The chapter begins therefore by reviewing what the RN knew at this time of overall IJN capability, comprising strength, plans and doctrine. It evaluates the intelligence sources available to the RN, identifies critical intelligence gaps, and looks at how intelligence then influenced subsequent decisions on Far East naval resources and reinforcement. It assesses how far the RN underestimated its IJN enemy, why this occurred, and whether it mattered compared to other factors such as resource overstretch. The second part of the chapter investigates the RN resources and capabilities available to create an Eastern Fleet from mid-1941 and how this influenced naval policy and strategy for the Eastern theatre. It also considers how the policy and capability of the RAF impacted on RN strategy. Did the RN recognise the importance of having the right RAF resources if it was to cope successfully with the IJN? Why was RAF reinforcement so slow to appear? This part concludes by asking whether the case for "imperial overstretch" holds up or whether the RN had adequate resources to pursue a successful defensive strategy focused on keeping

control of the Indian Ocean if it made timely choices. The chapter also considers how far war experience in Europe and the Mediterranean influenced the RN's approach to managing the evolving naval risk posed by Japan. Here it looks especially at the conclusions the RN was reaching on the impact of airpower at sea and the potential of carrier operations. Did the RN underestimate the importance of carrier based airpower in a future war in the East? Or did it have a different but equally valid operational doctrine based not only on pre-war thinking but recent war experience?

The RN picture of the IJN in 1941

For most of the inter-war period the RN viewed the IJN as both its most likely opponent in a future war and the only naval power that posed a significant threat. In terms of size, the IJN ranked third after the RN and USN, its fleet spanned the full range of naval capability, it had established a fine tradition¹, and was recognised as an innovator.² It was by any measure a powerful force and therefore a key standard against which the RN judged its strength and capability. As explained in Chapter One, the strength of the IJN, current and projected, was a crucial key determinant of the RN rearmament programme from 1935 onward but it also shaped RN programmes in the 1920s and early 1930s, especially for cruisers and submarines.³ As also demonstrated in Chapters One and Two, until 1940, defence of the Far East was seen as pre-eminently a naval problem and the Admiralty dominated Far East defence policy and planning. Until 1937, this policy and planning had a theoretical quality but Japan's invasion of China increased the risk of confrontation and

¹ This phrase appears in JIC (41) 175 of 1 May, 'Japan Future Strategy', and would have reflected NID thinking. This paper also noted that the IJN had little experience of modern warfare though in China they had demonstrated excellence in combined operations.

² The *Kongo* class battlecruisers (1913) and *Nagato* class battleships (1920) were superior to their foreign contemporaries when they first appeared and this was recognised by both the RN and USN. The *Nagatos* were the first battleships to mount 16 inch guns. The RN was sufficiently impressed by the *Kongos* to try and negotiate their loan to the RN in 1915 albeit without success. See: Evans and Peattie, p 159-175.

³ The specifications of the '*County*' class cruisers laid down from 1924 onward were largely dictated by IJN cruiser plans following the 1922 Washington Naval Treaty. The *Southampton* class laid down in 1934 were strongly influenced by the *Mogami* class. The 'O', 'P' and 'R' class submarines, laid down between 1924-1929, were specifically designed to hold off an IJN fleet in the South China Sea pending the arrival of the main RN fleet. See: Evans and Peattie, p 226; H T Lenton, p 33-37, 46-52, 60-64, and 212-215; Peter Padfield, *War Beneath the Sea*, (London: John Murray, 1995), p 18-19.

the prospect of an attack on British possessions. The 1937 Imperial Review and FEA represented a watershed in judging those risks. For all these reasons, the RN studied the IJN closely drawing on both overt and secret intelligence sources.

The RN's intelligence picture of the IJN has received contrasting reviews from historians. An influential article by Wesley Wark in 1986 stated that poor intelligence and wishful thinking allowed the RN to create an image of the IJN that made it less threatening and hence easier to manage. He argued that, as the RN increasingly struggled in the late 1930s to provide a fleet to match the IJN, so it sought convenient evidence that Japan could neither sustain nor make effective use of a superior fleet. This led it to set IJN efficiency at 80 per cent of the RN, to under-rate Japanese technical and industrial capacity, and to believe that the IJN would be a cautious opponent. These factors encouraged a disastrous reliance on inadequate forces, manifest in the Force Z deployment, at the outset of war.⁴ Douglas Ford reached a rather similar view 15 years later.⁵ By contrast, John Ferris, reviewing British intelligence performance in the run-up to war, agreed the RN's assessment of the IJN was mediocre but argued the failings were compensated by system and circumstances. RN strategy, based on "bean counting" of warships and a rejection of best case planning, was not distorted by any underestimation of Japanese quality nor was the latter responsible for the loss of *Force* Z⁶. This view drew on arguments made by Christopher Bell. Bell accepted that, in the 1930s, the RN had failed sufficiently to recognise IJN technical achievements and innovation in tactical thought, especially in the

⁴ Wesley Wark, In Search of a Suitable Japan: British Naval Intelligence in the Pacific before the Second World War, *Intelligence and National Security*, 1986, 1:2, 189-211.

⁵ Douglas Eric Ford, Climbing the Learning Curve: British Intelligence on Japanese Strategy and Military Capabilities during the Second World War in Asia and the Pacific, July 1937 to August 1945, (unpublished doctoral thesis, Department of International History, London School of Economics and Political Science, 2002). As the title suggests, Ford's approach is broader both in the areas covered, dealing with intelligence performance on the IJA as well as IJN, and time. The approach adopted by Wark and Ford suffers from three weaknesses. First, they focus too much on what was not known, or they think was not known, rather than emphasising what was known and then focusing on key gaps. Second they fail adequately to distinguish between what was knowable and what was not knowable. As this thesis shows, it was not possible to predict the timing of a Japanese attack on Malaya with any certainty before autumn 1941 because no firm plan existed before then. Nor could the RN have predicted prior to 1941 that the IJN would group all its fleet carriers in a single task force to deliver strategic effect because the IJN did not adopt this concept until early that year. Finally, they do not place intelligence sufficiently within the wider context of political and military risk management. Perceived intelligence weakness has to be weighed against the fact that British assessments of the forces the Japanese would deploy against Malaya were consistently good. ⁶ John Ferris, Intelligence and the Origins of World War II, in *Intelligence and Strategy*, (Oxon UK: Routledge, 2005), p 123.

use of naval airpower. However, he disputed that faulty quality estimates of the IJN were responsible for Britain's inadequate dispositions in the Far East in December 1941 which he saw forced more by circumstances and the demands of grand strategy. RN intelligence failings would not have been significant had Britain been able to despatch sufficient naval and air forces to the East to implement a defensive strategy. He also argued that, in planning for war with Japan, the Admiralty always wanted its naval forces to be larger than they were, always preferred numerical superiority over the IJN, and calculated the balance of forces on the basis that one Japanese warship equalled one British warship of equivalent size.⁷

In terms of unit numbers of IJN warships, RN "bean counting", or basic assessment of IJN order of battle (orbat), in mid-1941 was fairly accurate though not perfect. A minute prepared by NID 4⁸ for the PM on 26 August 1941 gave an authoritative statement of overall IJN strength.⁹ This got most numbers correct.¹⁰ It overstated the number of operational destroyers and submarines but these errors were not significant and may be explained by the inclusion of units in reserve.¹¹ However, the minute also contained important mistakes in displacement and armament which represented a more serious underestimate of actual IJN fighting capability especially airpower. It correctly identified eight aircraft carriers but underestimated the displacement of the fleet carriers *Hiryu* and *Soryu* and the light carrier *Ryujo* by about 50 per cent.¹² Overall aircraft capacity of the

⁷ Bell, *The Royal Navy, Seapower and Strategy between the Wars*, p 63-65. See also his essay, "The Royal Navy, war planning, and intelligence assessments of Japan, 1921 – 1941", in *Intelligence and Statecraft – Use and Limits of Intelligence in International Security*, edited by Peter Jackson and Jennifer Siegel, (Westport, CT, USA: Praeger, 2005).

⁸ NID 4 was the NID section responsible for Japan.

⁹ Minute from FSL to PM, covering NID 4 minute, dated 26 August, PREM 3/252/4, TNA. This minute was prepared in response to a request from the PM the previous day. The PM had also sent his first minute the previous day proposing the despatch of *Prince of Wales* to the Far East. The NID minute was an expanded version of a report on IJN strength circulated in Weekly Intelligence Report No 74 dated 8 August. ADM 223/151, TNA.

¹⁰ The minute did not provide any details of fleet organisation though a separate NID note, NID 02344/41 produced two months earlier on 19 June, did set out squadron allocations which, while not comprehensive, were broadly correct compared with post war reports.

¹¹ NID 4 destroyer and submarine numbers were 126 and 80 respectively. Japanese Monograph 160, Naval Production – Immediate Preparations for War 1940-41, p 35, provides the official Japanese totals of 112 and 65. Roskill's post war figures at Appendix L of *War at Sea* Vol. 2 are 113 and 63.

¹² NID 4 quoted 10,000 tons for *Hiryu* and *Soryu*, and 7000 tons for *Ryujo*. The true figures, taken from Peattie, *Sunburst*, Appendix 4, were: *Hiryu* 17,300; *Soryu* 15,900; and *Ryujo* 10,600.

eight carriers was also underestimated by about a quarter.¹³ Six cruisers, the four *Mogami* class and two *Tone* class, were mistakenly listed with 6 inch guns whereas in reality they were all by this time armed with 8 inch.¹⁴ Finally, the minute included a "heavy armoured cruiser" of 14000 tons, armed with six 12 inch guns, on trials which did not exist.

Estimates for the overall strength of the IJNAF during the second half of 1941 were also broadly accurate. The JIC assessed first line strength at 1496 aircraft in May, including 330 ship-borne.¹⁵ NID circulated a figure of 1600 first line strength in August.¹⁶ An Air Ministry Weekly Intelligence Survey in December 1941 quoted a total IJNAF strength of 1561 with 547 ship-borne.¹⁷ These estimates compare with a true figure for frontline IJNAF strength on the outbreak of war of 831 shore-based and 646 ship-borne aircraft, a total of 1477.¹⁸ As regards ship-borne aircraft, the British estimates were fairly accurate for seaplanes and floatplanes but underestimated the carrier total by about 25% (338 in

¹³ The minute allocates 362 aircraft between these eight carriers whereas Peattie, p 152, estimates around 464 at this time following the formation of the First Air Fleet. The official Japanese figure for the embarked carrier complement at the outbreak of war in December, given in JM 160, Chart 6, p 37, is 473. *Zuikaku* did not commission until 25 September.

¹⁴ The four *Mogami* class were initially fitted with 15 6 inch guns since Japan had reached its London Naval Treaty limit on 8 inch cruisers but they were always designed to be upgraded and this was done secretly in the late 1930s. Both the RN and USN missed this. The *Tone* class were designed as 8 inch cruisers from the start but NID 4 appears to have assumed they would repeat the 6 inch pattern of the Mogamis. See: Evans and Peattie, chapter 8. NID 4 did not correct this error, which was shared by the Americans, until after the Battle of Midway when photographs of *Mikuma* and *Mogami* showed their main armament was ten 8 inch guns. NID 4 rightly then concluded they must have been designed for upgrading to 8 inch from the start and assumed the two *Tone* class would now be similarly armed. NID report, "Disposition of the Japanese Fleet", dated 5 July 1942, ADM 223/497, TNA.

¹⁵ JIC (41) 175 of 1 May, Ibid. Comparative strength for the IJAAF was identified as 886 giving a total Japanese frontline strength of 2384. The figure for ship-borne air strength of 330 aligned closely with the subsequent NID estimate for the PM in August. Given that the total included seaplanes and catapult reconnaissance aircraft, the total underestimated carrier borne strength even allowing for the fact that there were only six carriers in commission at this time. The large fleet carriers, *Shokaku* and *Zuikaku*, were still in build.

¹⁶Weekly Intelligence Report No 74 of 8 August 1941, ADM 223/151, TNA.

 ¹⁷ Air Ministry Weekly Intelligence Summary No 120 of 17 December 1941, AIR 22/75, TNA. This report set IJAAF strength at 1108 giving an overall Japanese frontline of 2669. By December, there were 10 IJN carriers in commission so deployed carrier air strength had grown accordingly from May estimates.
 ¹⁸ These figures come from Japanese Monograph 160, Naval Production – Immediate Preparations for War 1940-41, Chart 6, p 37. The *Naval Staff History, War with Japan, Vol 1.*, pp 79-80, gives a total strength at the outbreak of war of 1737, comprising 660 fighters, 330 carrier strike aircraft, and 240 land-based bombers. This is too high for fighters (even with reserves) and too low for the other categories. Two other post war estimates of IJNAF strength at the outbreak of war which are worth noting are by: Masatake Okumiya and Jiro Horikoshi, *Zero*, (USA: Bantam, 1991), p 34; and, Christopher Shores and Brian Cull, *Bloody Shambles*, Vol 2, (London: Grub Street, 1993), Appendix IV, p 470. *Zero* gives a frontline strength of 1384 with 691 deployable by carrier while Shores gives a strength of 1565.

December¹⁹ as opposed to a real total of 473). The estimates for IJNAF land-based bomber strength were also in the right order but there was otherwise no detailed breakdown of either land-based or ship-borne strength into either category i.e. fighters, torpedo bombers, heavy bombers etc., or specific aircraft type such as A6M Zero, B5N2 torpedo bomber, or Type 1 bomber etc. Alongside the above estimates of frontline strength, evidence from early 1942 suggests that British intelligence departments had reached a surprisingly accurate view on the size of the aircraft reserve held by the Japanese at the start of the war.²⁰

The May JIC report did not expect Japanese air strength to grow significantly over the next two years, judging that production only balanced wastage and re-equipment.²¹ For the IJNAF, at least to end March 1942, this assessment was essentially correct. In the summer of 1941, production of naval aircraft of all types was only 162 aircraft per month and was only 179 per month over the first four months of war. Production was especially slow for the more modern combat aircraft and this was compounded by the paucity of reserves noted above which represented barely 25% or less of frontline strength. There were only 415 Zero fighters available to the frontline at the outbreak of war and, as will be demonstrated in Chapter Eight, carrier attack aircraft availability was depleting fast well before Midway.²²

Historians are often scathing about British lack of knowledge of Japanese aircraft performance. The surviving intelligence records here are patchy. However, there is evidence that accurate performance tables for all Japanese aircraft in use at the outbreak of war had been circulated across the British intelligence community by mid-1941.²³ The

¹⁹ This is the WIR 120 17 December figure but NID 4 had given the figure of 362 carrier aircraft in their August minute to the PM.

²⁰ A minute prepared for the PM by his Military Secretary, Major General Hastings Ismay, on 7 March 1942, which drew on JIC advice, stated that the immediate reserve at the start of hostilities for the two Japanese Air Forces was 650 aircraft. JM 160, Chart 6, ibid, states that the actual total for the IJNAF operational reserve was 309. It is unlikely the IJAAF reserve was larger so a combined estimate of 650 was about right. Ismay's minute is in PREM 3/252/3, TNA.

²¹ It should be remembered that wastage took account of ongoing operational losses in China.

²² These figures are drawn from Japanese Monograph 160, Chart 6, ibid, and Japanese Monograph 172, Naval Production 1942-44, Chart 4, p 50-51. See also Peattie, p 166.

²³ 'Performance Tables, Japanese Army and Naval Air Services', circulated under covering minute by Air Ministry (A.I.2.©) on 20 May 1941, AIR 40/241, TNA. This included a note at the front with recent

exceptional range of many Japanese naval aircraft, including the new Zero fighter, is identified in these tables.²⁴ Available evidence suggests that British intelligence also had a reasonably accurate picture of IJNAF aircraft armament. The main types of bomb carried were known as were details of the Type 91 aerial torpedo.²⁵ This intelligence on aircraft and armament had been absorbed within Far East Air HQ by early autumn 1941 at the latest.²⁶ Meanwhile an August NID report identified eight Japanese airfields in Indo-China together with details of the upgrades underway at Saigon and Bien Hoa. Significantly, this report also included a chart showing the operational radius for heavy bombers deploying from Saigon and Soctrang, demonstrating that Singapore and the

headline intelligence on the new Zero fighter. Specifications and performance data were correct including a possible endurance of 6-8 hours. A.I. 2. C also circulated detailed and very accurate assessments of the three primary IJN carrier aircraft, the Zero fighter, Type 97 torpedo bomber, and Type 99 dive-bomber, on 13 December 1941. These are in AIR 40/33 and AIR 40/35, both TNA. Although circulated after the outbreak of war, this data had clearly been in the intelligence community for some months. All papers were copied to NID. It seems likely that NID's accurate assessment of the Type 96 Nell naval heavy bomber, published in Weekly Intelligence Report No 105 of 13 March 1942, also drew on this earlier data. Performance data in these 1941 papers has been compared with that given in Peattie, Appendix 6. ²⁴ Details of the Zero are actually given in the covering letter circulating the Tables. A D Harvey notes that details of the Zero were also printed in a booklet "Japanese Service Aircraft" issued by the General Staff in India at the time of Pearl Harbour. A D Harvey, 'Army Air Force and Navy Air Force: Japanese Aviation and the opening phase of the war in the Far East', (War in History, 6:2, p 174 – 204, 1999) p 178. ²⁵ See WIS No 120 of 17 December, ibid. The three main bombs were: 250Kg, 500Kg, and 800Kg. This report correctly states that the Type 99 D3A1 Val Dive-bomber was normally armed with the 250kg while the Type 97 B5N2 torpedo bomber could carry the 800kg. It also refers to the Type 91 Mod 2 which had only entered service in mid-1941 and records generally accurate dimensions, overall weight, and warhead weight. It also gives a release height of 80 metres. Some historians give a grossly exaggerated view of the capability of the Type 91 compared to the standard RN 18 inch Mark XII and XIV Fleet Air Arm Torpedoes. In fact, specifications, performance and reliability were very close. The Type 91 could in theory be dropped from up to 500 metres altitude but authoritative Japanese sources state that, despite the optimistic claims of the ordnance department, only 10 percent would function correctly at 200 metres and 50 percent at 100 metres. In an operational context, the preferred standard drop was from a range of 600 - 400metres at 160 - 170 knots at a height of 30 - 50 metres. This was not so different from the Albacore envelope, although the latter was somewhat slower. For the performance of the Type 91, see the US Strategic Bombing Survey, Military Analysis Division, Japanese Air Weapons, p 55 – 56. For comments on operational use, see: USSBS, NAV No 77, Operations of 22nd Air Flotilla in Malaya. ²⁶ Group Captain Lawrence Darvall, senior Air Staff Officer Far East, sent a note to Brooke-Popham, undated but from the content probably September, on the Japanese air threat. AIR 23/1970, TNA. He quotes Japanese light bombers as carrying 1000lbs to 800 miles and heavy bombers 4000lbs to 600-1000 miles. A D Harvey gives figures for Japanese Army light bombers at p 182 of his article. The Mitsubishi K 21 (Sally) had a capacity of 1653lbs and operating radius of about 800 miles. The Nakajima K 49 (Helen) could carry 1653lbs to about 900 miles. Peattie gives equivalent figures for the IJNAF heavy bombers in Appendix 6. The Type 96 Nell could carry 2000lbs to 1200 miles and the Type 1 G4M Betty 2000lbs to 1600 miles. Darvall's figures were therefore in the right order. For the heavy bomber he overstated payload and understated maximum range though his maximum of 1000 miles was probably reasonable under operational conditions. Darvall also stated that the long range fighter, i.e. Zero, had a range of 1500 miles which, as a maximum, was right.

Malacca Strait would be in range of aircraft with a normal bomb load.²⁷ As regards operational effectiveness, Far East Air HQ drew a distinction between the IJNAF whose quality was rated high and the IJAAF who were rated mediocre.²⁸ It is reasonable to assume this view was shared in the Far East Combined Bureau (FECB)²⁹ and the China Fleet.

As stated in Chapters One and Two, the RN's primary measure of its strength against the IJN was the number and quality of capital ships. Here it was certainly not complacent. In March 1940, Churchill, then First Lord, sent a paper comparing RN and IJN capital ships to the War Cabinet. Its main purpose was to argue the need to resume building capital ships suspended at the start of the war in order to ensure an adequate capability against Japan from 1942 onward. However, the paper is important for what it says about the existing balance. It stated that the IJN battle fleet, which had been completely modernised, had a speed at least equivalent to the *Queen Elizabeth* class and considerably greater than the *Royal Sovereigns*. Japanese battleships also outranged the un-modernised RN ships. It would be unsatisfactory to send any RN ships to the East unless they matched IJN ships for both speed and range. Only seven of the existing fleet did so. The paper noted that, although the new *King George V* class would broadly match anticipated new IJN ships in numbers, they would be out-gunned. In addition, Japan was believed to have four 12 inch gunned battle-cruisers in build.³⁰ The September 1940 COS "Future

²⁷ Weekly Intelligence Report No 76 of 2 August 1941, ADM 223/151, TNA. Saigon and Soctrang would both be used by IJNAF aircraft in December. The next WIR, No 77 dated 29 August, provided details of the Type 96 IJNAF heavy bomber, correctly estimating it could carry 2200lbs to 950 miles. This report admittedly doubted Japan could afford to deploy more than 150 land-based aircraft for potential operations against Malaya and the NEI at this time but this figure would be revised sharply upwards over the next three months.

 ²⁸ Despatch of Air Vice Marshal Sir Paul Maltby on Air Operations in Malaya and NEI 1941 – 1942, paras
 68 and 104, Supplement to London Gazette 26 February 1948, CAB 106/86, TNA.
 ²⁹ For details of FECB – see below.

³⁰W.P. (40) 95, 'Comparison of British and Japanese Fleets', 12 March 1940, CAB 66/6/25, TNA. The paper stated correctly that all ten IJN capital ships had received modern more efficient boilers and engines, new main armament guns of increased elevation, probably to 40 degrees, additional armour, including horizontal protection, and new anti-aircraft armament. As noted in Chapter One, four RN capital ships were reconstructed between 1934 and 1940, the three battleships, *Warspite, Valiant* and *Queen Elizabeth*, and the battle-cruiser *Renown*, while two more were partially modernised. These modernisations took broadly the same form as the IJN applied to all ten ships. Some of the comparative data that contributed to W.P. (40) 95 can be seen in a paper, 'British Equivalent to Japanese Capital Ships', attached to a D of P minute of 26 February 1940, ADM 116/5757, TNA. A paper prepared by the DCNS, Vice Admiral Sir Tom Phillips, earlier in February also stressed the current superiority of IJN capital ships. See his minute to Pound as First

Strategy" paper confirmed this assessment. It stated that Japan's modernised ships were "superior to our own" and that the new battle-cruisers could only be countered by a KGV or *Hood* or *Renown*.³¹ NID 4 reminded Churchill of the IJN capital ship modernisation programme in August 1941 as he was beginning the debate with Pound over Far East naval reinforcement.³² In March 1942, the Naval Staff also saw no reason why the IJN should not be more advanced than the RN in fire control.³³ And, as late as 1944, a paper by the Director of Naval Intelligence (DNI) stated that the four older IJN battleships of the *Fuso* and *Ise* classes were superior to the modernised *Queen Elizabeths* while the *Kongo* class battle-cruisers were superior to the modernised *Renown* although it recognised RN radar could in practice make a decisive difference.³⁴

An effective assessment of the Japanese naval risk to British interests could not rest solely on bean counting. It required knowledge of IJN organisation, the location and movements of its key forces, their fighting effectiveness, and, above all, timely warning of hostile intent. Here the evidence suggests that, despite limited resources, the intelligence available to NID by mid-1941 was good enough to enable the Admiralty and local RN commanders to reach reasonable conclusions on the scale, quality and timing of an attack. To provide the Far East intelligence picture, NID relied primarily on the FECB, a joint intelligence organisation set up in 1936 combining personnel from all three services to

Sea Lord and Churchill as First Lord dated 6 February 1940 in ADM 205/5, TNA. The minute was part of a trenchant, indeed almost intemperate, case put forward by Phillips to resume construction of the four *Lion* class battleships which had been halted to meet other more pressing priorities, notably escort vessels. Despite his romantic attachment to battleships, Churchill did not accept Phillips' argument. ³¹'Future Strategy', paragraph 25, CAB 66/11/42, TNA.

³² NID 4 repeated the details provided in February 1940 but with some additions. They noted (correctly) that the new AA armament comprised 5 inch guns and that catapults had been provided to allow ships to carry up to three aircraft. NID 4 note of 28 August 1941, PREM 3/252/4, TNA.

³³ Minute to FSL from Director of Gunnery and Anti-Aircraft Warfare Division of Naval Staff, dated 13 March 1942, ADM 205/13, TNA. This stated that there was no recent information on IJN gunnery and RDF (radar) but "there is no reason why they should not be considerably superior in Long Range Direct Fire and Medium Range Blind Fire". The IJN had in fact put much effort into long range gunnery with significant results in trials but this was based on traditional techniques of visual ranging. They never produced an effective fire control radar which the RN had in most capital ships by this time. See, Evans and Peattie, p 250-263 and footnote 69, p 595. Overall, it is unlikely there was much difference between the two navies in long range fire under good day-time conditions but radar gave the RN an advantage at night or in bad weather.

³⁴ DNI minute of 11 March 1944, 'Comparison of British and Japanese capital ships in South East Asia', ADM 223/495, TNA. This assessment was undoubtedly unfair to both the modernised *Queen Elizabeths* and *Renown* but it is indicative of an enduring Admiralty view.

support Far East Commanders. The FECB was a visionary concept for its day and represented what in modern parlance would be described as an all source "fusion centre".³⁵ When it moved to Singapore in 1939, it acquired its own Operational Intelligence Centre (OIC) modelled on that at the Admiralty, the Pacific Naval Intelligence Organisation, which provided a plot of all Axis naval activity from East Africa to the west coast of the Americas.³⁶ In covering the IJN, it drew together intelligence from sigint,³⁷ human agents³⁸, aerial reconnaissance, submarine surveillance, diplomatic reporting, and open sources. Its primary roles were to give early warning of Japanese attack, build an accurate Japanese order of battle, and provide operational intelligence once war had broken out. It also provided some set-piece assessments of Japanese capability and occasional strategic overviews. Marder, Ong Chit Chung, and John Ferris have provided good summaries of FECB, how it was organised, how it linked to London, and what it produced.³⁹

Sigint in its various forms contributed most value to the FECB intelligence picture and especially on the IJN. However, historical accounts of this contribution are often difficult to understand or misleading. This reflects frequent failure to distinguish between intelligence acquired through traffic analysis and direction finding (D/F), and that from actual decryption of cyphered messages. Some primary witnesses speaking long after the war, including personnel who worked in FECB, were often rather loose in their use of

³⁵ Patrick Beesly, who worked for NID in the war, described FECB as a "well thought out and comprehensive organisation, the first example of an inter-service effort in the intelligence field, and for NID its most important outstation". *Very Special Admiral: The Life of Admiral J H Godfrey CB*, (London: Hamish Hamilton, 1980).

³⁶Ian Pfennigwerth has a useful description of the Pacific Naval Intelligence Organisation in his biography, *A Man of Intelligence: The Life of Captain Eric Nave, Australian Codebreaker Extraordinary*, (Rosenberg Publishing, 2006), p 140. In his review of his command for 1939, CinC China, Vice Admiral Sir Percy Noble, stated that FECB had ensured he knew with complete confidence the whereabouts of all elements of the Japanese Combined Fleet on the outbreak of the European war. It had also located the German Pocket battleship *Graf Spee* during her brief foray into the Indian Ocean through long range direction finding (D/F) fixes. 'NID Vol 40, Far East and Pacific', ADM 223/297, TNA.

³⁷ This comprised: radio intercept; traffic analysis; D/F; decryption of Japanese traffic, both military and diplomatic. FECB sigint collection and processing involved close collaboration with GC&CS who seconded staff.

 ³⁸ Relevant SIS reporting was passed to FECB but the JIC also recommended in May 1941 that an SIS representative "should become a member". Minutes of 14th JIC Meeting 1941, CAB 81/88, TNA.
 ³⁹ See: Marder, Vol 1., p 355-362; Ong Chit Chung, chapter 8 especially p 215-220; and John Ferris,

[&]quot;Consistent with an Intention": The Far East Combined Bureau and the Outbreak of the Pacific War, 1940-41, (*Intelligence and National Security*, 27:1, p 5 – 26, February 2012).

language here or failed adequately to explain the different categories of Japanese cypher. The evidence is clear that, during 1941, the dominant input to tracking IJN strength, organisation, locations and movements, was traffic analysis.⁴⁰ D/F certainly made a useful contribution in support but there are differing views on its accuracy.⁴¹ A note written for Marder in 1979 by Lieutenant Commander S W Francis, who served in the FECB, provides an authoritative account of FECB ability to track both Japanese warships and naval air squadrons with considerable precision through traffic analysis and D/F fixing.⁴² For example, this undoubtedly enabled FECB to monitor the Japanese air build up in Indo-China in late 1941 and potentially therefore to give an accurate assessment of the air threat to *Force Z*. It also enabled FECB to track the formation and movements of the Southern Task Force earmarked for the invasion of Malaya.⁴³

The position on the breaking of Japanese cyphers is inevitably complex. For much of the inter-war period the British sigint organisation, the Government Code and Cypher School (GC&CS), was able to read the bulk of Japanese diplomatic and naval traffic⁴⁴ but new high grade cypher systems introduced in 1938/39 then denied Britain access to the most

⁴⁰Ferris describes this well. Essentially, it rested on monitoring the patterns of IJN radio transmissions by volume and type and linking these with unit call signs and even individual operators. Effectiveness depended on the painstaking construction of IJN organization and identities over time and ability then to spot changes. Ferris and Marder both note that FECB had developed an advanced technique of "Radio Finger Printing" which enabled it to build up a dictionary of individual IJN operators and follow their appearance on air. See, Ferris, The Far East Combined Bureau and the Pacific War, p 15 – 16. Pfennigwerth also has a useful description of RFP at p 140 – 141.

⁴¹ Lieutenant Commander E P G Sandwith, who joined FECB in August 1941, had a low opinion of D/F. He claimed bearings were often highly inaccurate and identifying call-signs were too often out of date. Quoted in monograph, 'Loss of Singapore, February 1942 and its Lessons for NID', p 3, included in papers of Vice Admiral J H Godfrey, DNI 1939-42, GOD/92, NMM, Greenwich.

⁴² Paper prepared for Professor A J Marder by Lieutenant Commander S W Francis, dated May 1979, Arthur J Marder Papers, MS-F02, Special Collections and Archives, The University of California Irvine Libraries, Irvine, California.

⁴³ US Navy Intelligence was equally effective at traffic analysis and, from February 1941, there was close cooperation between FECB and the US Station Cast at Corregidor. Frederick D Parker, *Pearl Harbour Revisited: US Navy Communications Intelligence 1924 – 1941*, (Center for Cryptologic History, US National Security Agency, 1993), p 37 - 38.

⁴⁴ Robin Denniston, in his biography of his father A G Denniston, Head of GC & CS throughout the interwar period, states that, in early 1939, GC &CS had full control of diplomatic and attaché traffic, were reasonably fluent in reading all main naval cyphers, and also knew a lot about the army cyphers in use in China. Robin Denniston, *Thirty Secret Years: A G Denniston's work in Signals Intelligence 1914 – 1944*, (UK: Polperro Heritage Press, 2007), p 106.

important military and civilian messages until early 1941.⁴⁵ Britain then benefited from a remarkable US success in breaking from September 1940 the new Japanese primary diplomatic cypher which the Americans designated "Purple".⁴⁶ The Americans shared this success with GC&CS in February 1941 and provided a decryption machine to enable the British to read intercepted Purple traffic directly.⁴⁷ By spring 1941, the Americans were reading between 50 -75 Japanese messages per day.⁴⁸ British output was somewhat less, largely due to more limited access to Japanese high grade traffic including some Washington Embassy material but, overall, Purple gave the US and British Governments valuable insights into Japanese intentions at the strategic level throughout 1941.⁴⁹ One of the Purple machines provided by the Americans was sent to FECB.⁵⁰ In parallel with the Purple exchanges, DNI and GC&CS agreed to collaborate on Japanese naval codes

⁴⁵ John Ferris, The road to Bletchley Park: The British experience with signals intelligence 1892-1945, *Intelligence & National Security*, 17:1, 2002, p 67-68. The most significant changes were the introduction of a new diplomatic cypher designated 'Purple' by the US and a new Naval General Cypher known as JN 25.

⁴⁶ John Prados, *Combined Fleet Decoded: The Secret History of American Intelligence and the Japanese Navy in World War II*, (New York: Random House, 1995), p 163 – 166.

⁴⁷ A combined US Army and Navy team visited GC&CS at Bletchley between January and March 1941. This is known as the Sinkov-Rosen mission from the names of the main US participants. Perhaps the most authoritative sources on the visit are: on the British side, GCHQ's post war assessment of "war warning" intelligence in HW 50/52, TNA; and, on the US side, the summary given in Robert Louis Benson, *A History of US Communications during World War II: Policy and Administration*, (Center for Cryptologic History, US National Security Agency, 1997), p 19, which draws on NSA records. Both sources state that GC&CS provided full details of the German Enigma machine in exchange for Purple. Michael Smith, The Emperor's *Codes*, chapter 6, also gives a reasonably accurate account of the US visit and the content of the exchanges. Bradley F Smith, *The Ultra-Magic Deals*, (Shrewsbury: Airlife Publishing, 1993), p 55 – 58, suggests wrongly that the British side failed to reciprocate US openness and held back key aspects of Enigma. ⁴⁸ Prados, p 165.

⁴⁹The intelligence product from Purple intercepts was called "Magic" by the Americans and the decryption machines likewise "Magic machines". There is a readily accessible and comprehensive set of Magic intercepts during 1941 in the five volume Magic Background of Pearl Harbor published by the US Department of Defence in 1978. British intercepts of Japanese Purple messages from July to December that year are in HW 12/266 – HW 12/271, TNA. These intercepts made an important contribution to JIC reports in 1941. Their scope is also evident by looking at the titles of intercepts sent on a daily basis to the PM, especially in the second half of the year, and contained in HW/1, TNA. The post war GCHQ summary of sigint material available to the British and US governments which provided war warning indicators in late 1941, including material relevant to Pearl Harbour, states that there was full sharing of Purple material in 1941 and found no evidence that the US deliberately held messages back. The one omission from the British record are some of the final "deadline" messages from the last stage of US/Japanese negotiations in the first week of December. See: HW 50/52, TNA.

⁵⁰ Benson, *A History of US Communications during World War II*, p 20. Benson does not give a date but it was probably despatched by late February so would have reached Singapore by end April.

especially JN 25⁵¹ and this initially centred on exchanges between FECB and the US Station Cast at Corregidor in the Philippines which were both leading on JN 25.⁵² It is likely that both parties brought valuable contributions to the table here though the British initially appear to have contributed more.⁵³ Although GC & CS had apparently achieved some readability of JN 25 as early as September 1939, when it passed responsibility to FECB, neither the British nor US teams were able to translate this into actual operational intelligence until December 1941 after the outbreak of war.⁵⁴ The two years 1940/41 were required to understand the structure of the JN 25 system sufficiently to break complete signals and to overcome the problems caused by the Japanese shift to a new variant JN 25B in December 1940.⁵⁵ The fact that FECB personnel involved in decryption, but especially JN 25, grew from five to 40 between early 1940 and mid-1941 demonstrates the scale of effort and its importance.⁵⁶ Although the JN 25 work yielded no direct operational intelligence pre-war, it did undoubtedly provide greater understanding of IJN communications practice which could then be applied to traffic analysis. The sigint intercept work described here was supplemented by intelligence from lower grade

⁵¹ JN 25 was introduced in mid-1939. The first variant, which would become known as JN 25A was in force for 18 months until December 1940 when JN 25B was introduced. The British draft FECB history, p 9, states that by mid-1941, about 75% of IJN traffic used JN 25B. HW 50/88, TNA.

⁵² These exchanges also began in February 1941. NID Vol 42., 'Far East and Pacific III, Special Collaboration of British and US Radio Intelligence', ADM 223/297, TNA, and 'History of Far East Sigint', HW 4/25, TNA. For the US perspective on these exchanges, see Benson, *A History of US Communications during World War II*, p 20. Benson states that the US provided a Japanese merchant ship code, an IJN personnel code, and callsign data. The British provided "valuable information" on JN 25 in return. Benson also states that an encrypted radio link was provided between FECB and Station Cast from April 1941.
⁵³ See the post war GCHQ summary of "war warning" intelligence, HW 50/52, TNA. This states that FECB supplied Corregidor with "the latest JN 25 book, indicators and subtractor tables, on all of which the US Navy had no information". It emphasizes that cooperation between FECB and Cast was extremely close for the rest of 1941 with complete sharing of all intercepts and decryption results. Peter Donovan and John Mack in their new book, *Codebreaking in the Pacific*, (New York: Springer International, 2014), agree that by mid-1941 there was a full exchange on JN 25 between FECB and Cast. They also state that the foundation work done on JN 25 by GC&CS and FECB from 1939 – 1941, which included mathematical input from Alan Turing, was critical in enabling both the British and Americans to read JN 25 from December 1941 onward. Benson concurs with this but gives less detail.

⁵⁴ Pfennigwerth, in his biography of Eric Nave, at p 146, states that GC&CS had "read 1000 (JN 25A) messages" by end 1940. If this means partial readability, it is possibly correct, since the draft history of FECB refers to 20% readability of JN 25B in May 1941. However, all official British (and US) records seem clear that there was no operational intelligence, i.e. full decryption of key signals, until December 1941. See: e.g. HW 50/88, TNA; Frederick D Parker, *Pearl Harbour Revisited: US Navy Communications Intelligence 1924 – 1941*, p 22 – 23; and Donovan and Mack, *Codebreaking in the Pacific*, ibid.
 ⁵⁵ Draft history of FECB, p 7 – 9, HW 50/88, TNA.

⁵⁶ Ibid.

diplomatic cyphers, such as the Red system⁵⁷ that preceded Purple and could be read by both Britain and the US, other low grade cyphers used by the Japanese Consular network and plain language intercept.⁵⁸ Little of this wider civilian output directly illuminated IJN capabilities and operations but it did provide further context for judging Japanese intentions.⁵⁹

Intelligence gleaned from these sigint intercepts had obvious limitations. Even the highest quality Purple intercepts could only offer occasional and partial indications into Japan's ultimate political and strategic intentions. Without consistent and comprehensive access to JN 25 or equivalent IJA systems, it could offer no insight into high level naval or military planning. The sigint that was available also told the RN little about the quality of the IJN, its specific weapons systems, its fighting effectiveness, let alone the detailed strategy and tactics it would apply in a war with Britain and its allies. Nor could it tell the RN much about the IJN's building programme. Human sources could potentially contribute to all these areas but the highly secretive and well protected Japanese system proved difficult to penetrate either by the Secret Intelligence Service (SIS) or the Military Attaches in Tokyo.⁶⁰ The Americans were no more successful.⁶¹

One other source of intelligence on the IJN was available to NID although by mid-1941 it was historic rather than current. This was submarine surveillance first noted by Marder. He describes a patrol by *HMS/M Regulus*, in Japanese waters, which he estimates took

⁵⁷ Purple was only used by 13 Japanese diplomatic missions globally. In general, they were those Tokyo judged most important. The rest continued to use Red.

⁵⁸ See Michael Smith, chapter 8, for a balanced summary of the Purple and JN 25 contribution. Smith shows that the British were at this stage generally ahead of the Americans on JN 25.

⁵⁹ Benson states that the US achieved no significant decryption of Japanese Army cyphers during 1941. *A History of US Communications during World War II*, p 4.

⁶⁰Keith Jeffery, *MI6: The History of the Secret Intelligence Service 1909 – 1949*, (London: Bloomsbury, 2010), pp 262-266. The poverty of SIS reporting on the IJN building programme is illustrated by an April 1939 report which summarises building underway at Yokosuka, Maizuru, Kure and Kobe. It was wrong in virtually every detail, confusing battleships and carriers under construction and identifying three fictitious battle-cruisers. The covering comment admitted that collection in Japan was very difficult and that SIS was largely dependent on visiting Chinese agents. Japanese Naval Shipbuilding, dated 17 April 1939, ADM 223/885, TNA. The Military Attaches nevertheless produced some useful insights. For example, the Tokyo Naval Attaché reported in mid-October that all units of the IJN had mobilised and moved to a war footing. Craigie tel 2017 to FO of 17 October, FO 371/27964, TNA.

⁶¹ Ralph Lee Defalco III, Blind to the Sun: US Intelligence Failures Before the War with Japan, *International Journal of Intelligence and Counter-Intelligence*, 2003, 16:1, 95-107.

place in October 1940, and produced valuable photographic intelligence of major IJN units.⁶² The relevant patrol was almost certainly one which took place in mid-October 1939, exactly a year earlier than Marder believed. It focused on the mouth of the Bungo Channel⁶³ and did indeed involve significant contact with the IJN Combined Fleet.⁶⁴ It is described by Alastair Mars, then the navigator of *Regulus*. Mars describes covertly observing an IJN fleet exercise including "a brand new Japanese aircraft carrier", almost certainly the *Hirvu*.⁶⁵ He shows such intelligence patrols were frequent until all RN submarines were withdrawn from the Far East in mid-1940.⁶⁶ Mars also provides a compelling picture of the high effectiveness and efficiency of the 15 submarines of the Fourth Flotilla which he argued would have been a major threat to any IJN seaborne invasion force. Significantly, he assesses Japanese anti-submarine measures as "feeble". Had RN submarines remained in the Far East after mid-1940, they would certainly have corrected some of the intelligence errors regarding new IJN warships. The substantial US submarine force within the Asiatic Fleet could also have contributed here but there is no evidence they were ever used in this way and they appear to have lacked the necessary aggression and risk taking.⁶⁷

In the absence of consistent high level humint, or a substantial breakthrough into JN 25, British assessments of how their broadly accurate picture of overall Japanese order of

⁶² Arthur Marder, Vol 1, p 356. This describes how an IJN officer discovered photographs taken by *Regulus* in Singapore after its fall.

⁶³ The Bungo Channel is the strait separating the islands of Kyushu and Shikoku and gives access to the Inland Sea.

⁶⁴ *Regulus* ' log for October 1939 provides summary details of this patrol. *Regulus* left Hong Kong on 2 October and was operating close inshore at the mouth of the Bungo Channel for about a week before returning to Hong Kong on 21 October. She sighted the carrier *Ryujo* on 8 October, dived to avoid another carrier the following day, and manoeuvred "to close the Jap fleet" on 11 October. The log is in ADM 173/15986, TNA. It has not proved possible to locate the relevant patrol report although the report for *Regulus*' next patrol to Vladivostok in December, which involved close surveillance of the Russian naval units there, is in ADM 199/1833, TNA.

 ⁶⁵ Alastair Mars, *Submarines at War 1939 – 1945*, p 57-58. As already noted in Chapter Two, Mars' chapters 3 and 4 give a wider account of British submarine operations in the Far East in the late 1930s.
 ⁶⁶ Marder states that the Japanese found evidence that *Regulus* had entered Shibushi Bay and Osaka Bay via the Kitan strait all producing photographic intelligence. It is not clear, however, that all these incursions occurred in the October 1939 patrol. Mars' testimony suggests surveillance by various submarines was probably fairly continuous. *Regulus* herself was sunk in the Mediterranean in December 1940.

⁶⁷ See useful comments here by Captain John F Connell, USN Rtd., in *Submarine Operational Effectiveness in the 20th Century, Part Two (1939 – 1945)*, chapter three (British submarines) and chapter eight (US submarines).

battle would translate into an actual attack on the territory or interests of Britain or its Allies had to be based primarily on judgement. Judgement would take into account geographic and logistic possibility and the existing Japanese military commitments in China. From the August 1940 FEA, through to mid-1941, the core elements of the intelligence judgement here, reflected in both London and Singapore, were broadly constant. They were that Japan could easily make available a southern expeditionary force of six to ten divisions, that it had sufficient shipping to lift this from Formosa or Hainan, it could cover it with most of the IJN's major units, and could also deploy a substantial land-based air force of 350 – 450 aircraft. The judgement also reckoned Japan faced three major constraints in contemplating an attack on Malaya or the NEI: the challenge of distance, a minimum of 1150 miles from its embarkation points to the nearest targets; the possibility of US intervention against its long communication lines; and, above all, the need to acquire advanced airbases if it was to achieve acceptable air cover for an invasion force. An attack relying solely on carrier air cover was clearly possible but inherently risky. A key assumption therefore which, quite reasonably, underpinned British calculations until the Japanese move into southern Indo-China at the end of July 1941 was that the need to ensure air cover would lead Japan to a strategy of incremental advance and thereby provide warning. Historians have not sufficiently acknowledged this.

The application of these core judgements in the early summer of 1941 are illustrated in the comprehensive JIC update published on 1 May⁶⁸ and the deliberations in Singapore around an FECB threat assessment dated 4 April⁶⁹. FECB stated that the nearest Japanese launch point to Kota Bharu was Hainan. Unless they established prior bases in southern Indo-China or Thailand, air cover for an attack on Malaya would therefore have to be ship-borne and the maximum available force would be six carriers and three seaplane carriers capable of delivering 75 fighters, 206 strike aircraft and 60 assorted floatplanes. However, if Japan could obtain bases in southern Thailand, it estimated it could deploy a shore-based air force of 200 fighters, 200 light bombers, 150 heavy bombers and 100 reconnaissance aircraft. This estimate proved accurate. The total combined IJAAF and

⁶⁸ JIC (41) 175 of 1 May, 'Japan's Future Strategy'.

⁶⁹ AIR 23/1865, TNA.

IJNAF strength deployed against Malaya in December was 564 aircraft.⁷⁰ In commenting on this FECB assessment in May, GHQ Far East Air Staff accepted these figures were credible and discounted the ability of a carrier force alone to generate sufficient offensive strength. They judged therefore that Japanese plans must allow for the occupation of southern Indo-China and Thailand as well as holding back a considerable naval bomber force to guard against US intervention. Following the subsequent move into Indo-China, Group Captain Lawrence Darvall, Senior Air Staff Officer and now also acting as Chief of Staff to Brooke-Popham, stated in mid-August:

"The great difficulty in attacking Malaya has been to provide shore-based air cover. Now the Japanese have the means of providing it from Indo-China, it is hard to believe they will not take advantage.⁷¹ An ominous move will therefore be the preparation of southern Indo-China air bases for full operation including stocking with fuel and bombs etc. Aircraft can be flown in but ground support takes time. Once established, such forces could support a seaborne invasion sailing from Hainan or Formosa and not touching Indo-China."⁷²

Darvall concluded:

"The air position is a vital sine qua non for Japan. Preparation and stocking of Indo-China airbases is a critical intelligence indicator. The arrival of the Type Zero naval fighter⁷³ will be a definite indicator that Malaya is the target."⁷⁴

⁷⁰ The IJAAF 3rd Air Group deployed 447 aircraft comprising 168 fighters, 108 light bombers, 99 heavy bombers, and 72 reconnaissance aircraft. The IJNAF 22nd reinforced Air Fleet had 36 fighters, 99 heavy bombers and 9 reconnaissance aircraft. The breakdown by type was almost exactly as FECB had anticipated six months earlier. Japanese figures are from: JM 107, Malaya Invasion Naval Operations, Office of US Military History, p 6.

⁷¹ In a quite separate note dated 28 July, "Some Notes on the Present Situation", Darvall suggested three possible Japanese motives for their move into southern Indo-China: a stepping stone for further moves on Malaya etc; to secure their southern position prior to attacking Russia; or to increase their economic control in the region as a bargaining counter with western powers. AIR 23/1970, TNA. Eri Hotta's recent work, *Japan 1941: Countdown to Infamy*, (New York: Knopf, 2013), chapter 6, suggests this was quite a good summary of the thinking within the Japanese leadership at this time.

⁷² This was indeed the approach adopted by Japan in December. The main Malaya attack force deployed from Hainan. JM 107.

⁷³ This reference is a further indicator that the arrival of the Zero had been noted, at least in FECB and Far East Air HQ, many months before the outbreak of war.

Overall therefore, at this time, both London and Singapore had got the likely scale of a southern attack, at least in terms of raw numbers, and the way they would be applied, about right.⁷⁵ Darvall was also right in emphasising the Indo-China airbases as a key warning indicator.⁷⁶ Brooke-Popham certainly absorbed the numbers on the air threat because he sent a slightly updated assessment to the COS on 16 September as a basis for calculating RAF reinforcements.⁷⁷ Estimating the fighting quality of a Japanese expeditionary force was clearly more difficult and neither FECB nor Darvall appear to have offered a direct view here. Darvall did, however, propose a figure of 120 (60 bombers and 60 escorting fighters) for the likely Japanese daily sortie rate generated from 600 aircraft which he judged "not particularly serious".^{78 79} This was certainly complacent given the limitations of RAF fighter defence in both numbers and quality.⁸⁰

⁷⁴ August comments in AIR 23/1865, TNA.

⁷⁵ This judgement differs sharply from that reached by Douglas Ford in chapter 1 of his thesis *Climbing the Learning Curve*.

⁷⁶ In a slightly later note dated 8 September, Darvall stated that FECB now assessed that the current capacity of airbases potentially available to Japan within 500 miles of Northern Malaya was 250 aircraft. He also argued that Japan lacked the air resources to undertake more than one major campaign at a time nor could it afford to preposition fuel, bombs and support personnel in different theatres to allow rapid transfer of aircraft. Japan would have to choose and this would provide warning indicators. AIR 23/1970, TNA.
⁷⁷ CinC FE tel to COS of 16 September 1941, Brooke-Popham Papers, 6/1/31, LHCMA. He correctly noted

that airfield limitations might restrict Japanese deployment to 250 aircraft at short notice. ⁷⁸ Darvall's figures here, which he implied drew on Battle of Britain experience, were not unreasonable if regarded as averages. The highest weekly sortie rates generated by the Luftwaffe for both bombers and fighters during the Battle of Britain were about three times their serviceable strength but often well below this. See: Derek Wood & Derek Dempster, The Narrow Margin: The Battle of Britain and the Rise of Air Power 1930 - 1940, (London: Tri-Service Press, 1990), Appendices 17 and 20. FECB's estimate of 550 Japanese bombers and fighters, at 75% serviceability, would translate into a serviceable strength of 412. Applying the maximum Luftwaffe ratio, this would therefore generate an average weekly sortie rate of 1237 and therefore an average daily rate of 178. This was 50% more than Darvall's figure but the Luftwaffe only rarely achieved the full ratio of three times strength and 120 was not far out as an average equivalent. There are, however, obvious problems with such statistical comparisons. Sortie rates varied hugely on a daily basis depending on weather and operational factors and any capable air-force could generate much higher ratios for a limited period. Above all, the ratio of defending fighters to attackers in the Battle of Britain was about 1:3 whereas in Malaya in December it would be about 1:7. Malaya also lacked an equivalent radar supported fighter direction system and the experience and skill level of RAF pilots based there was low compared to their UK counterparts and certainly to the Japanese.

⁷⁹ Interestingly, Air Vice Marshal Sir Paul Maltby, in his Despatch on Air Operations in Malaya and NEI 1941 – 1942, at para 227, states that, during the first three days of the war, Japanese deployment over Northern Malaya averaged 120 aircraft. It is not clear whether this figure refers to total aircraft deployed or sorties but was probably the former in which case the initial sortie rate was likely to be at least twice that. Supplement to London Gazette 26 February 1948, CAB 106/86, TNA.

⁸⁰ Ferris states that Darvall often expressed disdain for his intelligence staff but he does not provide a source for this. "Consistent with Intention", p 9. He may have been drawing on Aldrich who states: that Darvall rejected FECB projections about the strength of Japanese air power in southern Indo-China as "alarmist and

The lack of quality humint meant assessments of future naval build depended on published Japanese budgets which were inevitably often misleading, on calculations of industrial capacity and availability of building slips, information acquired by the Naval Attaches, and occasional visual sightings by visiting British merchant vessels. Inevitably the RN was also tempted to assume that IJN building plans would mirror those in European navies. There were essentially two things the RN got wrong on future IJN build. It failed to identify the super-battleship programme⁸¹ and it assumed an entirely fictitious battle-cruiser programme⁸². Several important qualifications are required here. In criticising RN assessments of IJN building plans, Wark and other historians have focused on NID studies

defeatist". Aldrich, *Intelligence and the War Against Japan*, p 63. Aldrich here drew in turn on Peter Elphick, *Far Eastern File*, p 167. The exchanges described in the text above suggest a more positive and collegiate relationship. It is also worth noting that Admiral Thomas Hart, CinC US Asian Fleet, claimed that Darvall had made "a far from good impression on my observers" during contacts in the autumn of 1941 by which time Darvall was acting as Brooke-Popham's Chief of Staff. Leutze, *A Different Kind of Victory*, p 195 – 196.

⁸¹ In late 1937, the RN assessed that Japan was commencing two new capital ships, almost certainly armed with 16 inch guns and probably displacing between 42 - 43,000 tons. SIS reported around this time that the new ships were to be armed with 12 16 inch guns and displace 46,000 tons. However, DNI stated that subsequent information from secret sources (almost certainly SIS) had suggested "the definite possibility" of the ships having 18 inch guns, a possibility which DNI felt "could not be ignored". In reality, the two ships of the Japanese 1937 programme were Yamato and Musashi of 72.000 tons and carrying nine 18.2 inch guns. The SIS reporting was thus some way out but it at least helped convince the Naval Staff that the IJN ships were significantly superior to the KGVs then building and that a response, the Lion class, was required. D of P and DNI minutes dated 22 December 1937, file PD 06563/37, ADM 116/3735, TNA. For more background on the SIS report, see Keith Jeffery, MI6, p 266. By 1940, the RN assessed the IJN would commission four new capital ships by 1942, the two 1937 programme at 40,000 tons (assessed displacement down somewhat since 1937) and two others of 35,000 tons all armed with up to 9 16 inch guns. See: W.P. (40) 95, 'Comparison of British and Japanese Fleets', ibid. In reality, the IJN planned a total of four Yamato class of which they completed only two, one in December 1941 and one in mid-1942. ⁸² The RN assumed the IJN was building four battle-cruisers of around 20,000 tons and armed with 12 inch guns till at least the end of 1941. It even believed the first of these called "Ibuki" had commissioned in early 1941. The genesis of this belief probably lay in an SIS report dating from late 1937 which stated that Japan was secretly building "three cruisers with 12 inch guns". See DNI minute of 22 December 1937 in file PD 06563/37, ADM 116/3735, TNA. While the SIS report was clearly wrong, there was some underlying substance in that the IJN genuinely contemplated such ships in 1934, see Evans and Peattie, p 294, and may have deliberately propagated the idea as a deception for some while afterwards. Mirroring may also have played a part in subsequent Naval Staff thinking. Since both the French and Germans had built such ships, the RN was no doubt susceptible to a belief the IJN would follow suit. SIS was then no doubt pressed to find further evidence. The enthusiasm with which at least some SIS agents reported the

existence of "battle-cruisers" or "pocket battleships" with specifications very similar to those of Germany smacks of agents reporting what their case officers had told them to look for and therefore presumably wanted to hear. See e.g. SIS report "Japanese Naval Shipbuilding", dated 17 April 1939, ADM 223/885, TNA.

in the period 1938-40.83 However, there is a later report on the IJN construction programme produced by the FECB in August 1941 which, although it still contains important errors, demonstrates that estimates of IJN build available to the RN were now closer to reality for all categories of warship.⁸⁴ It shows that, although the RN never got definitive intelligence on precise IJN building plans, by focusing on industrial capacity and the status of key building slips, it was getting nearer the right answers overall. In 1940, the RN thought the IJN would have four new battleships of 35-40,000 tons by 1942 and up to four additional 12 inch gun battle-cruisers, and its own forward building plans reflected this.⁸⁵ In reality, the IJN completed two Yamatos by 1942 and lacked the industrial capacity to continue the programme beyond this. FECB had not recognised the size and capability of the Yamatos but it was near the right overall numbers and the right in service dates for both capital ships and carriers.⁸⁶ Ferris and Bell have argued that ultimately NID errors over IJN capital ship plans did not much matter. The key point is that the RN made worst case assumptions about the planned rate of IJN build for capital units and the timing of their appearance, common sense balance was then applied by the political leadership, in several important instances by Churchill, and the RN then got its own rearmament programme for capital units about right as discussed in Chapter One.

⁸³ These began with an exhaustive review conducted by Commander Hilken of NID. Relevant papers are in ADM 116/5757, TNA.

⁸⁴ FECB Intelligence Summary, 'Japan: Warship Construction Programme', Index No: 911, dated 1 August 1941, ADM 223/347, TNA. The distribution list shows this was shared with DNI. This report correctly identifies one battleship fitting out (*Yamato*, which would be commissioned in December), and one building at Yokusuka (*Shinano*, the third *Yamato* class which would be converted into an aircraft carrier). It misidentifies *Musashi*, the second *Yamato* class, fitting out a Nagasaki, and *111*, the fourth *Yamato* on the slip at Kure (never completed), as "pocket battleships". It correctly identifies 3 aircraft carriers fitting out, which would be *Shokaku* (commissioned August), *Zuikaku* (commissioned September) and *Taiyo* (September). Total cruisers under construction are estimated at seven as opposed to the reality of four, while the figure of 17 destroyers compares to an official Japanese figures are from JM 160, p 35.

⁸⁵ Comparison of British and Japanese Fleets', ibid. The RN also assumed the IJN could build at a rate of three capital ships every two years.

⁸⁶ Unfortunately, although this FECB assessment was definitely shared with DNI, it was either not accepted in NID or else was soon forgotten. By March the following year, NID estimates for IJN construction were not only badly off track again but bordered on the ridiculous. An NID note forwarded to the PM by the First Lord A V Alexander on 16 March stated that one new battleship of 40,000 tons was in service, a second was imminent, and a further three were under construction. In addition, six battle-cruisers of between 14 – 20,000 tons, two nearing completion, and two carriers were also under construction. The PM had already queried whether Japan had the industrial capacity to support such a programme after seeing initial figures ten days earlier which were attached to a paper from the First Sea Lord, "Air Requirements for the successful prosecution of the War at Sea". It is doubtful whether he was convinced by Alexander's follow up which quoted distinctly flaky sourcing. PREM 3/324/14, TNA.

The RN picture assessed

In summary therefore, by late summer 1941, NID and the Naval Staff had a picture of headline IJN strength, both ships and aircraft, which was generally accurate. They had also received sound guidance on the scale of attack that might be applied to British interests. Any tendency to play down IJNAF effectiveness based on perceived poor performance in China was balanced by an inclination to overstate the IJN quality advantage in capital ships. Estimates for IJN new construction and aircraft production had errors but the latest FECB assessment demonstrated that, with careful analysis of available information, the intelligence community was getting closer to reality here. They also had a good picture of IJN organisation and, through the FECB, were able to track the movement of naval and air units in close to real time.⁸⁷ Tracking of Japanese merchant shipping was also accurate and during October and November would provide an additional pointer to likely hostilities.⁸⁸ Decryption of Purple diplomatic traffic and that from lower grade systems provided some important insights into overall Japanese thinking and intentions.⁸⁹

⁸⁷ See for example NID 4 report of 7 October 1941, 'Disposition of Japanese Fleet'. NID 4 also noted on 7 October that the IJN had completed its annual reorganisation two months ahead of the normal time. FO 371/27964, TNA. NID also reported this development in Weekly Intelligence Report No 81 of 26 September and suggested that Japan was putting its fleet in a state of readiness. ADM 223/151, TNA. By the end of the month it concluded the IJN fleet was on a "war footing". ADM 223/152, TNA. ⁸⁸ Weekly reports on Japanese Shipping Intelligence were produced by the Ministry of Economic Warfare under reference T 33/57/Z. Examples of these are in FO 371/27964. Ferris, "Consistent with Intention", p 25, drawing on FECB sources, states that FECB traffic analysis showed that, by early November, all Japanese merchant traffic had withdrawn northward, suggesting danger at the end of the month, which in turn triggered the air searches which found the Japanese invasion convoys. In reality, although FECB certainly contributed to shipping intelligence, the process was directed by MEW and drew on many other sources e.g. Lloyds. MEW produced its reports weekly and they were circulated to the FO, the Admiralty and Ministry of War Transport. NID 4 Note 4/20 dated 8 October recorded that the number of Japanese merchant vessels at sea, which averaged 162 per month during the first half of the year, had declined to just 40 between early August and early October. By the middle of the month, MEW was reporting that normal traffic had virtually ceased and by the end of October it had noted possible evacuee ships. NID stated that the Japanese Government had taken control of all shipping on 8 October.

⁸⁹ The assessment of British knowledge of the IJN provided in this paragraph is much more positive than that offered by Douglas Ford in chapter 1 of his thesis *Climbing the Learning Curve*.

War Warning

If British intelligence capability against Japan had strengths at the mid-point of 1941, two questions still need to be asked about its future contribution over the second half of the year. First, was the capability good enough to give precise and timely warning of an actual attack on Britain as opposed to merely illuminating the potential to attack? Second, were there critical gaps in the British intelligence picture that would gravely compromise RN dispositions and plans to meet an attack? On the first issue, John Ferris has recently argued that FECB, whose primary responsibility was war warning, failed to read Japanese intentions correctly in November and December 1941, was late in spotting the significance of their southern deployment and ultimately judged it was directed at Thailand rather than Malaya. He argues that Britain "received the worst of both worlds from FECB". "It rejected the FECB's assessments of Japanese capabilities, which were accurate enough to enable effective preparation, while accepting views on intentions that were wrong, and shaped by enemy deception." He argues that FECB views had significant influence here in both London and Washington.⁹⁰

Several criticisms can be made of the Ferris view which broadly aligns with the work of certain other historians such as Aldrich⁹¹. In the first place, he overstates FECB's role and influence. FECB was a critical sigint outpost, it was an important clearing house for intelligence collected from all sources within the region, and it had important specialist expertise on the Japanese military. Providing intelligence and local advice on war warning was certainly a primary task but that did not make it uniquely responsible for war warning as Ferris rather implies. A final judgement on Japanese intentions could only be reached in London. That was partly because London had unique intelligence, including Purple not available to FECB, but also because only London had the full diplomatic context (including insights drawn from wider sigint intercepts) and, importantly, access to

⁹⁰ John Ferris, "Consistent with an Intention": The Far East Combined Bureau and the Outbreak of the Pacific War, 1940-41. For the quotes, see p 26. Ferris accepts, p 17, that FECB offered "fairly accurate accounts of the characteristics and quality of Japanese forces". He also states these were often largely ignored by local commanders and that FECB staff were also isolated from the intelligence departments in London. It is important to emphasise, however, that sources on both these points conflict. ⁹¹Aldrich, *Intelligence and the War Against Japan*, especially chapter four.

US thinking and assessments. Ultimately, too, war warning was a matter of political and military judgement. The Intelligence community, of which FECB was a part, could offer specific insights drawn from sigint and humint and suggest, up to JIC level, what they meant but intelligence assessments could never be more than a guide and the British war leadership had to decide what weight to give them alongside other inputs such as reports from the Ambassador in Tokyo or from a wide range of sources in the US Government.⁹² Secondly, Ferris criticises FECB for poor political intelligence but this was beyond their power and senior local customers such as Brooke-Popham should have recognised that.⁹³ Quality intelligence insights on high level Japanese intentions could only have come from an SIS source with direct access to the Japanese leadership, which was never available, or from timely and revealing Purple intercepts, which were occasionally available, but rarely definitive and not always available to FECB. Finally, Ferris is rather selective in his assessment of the military indicators available to FECB and their role in illuminating Japanese intentions.⁹⁴ As Chapter Seven will demonstrate, FECB's monitoring of the air

⁹²To take an obvious example, the PM, the War Cabinet and COS, would have placed as much weight on HMA Tokyo's telegram of 22 October assessing Japanese intentions following the fall of the Prince Konoye Government as any single JIC assessment, let alone a view from FECB. FO 371/27884, TNA. As Ong Chit Chung points out, Craigie showed remarkable foresight in pressing the argument for an early Japanese move south in the face of a prevailing consensus that they were looking towards Russia. The War Office at least backed his interpretation. Operation Matador, p 222, 223. Diplomatic reports could also provide excellent military intelligence. A good example here is the report to the FO from the Consul General in Saigon on 13 November which summarized recent Japanese military movements in Indo-China and was crucial in convincing the War Office that the likely Japanese objective was Thailand not the Burma Road. See report text in WO 208/1080 and MI2c and DDMI comments dated 16 November in WO 208/653, both TNA. ⁹³ It was beyond their power, because without high grade political sources, either human or sigint, middleranking military officers based in Singapore just did not have the relevant skills, experience or background, to assess Japanese political or strategic intentions. Even if the sources had existed, and constitutionally, they had come under FECB control (in the case of high grade humint most unlikely), none of the senior FECB staff serving in late 1941 were equipped to exploit, understand, and present political intelligence in an effective manner. This point is well demonstrated by comparing one of the best examples of FECB political reporting that has survived, "Japan at the Crossroads: May 1941", released on 5 June 1941, and available in WO 208/902, TNA, with contemporary reports from HMA Tokyo. "Japan at the Crossroads" essentially draws up a balance sheet. On the one hand, Japan is better placed militarily for a move south than in 1940. On the other, it faces more determined opposition from the US and some strengthening of British and Dutch forces. Most of its judgements are reasonable, though it grossly exaggerates German technical assistance, but it is essentially a speculative piece lacking either hard information or penetrating insight. ⁹⁴ It is worth comparing the picture provided by Ferris in "Consistent with Intention" with that provided by Ong Chit Chung in chapter 8 of Operation Matador. Ong Chit Chung brings out the wide range and diversity of inputs feeding the intelligence picture through October and November. By end October it was clear something was likely to happen in the southern theatre but the more definitive warning indicators were only triggered in the last half of November and the British system actually did pretty well picking these up. WO 208/1080, TNA, has a good range of representative reports at this time, including some from US sources via BAD Washington.

build-up in southern Indo-China and the formation of a Southern Naval Task Force was impressive.⁹⁵ Chapter Seven will also show that the combination of sigint and military indicators from FECB, along with US warnings, meant Britain's war leadership were clear by end November that the Japanese were headed south and that the sheer scale of forces allocated made hostilities likely. What was not foreseeable with existing British sources was the attack on Pearl Harbour, and all the consequences that flowed from that, nor was it possible, without a source in the Japanese leadership, to be sure if an attack on Malaya was imminent, or whether the Japanese would consolidate in Thailand first, or indeed attack the NEI.⁹⁶ Against this background, the Ferris claim that war warning failed through FECB inadequacy is hard to support. War warning intelligence was far from perfect through the second half of 1941 but, as shown in subsequent chapters, it was good enough to enable the Admiralty to avoid an exposed position in the Far East if it chose to do so.⁹⁷

Intelligence gaps and underestimation

A second issue is the existence of critical gaps in the RN's picture of IJN capability and the implications these had for its deployment.⁹⁸ The RN underestimated the size of the IJN's carrier borne air-force and it had no inkling that, during 1941, the IJN would develop the concept of a multi-carrier strike force organised and able to project power at a considerable distance, and implement the training and support to give this practical effect. Equally, the RN had no awareness of how the IJN was training and deploying its land-based air strike forces alongside its fleet to create a single integrated offensive system with each component able to substitute for the other. The RN was also unaware of certain IJN innovations in weaponry especially long range torpedoes. Finally, the RN did not realise

⁹⁵ It is, however, important to note that the major jump in Japanese air strength in Indo-China only occurred in the final week before their attack. On 28 November therefore, Brooke-Popham, drawing on FECB, put 245 aircraft in Indo-China. Japanese sources suggest this was almost exactly right. JM 107, p2 has 225. By 6 December the FECB estimate had risen to 500 which was again about right. See Ong Chit Chung, p 229 for British estimates and sources.

⁹⁶ Britain also failed to anticipate a simultaneous attack on the Philippines.

⁹⁷ Again, the judgement on "war warning" reached in this paragraph differs sharply from the position taken by Douglas Ford in chapter 1 of his thesis *Climbing the Learning Curve*.

⁹⁸ Aldrich, p 60-65, looks more generally at British intelligence on Japanese capability and is generally fair in his judgements.

how tactically innovative the IJN would be, for example in night-fighting, although this was also an RN strength.⁹⁹

Underestimation of IJN airpower was the most critical RN failing and it is important to understand why this occurred. As already demonstrated, NID, the Naval Staff, FECB, and Far East Commanders possessed most of the basic intelligence to create a reasonably accurate picture of IJN air capability. They knew the number of aircraft carriers and the specification of the aircraft they carried. They knew the strength and organisation of the land-based IJNAF, had accurate performance data for its aircraft, and in the second half of 1941 would accurately track its deployment in Indo-China. They also knew the IJN had invested heavily in its air arm since the mid-1930s. The COS 1937 FEA provided a broadly accurate assessment of IJNAF strength at that time.¹⁰⁰ An exchange of minutes between DNI and the Director of the Naval Air Division (DNAD) in February 1940 estimated the IJN might then be spending fifty per cent more on its air arm than the RN.¹⁰¹ The same minutes estimated the strength of the IJN carrier air arm at 450 aircraft although DNAD questioned (wrongly) whether these were all as modern as their RN equivalents. The equivalent RN frontline strength at this point was 264.¹⁰² Despite this awareness of IJN air investment, there is a puzzling absence of comment on IJN air capability, and especially carrier capability, in the numerous British papers which assess the balance of

⁹⁹ In early 1942, the view took hold in the RN that the IJN did not like night-fighting and that this was something the RN should exploit. This seems to have been initiated by Vice Admiral Sir Geoffrey Layton, as CinCEF, in a signal to the Admiralty on 13 February 1942. CinCEF signal 1227z to Admiralty of 13 February 1942, ADM 223/867, TNA. Layton's view was incorporated in Weekly Intelligence Report No 102 circulated a week later on 20 February. This stated that pre-war impressions here now appeared to be confirmed by wartime experience. ADM 223/153, TNA. See also: Marder, Vol 2, p 45. IJN successes in a series of night encounters with the USN in the second half of 1942, notably Savo Island and Tassafaronga, demonstrate that this view was rubbish. However, it is important to add the qualification that the IJN did not always respond well when caught by surprise at night, as demonstrated by their performance at Balikpapan (Borneo) on 20 January and Bantam Bay (Java) on 28 February. Their response at Bantam Bay, when their invasion force was surprised by the Australian cruiser *Perth* and US cruiser *Houston*, was especially chaotic even though they enjoyed huge superiority. For a good account of this latter action, see: Jeffrey R Cox, *Rising Sun, Falling Skies: The Disastrous Java Sea Campaign of World War II*, (Osprey Publishing, 2014), Chapter 17.

¹⁰⁰ 'Far East Appreciation 1937', p 84, CAB 53/31, TNA. Significantly, it assessed there was little difference between IJNAF and RAF or Fleet Air Arm aircraft performance.

¹⁰¹ DNI minute NID 3515/39 of 19 February 1940, ADM 116/5757, TNA. In comparing relative expenditure, DNAD took account of expenditure on RAF Coastal Command.

¹⁰² Admiralty History of Naval Aviation 1919-1945 Vol 2, Appendix VII, ADM 234/374, TNA.

naval forces in the Far East through 1940-41.¹⁰³ As already emphasised, the primary RN gauge for measuring relative strength was always the battleship. The importance the RN attached to IJN battleship modernisation is apparent but it appears to have gleaned less detail on IJN carrier modernisation and there are few references to it.¹⁰⁴ Nor did the RN consider how the arrival of four brand new IJN fleet carriers between 1937 and 1941 might change IJN attitudes to naval warfare. It is revealing that, in forming its plans for a new Eastern Fleet in the second half of 1941, the RN sought equality with the maximum likely battleship force the IJN might deploy in the South China Sea but assessed a single carrier was desirable rather than essential.

There appear to be no contemporary documents or views from senior RN officers which satisfactorily explain this disregard for IJN airpower as a critical factor in the Far East naval balance as the Admiralty contemplated naval reinforcement during the second half of 1941. The omission is striking given the important role that airpower, including RN carrier operations, had played in both Atlantic and Mediterranean theatres by mid-1941. Indeed throughout this year, Cunningham bombarded the Admiralty (and on occasion the PM) with signals emphasising the crucial importance of adequate air cover (both carrier and land-based) if his fleet was to operate successfully. He underlined the impossibility of contesting the Central Mediterranean without such cover.¹⁰⁵ Cunningham's views are important because, as explored in Chapter Seven, there were striking analogies between the Mediterranean and South China Sea which the Naval Staff could hardly fail to note.

¹⁰³ There is an interesting contrast here with the 1937 'Far East Appreciation'. Although this has few references to carriers compared to capital ships, it does at least consider the carrier balance and looks at how four carriers might be deployed in a hypothetical 1939 war.

¹⁰⁴ Two out of three IJN fleet carriers are listed as "modernized" in Appendix 1 to Committee of Imperial Defence paper 1366-B, 'Comparison of the Strength Of Great Britain with that of certain other Nations as at January 1938', CAB 24/273, TNA. These would have to be *Akagi* and *Kaga* with the newly completed *Soryu* being the third. The RN does not, however, appear to have learnt the scale of these modernisations as it continued to list them with their original displacement of 27000 tons until at least 1941 whereas it had actually increased by some 30% in each case. See Peattie, Appendix 4 for a detailed account. *Akagi* and *Kaga* were completely reconstructed between 1934-35 and 1935-38 respectively, finishing at 36,500 and 38,200 tons. The light carrier *Ryujo* was also reconstructed in this period. None of the older RN carriers received comparable investment.

¹⁰⁵ See successive Cunningham signals to the Admiralty dated 25 April, 29 April, 27 May, 2 June, and 2 November. His November signal stated that his ability to operate in the Central Mediterranean required a carrier "stuffed with fighters". Two carriers were "better and safer than one" but one was "essential". Cunningham Papers, ADD MS 52567, British Library. Cunningham's views on the centrality of carriers in modern naval warfare were fully shared by Somerville at *Force H* and Admiral Sir John Tovey as CinC Home Fleet.

Explanations for not seeing the parallel are therefore hard to find. One obvious factor is that none of the RN's European opponents operated carriers so the RN had not needed to consider the implications of an air threat beyond the range of land-based aircraft during the war to date. A second factor was that, until the Japanese moved into southern Indo-China, the sheer distance of the Japanese airbases meant the land-based air threat was more theoretical than real and immediate. This distance factor may then have linked in some Admiralty minds with an expectation that RN forces operating in the South China Sea would be able to call on British or US land-based air support although, by mid-1941, experience in the Mediterranean should have suggested that, with the known balance of forces on each side, little comfort could be taken from this.

A final factor to consider is that the sheer geographical spread of RN commitments together with war losses and damage meant that, before 1942, it rarely had more than one carrier available in any theatre of operations and sometimes none.¹⁰⁶ As a result, with rare exceptions¹⁰⁷, the RN was obliged to deploy its carriers in a supportive role, either for local air defence or as a facilitator of fleet action through reconnaissance or attrition, rather than as a decisive weapon in its own right. This helps to explain why some of the Naval Staff may have seen a carrier for the Eastern Fleet as merely desirable rather than essential although it is important to stress that, at the end of 1941, there were also views within the Admiralty on the impact of airpower at sea quite as revolutionary as anything within the IJN or USN.¹⁰⁸

¹⁰⁶ There was no carrier in the Eastern Mediterranean throughout the second half of 1941.

¹⁰⁷ The most obvious is the attack on the Italian naval base at Taranto in November 1940 where the RN achieved a strategic effect comparable to Pearl Harbour.

¹⁰⁸ In a minute to fellow Admiralty Board members, dated 27 December 1941, the Fifth Sea Lord, Rear Admiral A L St G Lyster, stated that the dominating factor in naval warfare is no longer the big gun but the air striking force whether shore-based or carrier borne. Lyster saw no reason "why a fleet of carriers only escorted by cruisers and destroyers should not be able to deal effectively with what is usually termed a "well balanced" fleet. This proposal to dispense with battle-fleets was prescient but also radical at this time. Few senior officers in any navy would yet have gone this far. Lyster therefore argued for heavy investment in airpower – "particularly if we hope to compete with the Japanese Fleet in the Indian Ocean on anything like equal terms". He added – "If we do not provide our fleet with ample aircraft for both offence and defence, we are liable to get a caning". Lyster was of course writing in the wake of Pearl Harbour and the loss of *Force Z* but his views must have been moving in this direction through 1941 (he became Fifth Sea Lord in April) and it is surprising therefore that there is no obvious sign of his influence on Far East planning during the autumn. ADM 1/11971, TNA.

RN expectations of how the IJN would use carriers were inevitably likely to mirror its own thinking and current war experience. It would expect the IJN to divide its carrier fleet not just between Pacific and South East Asia theatres but also to support independent hunting groups rather than bring them together as a single force. Peattie and a recent article by Jonathan Parshall and Michael Wenger show that, up to early 1941, this was actually a reasonable assumption.¹⁰⁹ It was only in January that year that the IJN decided to bring its carriers together as a single concentrated force in the First Air Fleet which came into being formally on 1 April. Parshall and Wenger emphasise that the creation of this force marked a revolutionary leap from predominantly single carrier operations to coordinated multi-carrier operations. Prior to that date, IJN carriers had often operated in pairs but never as a foursome let alone as six.¹¹⁰ The revolution lay in moving from the carrier as a tactical weapon supporting the battle-fleet to a carrier task force that could use its combined air strike power to project strategic effect at long distance.¹¹¹ The leap was made possible by three elements coming together: motive, the need to remove the US Pacific Fleet from the board; availability and opportunity, in 1941, the IJN had the carriers, new aircraft and highly trained crews to consider operating in a new way;¹¹² and the authority to make it happen vested in the special status held by Admiral Isoruku Yamamoto as CinC Combined Fleet. Parshall and Wenger emphasise that the IJN translated this concept into a practical strategic weapon within barely six months, successfully solving numerous problems from a standing start. They state that the characteristics that many historians emphasise as classic examples of early war IJN carrier doctrine were in reality only a few months old at most. IJN carrier doctrine had evolved

¹⁰⁹ Peattie, p 147-153.

¹¹⁰ Six fleet carriers became possible with the commissioning of *Shokaku* and *Zuikaku* in the second half of the year.

¹¹¹ Parshal and Wenger emphasise the sheer number of aircraft dedicated to the Pearl Harbour attack, 183 first wave and 171 second wave, compared to anything that had gone before. The revolution lay not just in their strategic effect but the solving of all the logistic and operating challenges in putting them over the target.

¹¹² Alan Zimm provides some important qualifications on both the state of training of IJN aircrew and the combat readiness of the 5th Carrier Division (*Shokaku* and *Zuikaku*) at Chapter Ten of *The Attack on Pearl Harbor*. He emphasises that, while the IJN had a core of very experienced aircrew, the delivery of aircrew struggled to keep up with the demand created by an increase in carrier aircraft capacity of about one third in the second half of 1941.

very quickly, indeed virtually mutating overnight.¹¹³ The IJN was able to do all of this in remote locations beyond the reach of RN or USN intelligence and without the distraction of fighting a war. These IJN doctrine innovations occurred alongside, and were facilitated by, a comprehensive aircraft re-equipment programme across the year 1941 which again was at best only partly visible to the Western powers.¹¹⁴ Parshall and Wenger argue that it was virtually impossible for the USN or RN to spot this revolutionary change and appreciate its implications. To do so would have required not just extraordinary and timely insider intelligence access but an equivalent military vision of what was possible driven by similar strategic need.¹¹⁵ Both the USN, and certainly the RN, faced different challenges and neither had the luxury of concentrating its carrier power in a single theatre. It would be late 1943 before the USN could concentrate equivalent carrier power to the Kido Butai¹¹⁶ of late 1941.

Just as the RN failed to recognise the evolution of the IJN carrier fleet into a single concentrated force, so together with the RAF, it failed fully to understand developments within the land-based components of the IJNAF. The FECB, as already shown, was able to track IJNAF deployments in Indo-China effectively in the autumn of 1941 but there is no evidence it understood that the IJN had created a land-based equivalent to the carrier based First Air Fleet in the Eleventh Air Fleet operating as a fully integrated component of the Combined Fleet under Yamamoto.¹¹⁷ This was a concept that not only did not apply to the RN, where land-based maritime strike was an RAF Coastal Command responsibility, but had no parallel elsewhere in Europe or the US.¹¹⁸ As a result, while intelligence got both IJN aircraft numbers and performance characteristics about right,

¹¹³ Jonathan Parshall and Michael Wenger, Pearl Harbour's Overlooked Answer, *Naval History Magazine*, Vol 25, No 6, December 2011.

¹¹⁴ The A6M Zero fighter, and the latest marks of the Type 97 torpedo bomber and Type 99 dive-bomber were all introduced in the 12 months leading up to the outbreak of war. Although the RN and RAF had details of the Zero by mid-1941, it is not clear they realised it was designed for carrier deployment.
¹¹⁵ Lyster's minute of 27 December 1941, ibid, arguably did offer an equivalent vision of the way airpower would ultimately impact at sea.

¹¹⁶This was the IJN term for their new carrier task force.

¹¹⁷ Peattie, p 147-153.

¹¹⁸ To be fair, Cunningham recognised the need for, and did his best to promote, exactly this concept in the Eastern Mediterranean following the fall of Crete and the loss of all his carriers. However, inter-service politics made execution very difficult and it would be well into 1942 before something approaching this concept was put into effect albeit on a much smaller scale to the Eleventh Air Fleet. Cunningham, *A Sailor's Odyssey*, p 396.

drawing heavily here on traffic analysis, it failed to recognise that behind these numbers was a highly tuned weapon system dedicated to maritime strike.

Many of the senior RN officers, most responsible for meeting the threat from the IJN, cited underestimation of IJN power and effectiveness to explain the disasters that befell the RN in late 1941 and early 1942. Underestimation was inevitably linked with poor intelligence, an excuse that arguably became more popular with the passage of time. Pound, stated "we all under-rated the efficiency of the Japanese air forces and certainly did not realise the long ranges at which they could work".¹¹⁹ Vice Admiral Sir Henry Moore, who succeeded Phillips as VCNS, went further "we grossly underestimated the power and efficiency of the Japanese naval surface and air forces" and added "this may have been due both to lack of intelligence and to faulty assessment of what we had".¹²⁰ Godfrey as DNI, in his post war unpublished memoirs, said "Japan, behind an impenetrable security wall, had built up a fighting machine about whose composition and intentions we knew very little. Both we and the Americans erred and there is hardly anyone entitled to say - 'I told you so'".¹²¹ The question is whether these claims hold up or whether there is a strong element of *post facto* justification. In terms of reputations, blaming underestimation, and especially poor intelligence, was easier than accepting that defeat lay in poor strategic or operational decisions, or failure to provide the resources which intelligence suggested were necessary. It is striking that Vice Admiral Sir Geoffrey Layton, the Far East Naval CinC both before and after Phillips, when writing his contemporary account, does not refer to any intelligence weakness or underestimation and places the blame entirely on inadequate forces, a failure to provide the strength "we knew to be necessary".122

¹¹⁹ Marder, Vol 1, p 491. This quote is from a personal letter dated February 1942.

¹²⁰ Marder, Vol 1, p 352. This quote is from a letter to Marder in 1976.

¹²¹ Vice Admiral J H Godfrey, 'Afterthoughts', ADM 223/619, TNA. Godfrey was writing in the 1960s.
¹²² Vice Admiral Sir Geoffrey Layton, 'Remarks on the operations in Malaya and the Defence of Singapore', ADM 199/1472A, TNA. Layton's view was shared by Major General I S O Playfair, Chief of Staff to the American-British-Dutch-Australian ABDA joint Far East Command formed in January 1942, in a personal record written a year later. Playfair set out "fundamental defects" causing the loss of Malaya and then subsidiary "contributory causes". "Not enough forces" came right at the top of his list. He did not mention either poor intelligence or underestimation of the enemy as factors. Some Personal Reflections on the Malayan Campaign July 1941 – January 1942, CAB 106/193, TNA.

Possible explanations for specific underestimation of the IJNAF have already been addressed, but it is harder to support the claims of Moore and Godfrey that there was a wider failure given the reality of the naval intelligence performance set out earlier in this chapter and the generally excellent record of the JIC of which Godfrey was a key member.^{123 124} Nevertheless, as already noted, RN assessments of the risk posed by the IJN clearly depended not just on knowledge of its headline strength but also perceptions of its overall fighting quality and efficiency, the strategy and tactics it would deploy, and its ability to sustain operations over time. The Wark thesis that the RN created a false image of the IJN which understated its effectiveness, and of the resources therefore needed to counter it, is relevant here.

In judging how well the RN assessed its IJN opponent, some perspective on IJN strengths and weaknesses is required. The IJN's evolution of its air strike capability in 1940 - 41 was highly innovative but it was based on the local concentration of a superbly trained force rather than overall resource superiority or any fundamental technical advance in military capability. H P Willmott has described the IJN, and especially the IJNAF, as "so highly tempered it was brittle".¹²⁵ Much of its equipment was superb by the standards of 1941 and the competition it immediately faced in the Far East theatre but Japan lacked the industrial, technical, and logistic resources, and arguably the leadership and management insight, either to replace losses or to maintain a competitive edge against the Western powers. The IJN also had major weaknesses in lack of radar, modern aircraft

¹²³ Godfrey's biographer certainly did not agree with Godfrey's negative assessment of intelligence on the IJN. Addressing the question, "Was faulty intelligence to blame for the disasters of 1941/42?", he answered with an emphatic "No". Beesley's view is in line with the assessment in this chapter. See: Patrick Beesley, *Very Special Admiral: The Life of Admiral J H Godfrey CB*, (London: Hamish Hamilton, 1980). Beesley corresponded extensively with Marder and surviving members of NID4 and FECB in 1978-9. This correspondence is in MLBE 3/2, CCA, Cambridge.

¹²⁴ Michael Goodman in his new published *Official History of the Joint Intelligence Committee* states at p 106 that, in reviewing JIC reporting during 1941, Godfrey concluded that "the War Cabinet and COS were fully and accurately advised as to Japanese intentions and preparations". This is sourced to an NID paper in ADM 223/494, "JIC Appreciations in 1941 of Japanese Intentions". This paper does indeed reach this judgement, which accords with a separate assessment conducted in early 1942 by DMI. However, the NID paper was written post war by Captain Alan Hillgarth in 1945 – 46 when Godfrey was long gone. It did not therefore necessarily reflect Godfrey's personal assessment and there is no certainty he even saw it. ¹²⁵ H P Willmott, *Empires in the Balance*, p 82-83. Osamu Tagaya, *Imperial Japanese Aviator*, (Osprey, 2003), makes an identical point regarding the IJNAF. In his view, the IJNAF at the start of the war was immensely skilled but fragile and lacking in depth.

communications¹²⁶, poor anti-aircraft defence, indifferent damage control, and woeful anti-submarine capability where it was years behind the RN. Willmott emphasises that, above all, Japan lacked the merchant shipping resources necessary to sustain its economy during a war with the Western powers and reap the benefit of its conquests especially in regard to oil. Furthermore, the IJN had neither thought about trade protection nor devoted any effort to procuring the relevant capabilities, drawing on RN lessons in the Atlantic.¹²⁷ Willmott sees IJN doctrine as narrowly focused on the concept of a decisive battle with the enemy fleet. Here it was "ingenious, imaginative and beautifully crafted". But in its neglect of the wider aspects of maritime power on which Japan depended, it was hopelessly "misdirected" while the limitations of economic and industrial capacity threatened rapid "obsolescence".¹²⁸

Against this reality, the evidence that the RN formally and consistently marked the IJN down on fighting efficiency is sparse. Historians who make this case invariably highlight three items: a 1935 report by the Tokyo Naval Attaché, Captain J P G Vivian¹²⁹; the 1939 Tientsin papers described in Chapter Two which rated the fighting efficiency of the IJN at 80 per cent of the RN¹³⁰; and JPS and JIC assessments during 1941 that Japanese air forces should be rated on a par with the Italians.¹³¹ This evidence must be placed in context. The Vivian report attempted to identify traits in Japanese national characteristics and culture which might limit its efficiency. While the report undoubtedly attracted high level interest in the Naval Staff when it first appeared, there is a risk historians give it

¹²⁶ Alan Zimm shows just how poor IJN aircraft communications were in Chapter Four of *The Attack on Pearl Harbor*. IJN aircraft lacked even a basic VHF voice system until well into 1943 and the HF morse system, which was only fitted to strike aircraft and not fighters, was bulky and unreliable. This lack of modern communications imposed severe limitations on the conduct of strike, recce, and, above all, air defence operations.

¹²⁷ H P Willmott, *The Second World War in the Far East*, (London: Cassell, 1999), p71. He points out that the IJN had just four dedicated anti-submarine escorts in late 1941 and no underwater detection equipment available at sea until August 1942. At that time, the RN was deploying 2100 sonar equipped ships. ¹²⁸ H P Willmott, ibid.

¹²⁹ Vivian's paper and the subsequent Admiralty minuting are in ADM 116/3862, TNA. There is a detailed discussion by Marder, who discovered the paper, in Vol 1, p 346-352.

¹³⁰ COS 931, 'Situation in the Far East', paragraph 10, CAB 53/50, TNA. This stated that fighting equipment in the IJN was believed to be at a lower standard due to lack of training among specialist staff. In consequence the relative state of efficiency compared to the RN had been arbitrarily set at 80% but could be higher. The impact of this judgement on post Tientsin adjustments to Far East war plans was discussed at the end of Chapter Two. D of P paper dated 4 August 1939, 'The Situation if Japan intervened when we are already at war with Germany and Italy', ADM 1/9767, TNA.

¹³¹ COS (41) 13th meeting of 8 January 1941 and attached papers, CAB 79/8, TNA.

more weight than it merits simply because it survives in the files whereas alternative views do not. There is no evidence it had lasting impact or ever represented an agreed consensus. It is relevant that the 1937 FEA, two years later, clearly assumed that, for planning purposes, the IJN had equal capability to the RN. Indeed it specifically proposed the RN should aim for a capital ship advantage of twelve to nine. The 1939 80 per cent rating appears to have persisted as a rough gauge of IJN quality for planning purposes over the next two years, but there is no obvious evidence this had any practical effect. It is also important to underline that the original reference was to maintenance not to skill and commitment in battle.¹³²

Admiral Sir William Davis, a Captain serving as Deputy Director Naval Plans in 1941, looking back in 1975, said: "Many of us (on the Naval Staff) would not agree with the estimate that the Japanese were only 80 per cent efficient compared with ourselves. We thought they were tactically rather rigid and also behind us in anti-submarine tactics¹³³. But frankly we knew nothing else (about their efficiency) and many of us thought it best to over-estimate rather than underestimate".¹³⁴ That view rings true and fits with the cautious approach the RN took on comparative battleship performance. In fact there was some justification for questioning IJN fighting efficiency in terms of their ability to provide the logistic and personnel support necessary for a sustained war and the RN may have acquired at least anecdotal evidence of this.¹³⁵ In that specific sense, the concept of an efficiency correction was defensible.

Ranking the Japanese air forces with the Italians was potentially more serious if it implied they were an inferior opponent. As discussed in Chapter Three, it was one excuse for the COS limiting Far East air reinforcement in terms of both numbers and quality although it is harder to argue it was a decisive factor given the pressures to prioritise the Middle East.

¹³² The IJN discovered serious design flaws in several classes of ships in the mid-1930s, notably the *Mogami* and *Takao* class cruisers and *Fubuki* class destroyers. Correcting these involved major remedial work with ships out of commission for long periods. It is likely the RN was aware of this and it may have contributed therefore to an 80% availability factor. Evans and Peattie, p 240-245.

¹³³ This fits with Alastair Mars' view gained from submarine surveillance patrols off Japan, Ibid.

¹³⁴ Letter from Admiral Sir William Davis to Captain S W Roskill, dated 16 April 1975, ROSK 4/79, CCA, Cambridge.

¹³⁵Evans and Peattie, chapter 11, especially p 401-405.

It is not clear from the JPS and JIC papers where the analogy with the Italians originated. It seems likely it was an RAF more than an RN judgement and, if so, it is difficult to judge how much it influenced RN attitudes. It may at the least have encouraged the RN to be more relaxed about the air threat to operations in the South China Sea in late 1941 than was justified and to pose fewer questions about IJN carrier power. However, while historians see comparisons with the Italian air force as pejorative, and this was undoubtedly intended by the JPS, the RN, certainly Cunningham and Somerville, had learned to treat the Italian Air Force with respect in the central Mediterranean and, by late 1941, the Italians had achieved significant successes.¹³⁶ For example, they had torpedoed four heavy cruisers, with varying degrees of damage in four separate incidents between September 1940 and July 1941.¹³⁷ They had regularly attacked the fleet in Alexandria and conducted very disruptive mining operations in the Suez Canal. Finally, they had torpedoed and severely damaged the battleship Nelson just two months before the Force Z operation.¹³⁸ This record would surely have tempered any RN inclination to be complacent about IJNAF aircraft in Indo-China if it had been recognised they were armed with torpedoes and available intelligence on their range had been properly absorbed.¹³⁹

Overall, the evidence suggests that the RN's picture of IJN capability, while it clearly missed the impact of the "revolution" in its approach to airpower in 1941, was otherwise

¹³⁶ Cunningham in *A Sailor's Odyssey*, p 258 – 259, was unequivocal about the high quality of Italian air performance at sea during the first part of the war. He states: they appeared to have some squadrons "specially trained for anti-ship work"; their reconnaissance was "highly efficient" and "seldom failed to find and report our ships"; "bombers then invariably arrived in an hour or two"; "Italian high level bombing was the best I have ever seen, far better than the German".

¹³⁷ The ships concerned were: *Kent* on 17 September, a night attack conducted in moonlight; *Liverpool*, a dusk attack on 14 October; *Glasgow* on 3 December; and *Manchester* during the convoy operation "Substance" on 23 July when a destroyer was also hit and sunk. Peter C Smith, *Images of War: The Story of the Torpedo Bomber*, (Pen & Sword, 2007).

¹³⁸ This was during Operation 'Halberd', a convoy to resupply Malta run from Gibraltar in late September. Ironically, *Prince of Wales* was part of the battleship escort, shooting down two Italian torpedo bombers. See: Middlebrook and Mahoney, p 51-52 and Barnett, p 370.

¹³⁹ The historian James J Sadkovich has provided an important reassessment of Italian military capability which he demonstrates convincingly has been consistently underestimated by British and US historians. He confirms that in most aspects of naval and maritime air capability their equipment and techniques were competitive with the RN in the first years of the war. Indeed, he argues that the Italians effectively "stalemated" the RN in the Mediterranean up to 1943 with minimal German help. He also notes that their 32 submarines operating from Bordeaux sank 586,673 tons of Allied shipping, more than German surface raiders, and with a higher kill rate per boat than the German U-Boats achieved. See e.g.: "Understanding Defeat: Reappraising Italy's Role in World War II", (*Journal of Contemporary History*, Vol 24, No 1, January 1989, pp 27 - 61).

balanced and realistic. None of the key documents from 1937 onward show significant inclination to dismiss IJN fighting power or suggest it would be wise to contemplate a major engagement except on "favourable terms".¹⁴⁰ Chapters Six and Seven examine in more detail how the RN applied the intelligence picture of the IJN set out above, with its various strengths and weaknesses, to shaping and executing a strategy for dealing with the naval risk posed by Japan from mid-1941 through to the outbreak of the Far East war. The remainder of this chapter looks at the resources available to the RN to support a Far East strategy after mid-1940 and the RN policies and doctrine that influenced how those resources were used.

RN resources for an Eastern war in 1941

Chapter One showed that Britain implemented a modified "New Standard" naval building programme over the three fiscal years 1937-1939 designed to ensure adequate parity with the combined fleets of Germany and Japan by 1942. The outbreak of the European war in September 1939 triggered substantial changes to this programme. The plethora of new wartime shipping requirements, both new build and repair, and affecting both warship and merchant shipping needs, brought an immediate slowdown to previous plans. In May 1940, in order to meet the requirement for additional Atlantic escorts, merchant ships, and urgent army needs, six capital ships¹⁴¹, one aircraft carrier¹⁴², eight cruisers and ten

¹⁴⁰ One final issue should be addressed here. In *Churchill and the Admirals*, p 196, Roskill quotes Churchill telling the First Lord A V Alexander in September 1940 that "The NID are very much inclined to exaggerate Japanese strength and efficiency". This quote has been much repeated over the years and inevitably used to pin responsibility for the loss of *Force Z* on Churchill. There are two points to make about the quote. First, it is not consistent with the suggestion that the RN itself consistently underestimated the IJN. Indeed Roskill goes on to state: "It is therefore plain that it was Churchill, not the naval staff, that underrated Japanese prowess and efficiency". Second it is almost certain Churchill was recalling arguments over comparative battleship strengths when he was First Lord earlier in the year. He was essentially frustrated that he was being asked to justify investment in additional RN build on the basis of what he felt was little more than speculation about IJN strength. See his minute of 11 February 1940, ADM 116/5757, TNA. Not for the first time he was subjecting his briefers to rigorous sceptical questioning. Marder notes the Roskill quote and offers the judgement that both Churchill and the naval staff were "culpable" of underestimating the IJN, Vol 1, p 352, footnote 30.

¹⁴¹ These were the final ship of the *KGV* class, *Howe*, the four *Lion* class, and *Vanguard*. *Howe* was resumed in 1941 and completed in August 1942. *Vanguard* was laid down in October 1941 but not completed until 1946. The *Lions* were cancelled and broken up on their slips.

¹⁴² This was the final ship of the six *Illustrious* class, *Indefatigable*. She was resumed in 1942 and completed in May 1944. Her sister *Implacable* was also much delayed and completed even later in August that year. In September 1939, the Naval Staff had expected *Implacable* and *Indefatigable* to be

destroyers from the pre-war orders were suspended. The 1940 programme agreed over the previous winter was also savagely pruned back.¹⁴³ The impact of these suspensions and cuts, alongside war losses, on RN strength in 1941 and 1942 is illustrated in Table 8 below.

Table 8

British Empire Target Naval Strength¹⁴⁴

I	August 1940	August 1941	January 1942	Deficit
Capital Ships	13	16 (15)	18 (13)	5
Fleet Aircraft Carrier	s 4	7 (6)	7 (6)	1
Light Aircraft Carrier	rs 2	2 (2)	2 (2)	0
Cruisers	57	71 (58)	75 (58)	17
Destroyers	173	224 (215)	252 (232)	20
Submarines	47	61 (52)	72 (57)	15

Target strengths reflected planned production following May 1940 suspension and cuts but do not allow for war losses. Actual strengths achieved, which take account of real building rate, overseas purchases, and war losses are given in brackets.¹⁴⁵ The figure of 13 Capital ships for August 1940 excludes *Queen Elizabeth* undergoing modernisation until early 1941.

In terms of RN resources available to counter the naval risk from Japan, the message from these figures is stark. As a result of the demands of the European war, nominal RN strength in fleet units hardly changed from the time the FEA issued in August 1940 and the outbreak of the Far East war in December 1941. In reality the deficit against target

commissioned in October 1941 and June 1942 respectively. Their availability in 1942 would have made a significant contribution to the RN's global commitments and made the RN the strongest carrier power until late 1943. See memorandum by Fifth Sea Lord, State of the Fleet Air Arm, 4 September 1939, ADM 116/3722, TNA.

¹⁴³ 'Future Strategy', September 1940.

¹⁴⁴ 'Future Strategy', September 1940.

¹⁴⁵ These calculations are based on the data in H T Lenton.

strength was greater than displayed in the Table because the figures omit units under repair. Two fleet carriers and one battleship were out of action for between six and twelve months in August 1941 following war damage and a further three capital ships were out of action for between six and eighteen months in January 1942. The number of modern or modernised capital ships, able to engage Axis units on equal terms, never exceeded eight in this period. The Table also fails to bring out an acute shortage of modern fleet destroyers since the destroyer figures in the Table combine the categories of Fleet Destroyers and Destroyer Escorts. The RN entered the European war in 1939 with 103 modern fleet destroyers. By August 1940, war losses to date had reduced this figure to 87 and there was a further net fall to 83 in August 1941 with a small increase to 85 by January 1942. However, during the second half of 1941, a further 30 destroyers were on average unavailable due to damage or refit so effective strength was rarely above 55.¹⁴⁶ This was a quite inadequate number to meet fleet needs in three separate theatres and would be an important constraining factor in building up an Eastern Fleet in 1941-2. The balance in the destroyer total in the Table comprised destroyer escorts which fell into three categories: older vessels completed before 1920 to World War I design; around 35 old US destroyers acquired in the destroyer for bases deal in August 1940¹⁴⁷; and the new *Hunt* class¹⁴⁸ which began commissioning in mid-1940 and reached a figure of 43 by January 1942.

On the positive side of the balance, the RN had inflicted proportionately greater damage on Germany and Italy in the period up to December 1941. While nominal RN frontline strength grew over this period,¹⁴⁹ German and Italian strength in surface forces declined by about 40% in each case.¹⁵⁰ Even more important, by diverting building resources away

¹⁴⁶ See First Sea Lord note on the destroyer shortage dated 23 August 1941, ADM 178/322, TNA.

¹⁴⁷ The US actually provided 50 destroyers but around 15 were transferred to the Royal Canadian Navy and allies such as the Royal Netherlands Navy. The US vessels took around six months on average to refit for RN use and were then of only limited value – barely satisfactory as Atlantic convoy escorts.

¹⁴⁸ The *Hunt* class were originally designed for Atlantic escort but their sea-keeping was a disappointment and they were generally deployed in coastal escort and in the Mediterranean where they often operated as fleet destroyers with reasonable success.

¹⁴⁹ Compare Table 8 column 1 figures with those in parenthesis in column 3.

¹⁵⁰ By end 1941, the Germans had lost one battleship, one pocket battleship, one heavy cruiser, two light cruisers and 12 fleet destroyers. Roskill, *War at Sea*, Vol III, Part II, Appendix XX. The Italians had lost one battleship, three heavy cruisers, three light cruisers, 24 fleet destroyers and 20 escort destroyers. *War at Sea*, Vol III, Part I, Appendix G. These losses can then be compared with the German and Italian build

from fleet units from late 1939 onward to meet the requirements of the Battle of the Atlantic with the U-boats, and judicious management of merchant ship resources, Britain substantially compensated, through a mix of new build, requisition and capture, for the 9.1 million tons of merchant shipping lost during the 28 months to the end of 1941.¹⁵¹ The RN commissioned about 200 Atlantic escort vessels, primarily *Flower* class corvettes, in addition to the destroyer escorts referred to above, across the two years 1940 - 41, with about a third of these built in Canada.¹⁵² This provided a critical margin over U-boat build in this period. Britain may not have been winning the Battle of the Atlantic at the end of 1941 but it was in no immediate danger of losing. This was a far better outcome than anticipated by the COS in September 1940¹⁵³ and demonstrated that Britain had got its immediate naval priorities right. As already suggested, the IJN would fail to do so. Finally, it is important to note that the RN would see a steady improvement in its overall destroyer situation in 1942. It would commission 37 fleet destroyers that year, more than double the numbers in 1941, and 38 escort destroyers. 25 fleet destroyers and eight destroyer escorts would be lost but this still left a significant net gain in strength.

This resource picture explains why, as the Admiralty reviewed options for Far East reinforcement immediately following ABC-1, the only readily available force was *Force* H which could be redeployed in emergency from Gibraltar with the added prospect of the four *R class* battleships if and when the Americans released them from Atlantic convoy escort. Five months later, by end August, the outlook was better. Admiralty planners could anticipate a small increase in capital ship availability by the end of the year, as three *KGV* class came available and three *Illustrious* class carriers arrived from new build and repair. So long as there were no further losses, this would allow a defensive force of modern units to be established in the Indian Ocean by spring 1942 even without full US

figures in Annex 2, Tables A and B. Italian submarine losses were also very heavy in this period at 38 against a total build of 85 between 1930 and 1942.

¹⁵¹ Total losses from Roskill, War at Sea, Vol III, Part II, Appendix ZZ. However, the net loss (after taking account the gains from build and requisition etc) for vessels over 1600grt in this period was only 0.9 million tons. Hancock and Gowing, *The British War Economy*, Part III, Statistical Summary, Table 3 (d). Clay Blair, drawing on the figures provided by Hancock and Gowing, demonstrates that British controlled shipping comprising vessels over 1600 grt actually rose from 17,784 thousand tons at the outbreak of war in September 1939 to 20,693 thousand tons at 31 December 1941. *Hitler's U-Boat War*, Vol 1, Plate 6, p 99. ¹⁵² See Annex 2.

¹⁵³ 'Future Strategy', ibid.

"Atlantic substitution" and relief of *Force H*. This is the resource situation that underpins the dispositions which the First Sea Lord presented to the Prime Minister in their correspondence in the last week of August and which is examined in the next chapter.¹⁵⁴

RN air capability in 1941

The RN required a strategy for dealing with Japan that took realistic account of the resources it had available in 1941 but it also needed to apply the right capabilities and fighting tactics. Here, understanding the new potential of air power at sea and applying the lessons of the war to date was particularly important. Chapter One has explained how the FAA entered the European war with obsolescent aircraft and also faced low priority for development and production. Once the war got underway, a combination of prioritisation by the Ministry of Aircraft Production on key RAF types,¹⁵⁵ procurement mismanagement, and shifting operational requirements, caused development of the new generation fighter and strike aircraft ordered in 1939 and 1940 to move painfully slowly. Of the three aircraft taken forward, none would ultimately reach service until 1943, and of these only one proved operationally adequate, albeit not in its intended role.¹⁵⁶ The experience of the Norwegian campaign persuaded the FAA that its most critical need was a dedicated naval fighter with sufficient performance to counter the latest land-based

¹⁵⁴ Winston S Churchill, The Grand Alliance, p 768-774.

¹⁵⁵ This was an entrenched Admiralty belief and is backed by many historians, not least Roskill. However, it was (perhaps inevitably) disputed by Beaverbrook as Minister of Aircraft Production who claimed in mid-1942 that the prioritisation issue had little practical effect. Minute by Minister of Aircraft Production circulated under DC (S) (42) 60 of 10 July 1942, TNA.

¹⁵⁶ These three were: the Fairey Barracuda torpedo bomber, the advanced next generation TSR aircraft to replace the Albacore and Swordfish; the Fairey Firefly specification N 8/39 escort two-seater fighter to replace the Fulmar; and the Blackburn Firebrand high performance single seat fighter. The failure of the Barracuda was partly due to the cancellation of the advanced Exe engine by the Ministry of Aircraft Production in 1940 to concentrate on other engine priorities. This was a decision beyond the RN's control and it led to substantial and unsatisfactory redesign. The development of the Firefly was inhibited by changing perceptions of fighter requirements and the best means of meeting these. It eventually proved a useful aircraft, but as a fighter-bomber and night-fighter, rather than mainstream day fighter where it could not compete with contemporary US fighters, and was not fully operational until 1944. The Firebrand was a high performance single seat fighter able to take on land-based aircraft but was fatally compromised by hasty design and too many conflicting requirements. See: Norman Friedman, *British Carrier Aviation: The Evolution of the Ships and their Aircraft*, (London: Conway Maritime Press, 1988), chapter 10; and, David Hobbs, *The British Pacific Fleet: The Royal Navy's Most Powerful Strike Force*, (UK, Barnsley Yorkshire: Seaforth Publishing, 2011), p22.

strike aircraft and their escorting fighters.¹⁵⁷ Two factors came together here to drive a fundamental shift in fighter philosophy. The first was the threat from high speed aircraft but the second was the arrival of new technology, in the form of radar and advanced lightweight VHF communications, which made it possible to counter that threat with carrier based fighters using the newly emerging RAF fighter direction techniques. The result was the specification of the new Firebrand fighter in July 1940¹⁵⁸ and the decision to meet the gap before the Firebrand's arrival by ordering the Grumman F4F Wildcat from the US.¹⁵⁹ In 1941, the RN still assessed the Wildcat the best naval fighter in the world.¹⁶⁰ Grumman promised 20 aircraft per month, sufficient to equip the FAA frontline by autumn 1941.¹⁶¹ This would have given RN carriers broadly the same fighter

¹⁵⁷The Norwegian campaign demonstrated the need for much higher fighter performance, not only to compete with land-based fighters, but to provide an adequate speed margin over modern land-based bombers. Experiments with radar assisted fighter direction here, using radar equipped AA cruisers, emphasised the desirability of an agile aircraft able to gain height and distance quickly for interception. The Norway experience also demonstrated the potential of the new technology, radar, lightweight VHF communications (which were far ahead of the USN) and radio homing. Essentially, the FAA was now reaching for a "Battle of Britain" fighter defence concept based on new perceptions of the threat and available technology.

¹⁵⁸ Specification N 11/40. This followed an extensive debate over how to reconcile the traditional requirement for a long range escort fighter to support carrier strike forces, which in the FAA view required a dedicated navigator as well as pilot, and the new need to defend the fleet against high performance attackers, where equivalent fighter performance was needed, implying single seat and acceptance of shorter range. The Admiralty continued to worry about the difficulties a single seat fighter might face with navigation until well into 1941. The initial conclusion was that two aircraft were needed. Minute to PM of 6 February covering FSL brief on FAA Fighters dated 30 January, PREM 3/171/4, TNA, and Friedman, p 208 -9. See also: www.fleetairarmarchive.net/Aircraft/Firebrand. By September 1941, it was already clear the Firebrand was well behind schedule and could not be operational before mid-1943. See JSM Washington Memorandum of 19 September 1941, Strategic Importance of Single Seater Fighters to the Navy, CAB 122/142, TNA.

¹⁵⁹ The RN called the Wildcat the Martlet. Deploying the Wildcat from RN carriers was a problem because, without folding wings, none of the lifts in *Ark Royal* or the first three *Illustrious* class were large enough to accommodate them. The solution was to ask Grumman to produce a folding wing variant and eventually to adopt the USN practice of deck parking. As a result of these limitations, the first Wildcats delivered were used in a land-based role for the defence of Scapa Flow. Designing and producing a folding wing took much longer than hoped and the Admiralty briefly considered undertaking the work in UK. In early 1941 it expected the folding wing variant to begin arriving in the middle of the year but this proved wildly optimistic. See minute to PM of 6 February 1941 copying brief prepared by FSL on FAA fighter position dated 30 January. PREM 3/171/4, TNA.

¹⁶⁰ First Sea Lord note prepared for US Special Adviser Averell Harriman, 25 November 1941, ADM 205/9, TNA. Trials had by now shown that the Wildcat was more manoeuvrable than a Hurricane I, was faster at all heights up to 15,000 feet, and climbed better too. Friedman, p 210.

¹⁶¹ The RN ordered 100 aircraft in July 1940, 150 more in December 1940 and 200 in October 1941. First Sea Lord note for Averell Harriman, Ibid. The minute to the PM of 6 February 1941 suggests that an additional 81 aircraft were taken over from France in mid-1940. PREM 3/171/4, TNA.

capability as the USN in confronting the IJN in late 1941 and in 1942.¹⁶² By the end of 1941, Grumman had delivered less than half the numbers contracted and paid for and, crucially, none had the folding wings, essential to the RN, which Grumman had also promised.¹⁶³ Churchill, who monitored the FAA fighter problem throughout 1941, described this as "a melancholy story".¹⁶⁴ The USN, by then also acquiring Wildcats, blamed the delays on acute shortages of materials across the US aircraft industry due to concentration on the four engine bomber programme.¹⁶⁵ The end of 1941 therefore found the FAA badly let down by US industry and desperately trying to plug its fighter gap through stopgap adaptations of the Hurricane and Spitfire neither of which were really suitable for carrier operation.¹⁶⁶

¹⁶² The USN initially selected the Brewster Buffalo as its preferred naval fighter but switched to the Wildcat, partly on the basis of British experience, in mid-1941. The Wildcat remained its primary naval fighter throughout 1942. The Buffalo of course became the mainstay of British fighter defence in Malaya. ¹⁶³ First Sea Lord note for US Special Adviser Averell Harriman, Ibid. David Hobbs points out that the RN not only commissioned the folding wing Wildcat but deployed it before the USN. The 250 aircraft ordered in 1940 predated lend-lease and were paid for. The British Pacific Fleet, p 14 and footnote 29. ¹⁶⁴ Minute to PM of 6 February 1941 copying FSL brief of 30 January, PREM 3/171/4 and PM Minute of 16 August 1941, ADM 205/10, both in TNA. See also: COS (41) 593 of 30 September in which the PM questions fighter status following a visit to the new carrier Indomitable, CAB 80/30, TNA. In typical fashion, he cut to the heart of the issue. "All this year it has been apparent that the power to launch the highest class fighters from aircraft carriers may re-open to the Fleet great strategic doors which have been closed against them." He instructed that - "the aircraft carrier should have priority in the quality and character of suitable (aircraft) types". The latter was of course easy to say but much harder to deliver. ¹⁶⁵ Letter to First Sea Lord from US Naval Attaché London, dated 3 October 1941, ADM 205/9, TNA and letter to BAD Washington from CNO Admiral Stark dated 9 October 1941, CAB 122/142, TNA. BAD commentary on Stark's position and the difficult politics involved in resolving competing RN and USN demands for Wildcats is in BAD signal to FSL of 12 November 1941, PREM 3/171/4, TNA. ¹⁶⁶ 270 Hurricanes were released to the FAA between February and May 1941 once it became clear that Wildcat deliveries would be delayed. Friedman, p 210. Inevitably some of the RAF releases were of poor quality. See letter from Vice Admiral Naval Air Stations to Secretary of the Admiralty dated 21 September 1941, ADM 1/13522, TNA. A minute from the First Lord A V Alexander to the PM dated 4 December and circulated under DC (S) (41) 151 of 6 December, gives a good summary of the FAA fighter procurement problems at the end of 1941. It explains why the Hurricane and Spitfire, although necessary as stopgaps, were inherently unsuitable for carrier operation. It remained essential therefore to maximize Wildcat supplies until new British naval fighters were available. The minute emphasizes, however, that such supplies can only be assured by asking the US to prioritise naval fighter over heavy bomber production. CAB 70/4, TNA. Despite Alexander's emphasis that the Spitfire was unsuitable, it appears that the possibility of converting Spitfires for carrier use, including the provision of folding wings, was considered as early as February 1940 but was ruled out at this time because of the impact on Fighter Command requirements. The idea was then resurrected in September 1941, technical issues were resolved by January 1942, and an initial order placed for 250 aircraft by now designated the "Seafire". Minute by Minister of Aircraft Production circulated under DC (S) (42) 60 of 10 July 1942, CAB 70/5, TNA. See also: 'Aircraft for Aircraft Carriers', COS (41) 613 of 8 October 1941, CAB 80/30, NA, and 'Spitfires for use in Aircraft Carriers, Priority for Development', COS (41) 666 of 8 November 1941, CAB 80/31, TNA. The modification of the Spitfire for naval use inevitably still took time and the first 28 aircraft were not delivered until July 1942. At that point, deliveries were expected to run at 25 per month and, by late August, the initial order for 250 had been expanded to 452 by the end of 1943. This reflected the view by then that the

Given the delay to the Barracuda, the FAA also considered the merits of purchasing strike aircraft from the US. The current USN torpedo bomber, the Douglas Devastator, offered no significant performance advantage over the Swordfish or its Albacore successor which began coming into service in 1940. The US did have an excellent dive-bomber in the Douglas Dauntless SBD2 but the RN had long chosen to prioritise torpedo attack over dive-bombing and its carriers had insufficient capacity to carry reasonable numbers of both types.¹⁶⁷ The FAA was, however, impressed with the forthcoming Grumman TBF Avenger, which would prove the outstanding naval strike aircraft of the war, and 200 were ordered in late 1941 under lend-lease but did not reach the RN until 1943.

This background meant that, until well into 1942, the FAA was largely dependent on obsolete biplane strike aircraft dating from the mid-1930s and a more modern fighter of interim design, the Fulmar, introduced in 1940. *Indomitable*, completed in autumn 1941 with larger lifts and extra hangar space, was equipped with Hurricanes from the start, while modifications to *Illustrious* and *Formidable* in the US in late 1941 enabled them to deploy Wildcats when they re-joined the fleet at the end of the year. While they were not competitive with the latest IJN and USN carrier aircraft, the limitations of the standard British FAA types can also be overstated. The Fulmar, as primary fighter from 1940, could not match a Zero for speed or manoeuvrability but it was still quite fast enough to catch the most modern loaded strike aircraft and had other advantages both as an interceptor and reconnaissance aircraft.¹⁶⁸ The Swordfish and Albacore torpedo bombers had reasonable range, a good communications fit, were married to an excellent torpedo¹⁶⁹,

Firebrand would have to be abandoned. See First Lord minute circulated under DC (S) (42) 61 of 10 July 1942 and Minister of Aircraft Production minute circulated under DC (S) (42) 76 of 24 August, CAB 70/5, TNA.

¹⁶⁷ Professor NAM Rodger argues that the USN ended up prioritising the dive-bomber because its aerial torpedoes did not work satisfactorily. By contrast the RN had excellent torpedoes. Lecture given at University of Buckingham, 17 December 2012.

¹⁶⁸ The Fulmar was more robust than a Zero, could dive at 400 mph (faster than almost all contemporaries and a speed which would cause a Zero to break up), had a four hour endurance, was an excellent gun platform with large ammunition capacity (which Peattie, p 157, notes was a Zero weakness), all of which, when allied to radar control, made it a useful defensive fighter. See David Brown, *Carrier Fighters*, (London: Macdonald and Jane's, 1975), chapter 2.

¹⁶⁹ This was the 18 inch Mark XII introduced in 1940. Contrary to the impression of some historians that the RN was backward in aerial torpedo capability, the Mark XII could be dropped at up to 200 feet and 150

and their biplane manoeuvrability was an advantage in marginal flying weather.¹⁷⁰ In addition, from early 1941, significant numbers were fitted with ASV air surface search radar giving them a night and bad weather search and attack capability which neither the IJN nor USN could match.¹⁷¹ Judged therefore as an overall weapon system, the FAA torpedo bombers were effective and competitive.

Despite the limitations of its aircraft, both in numbers and quality, by the autumn of 1941, the RN carrier fleet had achieved notable operational successes across different theatres and under different commanders, amply demonstrating that the RN was definitely not tied to a conservative battleship mentality. One measure here is that the RN had sunk or disabled five modern or modernised capital ships through aerial torpedo attack by end May 1941.¹⁷² It had also completed more modern carriers than either the IJN or USN¹⁷³ even if, for all the reasons given above, it badly lagged both in the number and quality of frontline aircraft together with trained and experienced crews¹⁷⁴. And, despite all its

knots, making it easily comparable to the IJN Type 91. It also had two speed options, an excellent warhead and the option of an advanced detonating pistol, the duplex magnetic proximity fuse. ADM 234/374, Naval Aviation 1919-45 Vol 1, p 169. In addition, it had gyro –angling so the attacking aircraft could off-set rather than flying direct at the target.

¹⁷⁰The FAA's Swordfish and Albacore torpedo bombers likewise could not match their IJN counterparts for speed and range but were more robust and manoeuvrable; making them more suitable for more marginal flying conditions at night or in bad weather, and had high reliability. It is doubtful either IJN or USN aircraft could have taken of in the conditions prevailing in *Ark Royal* on 26 May for the crucial attack on the *Bismarck*. See ADM 234/374, Naval Aviation 1919-45 Vol 1, p 210-212, TNA.

¹⁷¹ The first airborne radar sets, known as ASV 1, were deployed in FAA aircraft in late 1939 but were fragile and unreliable. The much improved ASV 2 began to be deployed in early 1941. 825 squadron embarked in the new *Victorious* were entirely ASV 2 equipped and this facilitated their night attack on *Bismarck* on 24 May. Some aircraft in *Ark Royal* were also equipped enabling the critical attack on *Bismarck* in atrocious weather two days later. Derek Howse, *Radar at Sea: The Royal Navy in World War II*, (Basingstoke: Macmillan, 1993), Appendix F, p 307 - 308. Howse states that ASV 2 had an effective range of about 15 miles against a medium sized warship.

¹⁷² A D Harvey points out that at Taranto in November 1940 just 11 FAA Swordfish sank or disabled three modern or modernised Italian battleships while 89 IJN B5N2 were required to sink or disable five older US battleships in the first wave attack at Pearl Harbour. He also points out that, while the IJN is credited with sinking the first capital units at sea (*Prince of Wales* and *Repulse*), the FAA had previously disabled a modern German battleship at sea (*Bismarck*), 'Army Air Force and Navy Air Force: Japanese Aviation and the opening phase of the war in the Far East', (*War in History*, 6:2, pages 174 – 204, 1999). He could have added that the FAA had severely disabled the new French battleship *Richelieu* at Dakar on 8 July 1940 and come close to disabling the modern Italian battleship *Vittorio Veneto* at Matapan.

¹⁷³ By autumn 1941, the RN had completed five large modern fleet carriers, against four by the IJN, and three by the US. The IJN and the US had each completed a single light carrier earlier in the 1930s. ¹⁷⁴ The small size of the FAA at the beginning of the war meant that heavy losses of skilled crews during

¹⁹⁴⁰ had a serious effect on its efficiency. Navigation capability was noticeably suffering in 1941. Friedman, p 205.

procurement problems and heavy wartime attrition, frontline air strength had still grown significantly after two years of war and it would continue to do so into 1942.¹⁷⁵ Aircraft reserves by autumn 1941 were also substantial compared to those of the IJNAF.¹⁷⁶

The RN was nevertheless obliged to divide its carrier fleet across four theatres, Atlantic, the two ends of the Mediterranean, and the Indian Ocean.¹⁷⁷ This made it impossible further to explore and train for the multi-carrier operations and mass strike tactics which the RN had investigated in the 1930s and which the IJN developed so assiduously during 1941.¹⁷⁸ In theory, this left it poorly placed to handle a mass carrier engagement of the Coral Sea or Midway type which the IJN and USN would experience in mid-1942. However, by mid-1941, the RN had made innovations which could partly compensate for lack of numbers and quality of aircraft. Both the USN and IJN had effectively committed to an operational philosophy based on the single massive strike which made it very difficult to manage the more flexible flying cycle required to handle the competing tasks and demands of a multi-threat environment.¹⁷⁹ The RN by contrast emphasised operational flexibility with rapid switches of aircraft tasking.¹⁸⁰

The latest RN carriers had the most advanced radar of the day¹⁸¹, aircraft communications systems and D/F homing were steadily improved, and it continued developing and refining

¹⁷⁵ Headline figures for frontline strength are:

Date
 Sept 1939
 Sept 1941
 April 1942

 Strike aircraft
 140
 198
 196

Fighters 36 129 274

ADM 234/374, Naval Aviation 1919-45 Vol 1, Appendix VII, TNA.

¹⁷⁶ At end September 1941, alongside the frontline strength note above, there were 141 strike aircraft and 72 fighters allocated to training, a further 540 and 335 respectively in general reserve and 57 and 55 in transit. Admiralty Board Memo, ADM 167/112, TNA.

¹⁷⁷ The initiation of the Russian convoys from late 1941 effectively added a fifth theatre, the Arctic.

¹⁷⁸ Chapter One, footnote 128, records how Rear Admiral Reginald Henderson, the first flag officer given specific responsibility for RN carriers in 1933, conducted the first experiments with multi-carrier operations before either the IJN or USN. See also: Friedman, p 158, and Hobbs, p 21.

¹⁷⁹ See Jonathan Parshall, *Shattered Sword*, chapter 5, for a detailed discussion of this.

¹⁸⁰ Professor NAM Rodger, Buckingham Lecture, December 2012. The evolution of a sophisticated multirole flying cycle is well illustrated in some of the reports on *Force H* operations by Vice Admiral Somerville as early as autumn 1940. These show the execution of techniques and tactics, including radar pickets, which would still be in use in the 1960s and were quite beyond USN and IJN capability at that time. See Somerville Papers, edited by Michael Simpson, (Navy Records Society, 1996).

 $^{^{181}}$ Ark Royal was an exception here in never receiving radar. However, for much of her operational life she operated in consort with ships e.g. the cruiser *Sheffield* in *Force H*, that were radar fitted and could pass her air warning data etc.

the techniques for long range enemy raid detection and fighter direction, that were first tried in Norway, during subsequent operations in the Mediterranean.¹⁸² By mid-1941, it had the basis of the Action Information Organisation (AIO) that would revolutionise the way naval commanders used available information to drive operations and would be followed with only minor incremental changes in the RN and USN through to the 1960s. The IJN had no radar at all before late 1942, totally inadequate airborne communications, and no real concept of fighter direction. IJN Combat Air Patrols essentially ran themselves. This meant that IJN air defence was inefficient and susceptible to surprise.¹⁸³

As described in Chapter One, the RN had been experimenting with night flying operations, including night torpedo attack, since the early 1930s. The scope for night attack pre-war was, however, limited because of the difficulty of conducting night searches before the advent of radar. It depended therefore on night shadowing of an enemy already located at dusk which the FAA practised and became adept in. However, during 1941, about half of the RN's strike aircraft were gradually fitted with air search radar (ASV) which had a range of about 20 miles and therefore provided a genuine night search capability for the first time. As stated above, this enabled the RN carriers to undertake attacks at night or in bad weather in conditions impossible for the IJN or USN.¹⁸⁴

¹⁸² See David Brown, *Carrier Fighters*, chapter 4, for a good summary of the evolution of FAA fighter operations and early experiments with radar control. He records that the first radar-controlled interception at sea occurred on 23 April 1940 using the converted AA cruiser *Curlew* as radar picket. There is fascinating testimony to the quality of FAA operations at this time from an objective US observer, Commander E G Taylor USN, who was serving in the FAA in 1940 as an RN Sub Lieutenant. He notes that the FAA in the spring of 1940 was in a desperate condition as regards pilots, aircraft numbers and quality, but did an excellent job with what it had through skill, innovation and new technology. Taylor describes FAA fighter control techniques as very effective and far in advance of the USN which, in his view, was still not tackling the issue seriously at the end of 1941. Taylor subsequently played a part in RN procurement of the Wildcat drawing on his war experience. See Taylor testimony to the 1944 Hart Inquiry on Pearl Harbour, day 30 proceedings, p 367. The USN was later impressed with, and subsequently largely adopted, RN air defence tactics demonstrated by the RN carrier *Victorious* when on loan to the US Pacific Fleet in mid-1943. David Hobbs, p16.

¹⁸³ See Jonathan Parshall, *Shattered Sword*, chapter 8, for a very thorough analysis of IJN carrier air defence arrangements and capability. Also, Mark Peattie, p 156.

¹⁸⁴ See ADM 234/374, Naval Aviation 1919-45, Vol 1, p 65-66 for a useful summary of the development of night attack capability. Operational examples of night/bad weather operations were the attack on Taranto in November 1940, a night attack at a range of around 180 miles from *Illustrious*, and the attacks on *Bismarck* from *Victorious* and *Ark Royal* in atrocious Atlantic weather late on 24 May and in the afternoon and evening of 26 May 1941. ASV was arguably crucial to the success of the Bismarck attacks. There is a vivid account of its role from the CO of 825 Squadron in *Victorious* who states: "ASV proved to be of assistance

The Illustrious class carriers, of which the RN had four by the end of 1941, had armoured hangars and the rationale for this has been explained earlier in Chapter One. Many historians argue that war experience quickly demonstrated that the penalties imposed by this armouring in reduced aircraft capacity outweighed the advantages of extra protection.¹⁸⁵ Friedman also suggests that RN carriers gained significant strength from making the hangar an integral part of the ship's structure and that it was this, more than armouring, which determined their ability to survive serious damage. This contention seems questionable at least in the case of *Illustrious* which suffered five 1000lb and three 500lb bomb hits off Malta in January 1941. If Illustrious had been lost, and Formidable at the very least put out of action for longer as a result of damage off Crete in May, then the RN would have had one rather than three modern carriers available in the Indian Ocean in early 1942.¹⁸⁶ A better judgement therefore is that, while the armoured carrier ultimately did prove a dead end because of the resulting operating constraints, it served the RN well during a transitional period when radar directed fighter defence was not yet mature enough to counter modern strike aircraft. They were therefore a sensible investment from the viewpoint of the mid 1930s which then paid off in the special circumstances of 1940 - 42. The RN could have, and later did, reduce the penalty imposed by reduced aircraft numbers through the use of deck parks and outriggers.¹⁸⁷

beyond all measure. While remaining hidden from the enemy by cloud, my observer was able to give me a clear picture of own and enemy forces up to the very last moment of breaking cloud for attack". See: letter from the Secretary to the Admiralty to Rear Admiral Naval Air Stations, dated 15 November 1941, "HMS Victorious Operations against the Bismarck", ADM 199/1187, TNA. The Bailey Committee report on RN strength and capability prepared for the Americans and dated 11 September 1940 includes useful material on the FAA including night torpedo techniques. ADM 199/1159, TNA. There is also a very interesting blog from emason on the Taranto attack, under "Operation Judgement" in the World Naval Ships Forum/Battles and Events. This has several original records including a report from a US observer present in *Illustrious*, Lieutenant Commander John Newton Opie USN. Opie offers more valuable detail on how FAA night operations were carried out.

¹⁸⁵ For example, Friedman, D K Brown, and N A M Rodger. Rodger argues that the armoured citadel was a clever answer to problems that did not in the end exist (i.e. difficulty of achieving adequate fighter defence and the threat from surface gunfire at night or in bad weather). Buckingham lecture December 2012. For Brown, see *Nelson to Vanguard: Warship Design and Development 1923 – 1945*, (London: Chatham Publishing, 2006), p 190 -191.

¹⁸⁶ *Victorious* also suffered damage during Operation Pedestal in August 1942 that might have sunk an unarmoured carrier.

 $^{^{187}}$ *Illustrious* class carriers typically operated 50 – 60 aircraft in the Pacific in 1945. They were also able to brush aside IJN kamikaze attacks at Okinawa and remain on station while several of the latest USN *Essex* class carriers suffered serious damage and had to retreat.

Overall, by mid-1941, the RN had therefore acquired a much wider base of wartime experience in carrier operations than is often suggested. Some of this reflected the application and elaboration of pre-war thinking. The "find, fix and strike" role on behalf of the battle-fleet evident at Matapan and the *Bismarck* operations fall into this category and even the Taranto operation drew heavily on pre-war plans.¹⁸⁸ However, in air defence, the RN was breaking new ground with capabilities, not only radar but also VHF communications and IFF, which were not available before the war. It was also becoming adept at exploiting the full range of carrier capabilities, search, strike on both land and sea targets, and air defence, and anti-submarine required in complex multi-threat environments such as Mediterranean convoy operations. All of this had demanded much tactical innovation and a new approach to force composition. It is important to emphasise here that it was the RN which developed the concept of the fast multi-role carrier task force in this period, of which *Force H* was the supreme example. This model would only later be embraced by the USN.¹⁸⁹ Finally, as proof that it could conduct the most advanced multi-carrier operations, the RN undertook a four carrier operation against the most challenging opposition, air, surface and submarine, in Operation 'Pedestal', the convoy to Malta, in August 1942. Both the IJN and USN would have struggled to conduct a comparable operation against an equivalent level of air attack at this time.¹⁹⁰ Overall therefore, while the RN could not hope to compete with the IJN in late 1941 in either carrier numbers or quantity and quality of embarked aircraft, it would be quite wrong to view it as left behind in the exercise of airpower at sea. On the contrary, the RN carrier force had significant strengths and experience to draw on.

¹⁸⁸ The RN formed a special committee to look at air attack on enemy bases in 1929 and investigated the merits of specialised weapons for this. Mediterranean Fleet orders in 1936 included instructions for shallow water torpedo settings for an attack on Taranto. Friedman, p 156.

¹⁸⁹ It is worth emphasizing that the USN could not follow this model in 1941/42 because until its new build battleships (*North Carolina* and *Indiana* classes) became available for the Pacific in late 1942, it had no capital ships fast enough to operate with its carriers and it also lacked the oilers to support them until well into 1943. By contrast, the RN not only had its battle-cruisers but also widely used the modernized *Queen Elizabeth* class, significantly faster than their US equivalents, alongside its carriers in both Mediterranean and Indian Ocean. This not only ensured support against surprise surface attack but also provided substantial AA firepower.

¹⁹⁰See: Milan Vego, Major Convoy Operation to Malta, 10 – 15 August 1942 (Operation Pedestal), (US Naval War College Review, Winter 2010, Vol 63, No 1).

RAF maritime strike

As Chapter One has demonstrated, the 1937 agreement giving the RN full control of its carrier air arm left land-based maritime attack with the RAF. For the RAF, this role inevitably took lower priority in the first phase of the war to the air defence of the British homeland, to a strategic bombing campaign which not only reflected longstanding service doctrine but was recognised as one of the few options for carrying the war to Germany, and even within the maritime sphere, to the anti-submarine effort. By late 1940, the RAF had nevertheless deployed a new torpedo bomber, the Beaufort, broadly equivalent in capability to the IJN land-based torpedo attack bombers albeit with less range. However, a British equivalent of the IJN Eleventh Air Fleet would have required a significant diversion of resources from Bomber Command to Coastal Command that was never forthcoming even in the face of the acute threat in the Battle of the Atlantic and the Indian Ocean in 1942. The UK based Beaufort torpedo force struggled therefore to reach four operational squadrons by the end of 1941¹⁹¹ and the only overseas torpedo force at that time were the two Malaya squadrons equipped with obsolete Vildebeest biplanes. The parlous state of RAF torpedo strike in early 1942 is summarised in a report for the Assistant Chief of Air Staff (Operations). This stated that, although torpedo attack was known to be more effective against ships than bombing, the RAF had neglected it for both technical and tactical reasons. It highlighted lack of high level commitment, shortage of torpedoes and associated maintenance and support facilities, and inadequate training for this specialised role given constant diversion of aircraft and crews to other tasks. This presented major difficulties in expanding the force.¹⁹²

The lack of high level support partly reflected the scarcity of high value warship targets accessible to the UK force since bombing was seen as adequate for interdiction of commercial traffic and was also the preferred option for attacking naval targets in port or

¹⁹¹ For an account of the development of the Beaufort force, see: Ralph Barker, *Shipbusters: The story of the RAF torpedo bombers*, (London: Chatto & Windus, 1957).

¹⁹² Minute to ACAS (O) of 25 May 1942, AIR 20/887, TNA. See also: earlier DCAS minute to Sir Henry Tizard of 9 December 1941, AIR 20/887, TNA. This also emphasises the torpedo is the most effective weapon for maritime attack but points to shortcomings in the Beaufort, lack of dedicated crews and torpedo shortage.

dockyard. But it mainly reflected the entrenched belief across most of the RAF leadership that the strategic bombing of Germany must take primacy and that everything else, with few exceptions, represented a diversion from winning the war. To be fair, statistics did not help the Coastal Command case for enhanced surface strike resources. They demonstrated that surface strike was very expensive for only limited benefit. Between April 1940 and March 1943, Coastal Command conducted 3700 attacks which sank 107 vessels (almost all merchant) for the loss of 648 aircraft. Meanwhile minelaying, primarily by Bomber Command, sank three times the number of ships (369) for about half the losses (329).¹⁹³ The poor Coastal Command surface attack record was painfully underlined by the woeful performance of the Beaufort force during the escape of the German battle-fleet through the Channel in February 1942. By contrast, both Scharnhorst and *Gneisenau* were badly damaged by mines dropped along their predicted track and Gneisenau was the wrecked by Bomber Command in dock at Kiel a fortnight later.¹⁹⁴ Nevertheless, despite limited resources, the Beaufort force had some notable successes. An attack on 6 April 1941 crippled the German battle-cruiser Gneisenau alongside in Brest and a night operation on 13 June seriously damaged the pocket battleship Lutzow.¹⁹⁵ The latter was the first successful attack by a land-based torpedo force on a capital ship at sea¹⁹⁶and a harbinger for the IJN attack on Force Z.¹⁹⁷

Small size and lack of dedicated expertise in the UK Beaufort force constrained the development of a torpedo strike force overseas. However, two squadrons were deployed to Egypt via Malta in early 1942 to compensate for the loss of the Alexandria battle-fleet which was destined for the Indian Ocean following the Japanese attack but was then badly damaged by Italian frogmen before it could be released. This planned substitution of

¹⁹³ John Terraine, *The Right of the Line*, (London: Hodder and Stoughton, 1985), p 422.

¹⁹⁴ John Deane Potter, *Fiasco: The break-out of the German Battleships*, (London: William Heineman, 1970).

¹⁹⁵ Peter C Smith, *Images of War: The Story of the Torpedo Bomber*, (Pen & Sword, 2007). The attack on *Lutzow* off the Norwegian port of Egersund took place at a range of about 400 miles, only slightly less than the attack on *Force Z*.

¹⁹⁶ Ralph Barker, p 16 and 59.

¹⁹⁷ As noted by Martin Middlebrook and Patrick Mahoney, p 302-303. This successful strike contrasted with the poor performance by all three available UK Beaufort squadrons during the channel breakout by German battle-cruisers six months later. The latter failure reflected incompetent communication and command and control rather than any deficiency in aircraft performance.

Beaufort torpedo bombers for battleships was an almost exact analogy of Yamamoto's use of the 22nd Air Flotilla to counter *Force Z*.¹⁹⁸ It demonstrated that the RN leadership recognised the strategic impact that an appropriate land-based strike force could achieve. However, the Beaufort force was too small, and its crews insufficiently trained, to stand real comparison with its IJN counterpart. The force took some while to achieve operational efficiency in the theatre and there were insufficient resources for an additional force in the Indian Ocean although one of the Egypt squadrons would be deployed onward to Ceylon at the end of April.¹⁹⁹ As already noted in Chapter Three, the Far East also suffered from problems with the planned production of Beauforts in Australia. Australian Beauforts were to replace the Vildebeests in Malaya by mid-1941 as part of the "336" reinforcement plan.²⁰⁰ Due to a shortage of key parts from the US, only seven aircraft were completed by the end of 1941 when production halted until mid-1942.²⁰¹ Even if the aircraft had been produced to schedule, Air Staff minutes show that no suitable torpedoes were available to equip them until mid-1942.²⁰² The modernisation of the Malaya strike force on which Far East Commanders placed much emphasis was therefore always compromised although neither the COS nor Far East Commanders seem to have known this.²⁰³

¹⁹⁸ JP (41) 1072, 'Far East Policy', attached to COS (41) 428th of 19 December 1941, CAB 79/16, TNA. ¹⁹⁹ COS (42) 109th meeting of 7 April, CAB 79/20, TNA. The CAS accepted that torpedo bombers were the most pressing need in the Far East but the only way of providing these was to replace the remaining two Beaufort squadrons in UK with obsolete Hampdens. The Beauforts would then be deployed to the Middle East releasing the two squadrons just despatched there to go on to India. Clearly the impact of just two squadrons would have been limited although still a significant contribution to the defence of Ceylon. ²⁰⁰ As noted in Chapter Three, when Brooke-Popham took stock of planned reinforcements following his arrival as CinC Far East at the beginning of 1941, he expected to have two squadrons of Beauforts and reserves, comprising 50 aircraft by the end of the year. However, he was aware, following a visit to Australia, that this reflected an estimated output in Australia of 20 aircraft by October and 70 at the end of the year. Given the embryonic state of the Australian aircraft industry, he should perhaps have anticipated the targets would slip even without the problems of the US supply chain. And, even if the original target had been met, the new Beaufort squadrons could not have achieved operational efficiency until well into 1942. See: Brooke-Popham letters to Street, PUS Air Ministry, dated 22 February and 28 October 1941, Brooke-Popham Papers 6/3, and G2 minute of 20 February 1941, Brooke-Popham Papers 6/1, all in LHCMA.

 ²⁰¹ COS (42) 7 of 6 January 1942, 'Provision of Beauforts for Malaya from Australia', CAB 80/33, TNA.
 ²⁰² Air Staff minuting dated 29 May 1941, 'Should Australian Beauforts be equipped with torpedoes'?, AIR 20/887, TNA.

²⁰³ The COS agreed to press the Australian Government to expedite the provision of Beauforts to Malaya on 26 December 1941 and again on 7 January 1942. See COS (41) 435th of 26 December, item 5, CAB 79/16, TNA.

There is no doubt that British maritime air power was quite inadequate to take on the IJN in December 1941. However, the evidence above shows that this situation cannot be reduced to simple explanations. The RN's overall record and experience in 1940 and 1941 demonstrates a good grasp of the risks and opportunities presented by modern airpower at sea and often showed remarkable innovation with limited resources. In rebalancing its naval programme in 1940, the RN cut battleships not carriers. The RN knew its FAA aircraft were inadequate, but made reasonable and timely decisions to address this, and fell victim to production priorities in the UK and US it could not foresee. The RAF's Beaufort force had similar potential capability to the IJNAF but suffered the limitations of small size, multiple roles, and inadequate training for the specialised maritime environment. The RAF could have invested more in the Beaufort force at the expense of bombing but for decision-makers in 1941 that trade-off was hard to justify though it made it difficult to build up the force when it was urgently needed overseas in 1942.²⁰⁴ The RAF should, however, have been quicker to spot the problems with the prospective Australian Beaufort force given its importance to Far East reinforcement.

The lack of adequate maritime air resources to meet the IJN is seen by many historians, including Roskill, as essentially a consequence of overstretch. However, the problem was less one of overall capacity than strategic choices. Britain chose to prioritise its air resources in 1941 on Fighter and Bomber Commands at home and in the Middle East and deliberately to carry risk in the Far East. It is important to note here that for a whole series of reasons outside the scope of this thesis, which included steady attrition, production failings, and the need to re-equip the whole frontline, Bomber Command took a long time to reach a size with which it could have any hope of strategic effect. Air Chief Marshal Sir Arthur Harris stated that, when he took over in February 1942, when prospects in the Far East were most grim, immediate strength was 378 aircraft of which only 69 were heavy bombers and 50 were light bombers. His primary force was therefore 250 medium bombers about the same as those in the Middle East and those planned for India by the

²⁰⁴ It is worth noting that matters did begin to change from mid-1942 with the decision to develop a variant of the well proven Beaufighter as a replacement for the Beaufort. This was the Beaufighter TFX, known as the "Torbeau" which became a very successful maritime strike aircraft with the first squadron going operational in UK in November 1942. Beaufighter, *Flypast Special*, Key Publishing, 2012.

autumn.²⁰⁵ Against this background, in the spring of 1942, the First Sea Lord, with partial support from the Chief of the Imperial General Staff (CIGS), now Field Marshal Sir Alan Brooke, argued forcefully for air resources to be diverted from bombing to protection of sea communications. His primary concern here was the Atlantic but he also emphasised the need to improve the defences of the Indian Ocean.²⁰⁶ He met vigorous opposition from the Chief of Air Staff (CAS) Sir Charles Portal and the Harris figures help to explain why.²⁰⁷ The subsequent argument has been described by Brian Farrell and others as one of Whitehall's most notorious battles of the war. The debate, which is especially well summarised by Farrell, ran for three months before a compromise position was reached in July which provided Pound with only a limited part of what he had sought.²⁰⁸ Farrell suggests four factors caused Pound substantially to concede: the attitude of the PM which was broadly behind Bomber Command; production limitations which made it impossible for a diversion to maritime air to achieve results in a meaningful timescale²⁰⁹; shifting strategic perceptions in favour of bombing U-boat bases and focusing effort on the Bay of Biscay; and greater efficiency in Coastal Command by mid-1942.²¹⁰ Not mentioned by Farrell but also important is the impact of Midway and the drastic reduction in the threat to the Indian Ocean. In effect a slow or even minimal air build-up here was now tolerable.

Overall, the striking point is how little was really changed by this debate. Minimal Admiralty requirements in the Atlantic area were met by the end of 1942, and arguably in the Indian Ocean too, but more from the impact of US production than any shift in British

²⁰⁶ See: Minute by First Lord covering Memorandum by First Sea Lord, dated 6 March 1942, 'Air Requirements for the successful prosecution of the War at Sea', DO (42) 23 of 6 March, PREM 3/324/14, TNA. This contains the famous opening paragraph: "If we lose the war at sea, we lose the war". Also: 'Future Strategy', COS (42) 71 (O) of 21 March 1942, CAB 80/61, TNA and 'The Bombing of Germany', COS (42) 171 (O) of 16 June, CAB 80/63, TNA.

²⁰⁵ John Terraine, The Right of the Line, p 461.

²⁰⁷ 'The Bombing of Germany', COS (42) 183 (O) of 23 June, CAB 80/63, TNA.

²⁰⁸ 'Provision of Aircraft for the War at Sea', COS (42) 204 (O) of 18 July, CAB 80/63, TNA. This reflected a report negotiated by the ACNS (Home) and ACAS (P).

²⁰⁹ Farrell notes that Portal had sound reasons for rejecting demands from Attlee, Beaverbrook, and Wavell, as well as Pound, for more bombers to be sent overseas at this time beyond those currently planned. These included: the obvious constraints in time and shipping space inherent in any move of large air forces; the technical teething problems with the latest aircraft which would raise immense serviceability issues outside UK infrastructure; the "strategic immobility" caused by the need to replace Bomber Command's frontline; and the impossibility of adapting heavy bombers to a torpedo strike role. These constraints did not necessarily reflect well on previous RAF planning and procurement but as "we are where we are" arguments they were powerful.

²¹⁰ Brian Farrell, The Basis and Making of British Grand Strategy: Was there a Plan?, Book 2, p 376 - 380.

priorities.²¹¹ A final perspective is provided in a post war letter from Dr Noble Frankland, the official historian of Bomber Command to Admiral Sir Algernon Willis, Somerville's second in command in the Indian Ocean during 1942.²¹² Frankland described Bomber Command during the first part of the war until mid-1943 as a small under-nourished force which did not grow at all in 1942, partly due to re-equipping the frontline but also substantial diversions to Coastal Command and overseas.²¹³ Any further diversion might have led to the collapse of the offensive. Frankland did not believe either Portal or Churchill harboured any illusions that bombing alone would win the war but they did doubt it could be won without it and they may have been right.²¹⁴ He also stressed the need to understand that the strategic air offensive embraced many aims and achievements beyond the general attack on German industry. Initially, reducing the scale of German air attack on UK was a priority, while in 1941 - 43, a large part of its effort went on the Battle of the Atlantic, directly or indirectly. If the results were disappointing, the lesson was not that the strategy was wrong but that the force was operationally inadequate. That reflected poor RAF equipment and training decisions before the war. Frankland accepted that, by switching more resources to Coastal Command (and by implication wider strategic communications), success at sea might have come a little earlier. But the resulting excess resources could not easily have been switched back to an effective

²¹¹ Farrell provides figures, p 388, drawn from the British Official History which are useful in putting this debate in context. In September 1942, RAF strength was allocated as follows:

Command	No Squadrons	No First Line Aircraft
Bomber Command	48	468
Fighter Command	76 (day)	1338
Coastal Command	43	532
Army Cooperation	20	272
Middle East	62	830
India	27	442

At this time the USAAF also had two Bomber Groups with 96 heavy bombers in UK, three squadrons in the Middle East and two in India.

²¹²Willis sent a paper to Frankland, which he had written for Marder in 1966, setting out the classic partisan naval view that much of Bomber Command effort was wasted and would have been better spent on air support at sea. Frankland's letter in reply is dated 10 December 1966. Both are with the Willis papers in the IWM.

²¹³Frankland quoted frontline strengths for Bomber Command of 506 in November 1941, 417 in May 1942, and 515 in January 1943. The May 1942 figure is consistent with that of Harris.

²¹⁴ Frankland thought Harris may have had illusions that bombing alone would do it but much of his bombast was also aimed at maximising resource share.

strategic air campaign. He agreed with Roskill that the Battle of the Atlantic had to be won but winning this was no good on its own.

Chapter Six

Summer and autumn 1941: Reinforcement and deterrence

This chapter examines the factors that led to the actual despatch of major RN reinforcements to the Far East in the autumn of 1941. It argues that the traditional account of the genesis of *Force* Z and the decisions regarding its deployment, largely unchallenged for 60 years, is at best misleading. Force Z was one strand in a much more ambitious programme of reinforcement planned by the Admiralty that autumn. This programme for deploying a full battle-fleet to Singapore, with the intention then of using Manila as a forward operating base, reflected the "Atlantic substitution" agreement reached with the US at ABC-1 but also the subsequent US pressure for the RN to make a greater contribution to the defence of the Malay Barrier as described in Chapter Four. The Admiralty plans were flawed because of the inappropriate composition of the proposed RN fleet but must be judged within a wider US and British strategy to deter and contain Japan that autumn, not least through air and submarine power based in the Philippines. The chapter argues that, contrary to the prevailing historical consensus, this wider strategy did have the potential to check Japan. Failure lay in timing and execution, above all in not addressing the risk that Japan might strike before the key elements were in place, rather than the concept itself.

The initial debate over Indian Ocean reinforcement

1 July 1941, the mid-point of the year, was a watershed for both Britain and the US in managing the risk from Japan. For both countries, it marked a distinct shift to weighing the threats to their vital security through a global, rather than essentially European, focus. The primary driver for this change in perspective was the German invasion of Russia on 22 June. For Britain, this offered temporary relief from both the threat of invasion and of a major German drive into the Middle East. But it was acutely aware that, if Russia collapsed quickly, which seemed possible, it would then be faced with a much more powerful German challenge, including a northern drive on the Middle East, which it would struggle to meet. US calculations were similar. Both countries too anticipated that Japan might exploit the German invasion either by attacking Russia itself in Manchuria or by taking advantage of Russian preoccupation in the west to drive south into the resource rich East Indies. A northern attack would provide a breathing space to the hard pressed British but, as the US quickly recognised, this would be short-lived if it speeded a Russian collapse.¹

Magic intercepts gave Britain and the US valuable and simultaneous insights into Japanese thinking and intentions through the month of July as Tokyo decision-makers wrestled with how best to respond to the opportunity offered by the German attack.² They provided forewarning of the decision to move into southern Indo-China and, crucially, confirmation that the Japanese leadership viewed this as a stepping stone to a subsequent attack on Malaya, Singapore and the NEI.³ However, Magic and other sources also pointed to preparations for operations in Manchuria and potential divisions of opinion. As the weeks went by, it became evident that Japan was thinking aggressively and preparing for early military action but also waiting on events in Russia and keeping her options open. This would convince US and British decision-makers that Japan could yet be dissuaded or deterred.⁴

¹ Waldo Heinrichs, *Threshold of War: Franklin D Roosevelt and American Entry into World War II*, (New York: Oxford University Press, 1988), chapters 5 and 6, provides a good account of these calculations. ² Magic refers to US and British intercept of the Japanese Purple diplomatic cypher. Exhibit No 1 located in Vol 12 of the Joint Investigation into Pearl Harbor contains a good selection of Magic intercepts from 1 July

to 8 December 1941. There is a much more comprehensive set of Magic intercepts in the five volume Magic Background of Pearl Harbor published by the US Department of Defence in 1978. British intercepts of Japanese Purple messages in July are in HW 12/266 and those for August to November in HW 12/267 – 12/270, TNA.

³ See: Magic intercept of Purple tel Canton to Tokyo of 14 July 1941, decrypted by the US on 19 July. This is at page 2 of Exhibit No 1, Vol 12, Joint Investigation into Pearl Harbor. The British version is in HW 12/266, TNA.

⁴ The evolution of Japanese thinking on an advance southward is described in JM 147, Political Strategy Prior to the Outbreak of War, Part III, esp p 27 – 34, and JM 150, Political Strategy Prior to the Outbreak of War, Part IV, esp p 6 - 7. These identify two main factors behind the decision to seek bases in southern Indo-China and Thailand: the breakdown in negotiations with the NEI in mid-June over the supply of oil and other strategic resources; and German encouragement to attack Malaya and Singapore, particularly during the visit of Foreign Minister Yosuke Matsuoka to Germany in April. The British knew of the German encouragement regarding Singapore from the GC&CS intercept of a message from the Japanese Ambassador in Berlin on 23 March reporting a conversation with Admiral Raeder. F H Hinsley, *British Intelligence in the Second World War*, Vol 1, p 454. The JM accounts demonstrate, however, that, in July, Japan still hoped it could secure oil and other resources by peaceful means but was willing to resort to force if necessary. The IJN therefore now began serious contingency planning for operations against both the NEI

Against this background, nearly a year after the FEA, and with Japan poised to enter southern Indo-China, British plans for Far East naval reinforcement were those agreed by the Admiralty during ABC-1. Immediate "Phase 1" reinforcement would comprise Force H, deployed from Gibraltar as a task force to protect Indian Ocean communications. If the US entered the war, the RN would mobilise a substantial "Phase 2" Eastern Fleet centred on five capital ships released by the deployment of US forces in the Atlantic although three of these would be old and un-modernised and therefore of limited military value.⁵ However, the recent losses of cruisers and destroyers in the Mediterranean, particularly at Crete in May, suggested the RN would struggle to provide the planned supporting forces in this new Eastern Fleet.⁶ At a minimum therefore, if and when the US took on active responsibilities in the Atlantic, the RN could anticipate a stronger holding force in the Indian Ocean than was feasible in 1940 but the price of US Atlantic reinforcement was a weakened US Pacific Fleet now less able to constrain a Japanese southward move because it lacked the strength and mobility to intervene credibly in the Western Pacific. As noted in Chapter Four, the British war leadership underestimated the consequences of this weaker Pacific Fleet and credited it with greater deterrence value than was justified. The limitations to the Pacific Fleet were compounded by the failure to agree an ADB joint operating plan that would give practical effect to the Far East defensive strategy established in ABC-1. The defence of the Malay Barrier, on which all parties placed so much emphasis, had no greater naval commitment in mid-1941 than a year earlier, while British air and land reinforcements remained far below agreed targets. The Admiralty had

and the British in Malaya. The German invasion of Russia was a complicating factor because it introduced an attractive "northern option" for some in the Army. However, by August, Japan had decided against intervention in Russia and was pursuing a "wait and see" policy here, ready to exploit opportunities but not at the expense of southern interests. As its plans for southern operations developed through the autumn, Japan recognised that it was desirable to complete these by spring 1942 to avoid having to fight on two fronts if Russia chose to intervene in support of the Western powers once the weather permitted. JM 152, Political Strategy Prior to the Outbreak of War, Part V, p 12.

⁵ The most recent update on Far East reinforcement was AT 523 of 13 May to CinC Home Fleet and copied to all overseas commanders which anticipated that, following the redistribution of forces consequent on US entry into the war, the likely Eastern Fleet would comprise: two *Nelsons*, three *R-class*, *Force H*, ten cruisers, 32 destroyers and ten submarines. ADM 116/4877, TNA.

⁶ On 18 July 1941, the strength of the Eastern Mediterranean Fleet had reduced to: two battleships, four 6 inch cruisers, two 5.25 inch cruisers, two 4 inch AA cruisers, and 18 destroyers. Naval Staff minute DOD (H) to ACNS (F) of 18 July, ADM 205/11. A note sent by the First Sea Lord to the PM, just over a month later on 24 August, demonstrates the acute shortage of cruisers and destroyers against potential commitments at this time. ADM 178/322, TNA.

also done little to address the wider support needs of an Eastern Fleet. Some work was done to ensure reserves of fuel and ammunition and identify additional operating bases such as Port T. But almost nothing was done to improve port defences and protection from air attack in Ceylon or the provision of long range air reconnaissance.⁷

Historians have traditionally suggested that the decision actually to despatch RN capital units to the Far East, as opposed to hypothetical planning for this, originated in Churchill's well known exchange with Pound at the end of August. Two catalysts are usually identified to explain the PM's intervention: the Japanese move into southern Indo-China and US imposition of sanctions which markedly increased the likelihood of conflict; and pressure from Australia for early naval reinforcement including a personal message from Prime Minister Robert Menzies.⁸ This interpretation is that advocated, albeit in different ways, by Roskill, Marder, Barnett and Haggie. These developments certainly exerted influence on the PM, the COS and Naval Staff, but it is doubtful they were decisive in themselves. The initial reaction to the move into Indo-China in the stocktakes prepared for the COS by the JPS was surprisingly subdued and argued against any substantial early reinforcement.⁹ As explained in Chapter Four, this reflected the resource pressures in the Middle East and the PM's insistence that Japanese attack remained unlikely.¹⁰ The Australian request was strongly worded but not substantively different to earlier lobbying and the Australians had been kept closely informed on post ABC-1 plans for an Eastern Fleet. At the War Cabinet on 8 August, the VCNS, Phillips, argued forcefully that Britain should not risk conflict with Japan over Thailand because of the vulnerability of Indian Ocean communications to IJN attack.¹¹

Cowman argues convincingly that the debates over Far East naval reinforcement in the late summer and autumn are better viewed as part of a continuum stretching back to ABC-

⁷ Roskill summarises the history of mobile support for the RN in *War at Sea*, Vol III, Part II, Appendix P, "The History of the Royal Navy's Fleet Train". He describes the review completed in 1938 into fleet support in the event certain fixed bases, including Singapore, were lost. However, the Admiralty ruled that Singapore should always be available and this meant little contingency planning was ever done to ensure reserve support in the Indian Ocean and Far East theatres.

⁸ Cowman, *Dominion or Decline*, p 231.

⁹ 'Far East – Action in view of Japanese Intentions', attachment to COS (41) 254th meeting, ibid.

¹⁰ 'Japanese Intentions', COS (41) 139 (O) of 16 July, CAB 80/58, TNA.

¹¹ DO (41) 56th meeting of 8 August, CAB 69/2, TNA.

1. As Chapter Four has demonstrated, the concept of a new Eastern Fleet did not suddenly emerge in August; it had been the subject of constant planning from February onward.¹² What had, however, changed by August was the pace and nature of US Atlantic reinforcement. Under ABC-1, it was envisaged that the USN would only take over Atlantic responsibilities from the RN after a US declaration of war but, in practice, the USN had undertaken more pro-active escort operations as the summer progressed, releasing RN resources for potential redeployment in peacetime.¹³ By August therefore, the constraint on the build-up of an Eastern Fleet was less a question of US relief and more the need to refit and repair RN ships subject to war damage, notably at Crete. Phases 1 and 2 of the reinforcement process were also becoming blurred with the prospect of Indian Ocean Phase 1 immediate reinforcements in place in peacetime by the end of the year and other units then joining incrementally to achieve the planned Phase 2 total but also still in peacetime.¹⁴ These developments were confirmed at the "Riviera" Atlantic Conference between the British and US leadership at Placentia Bay between 9 -12 August. Here the USN not only committed to the full relief of RN escorts in the western Atlantic by mid-September under Hemisphere Plan 4 but also aggressive anti-U-boat operations designed to provoke confrontation with Germany.¹⁵ It is important therefore to see Churchill's discussion with Pound beginning with his minute of 25 August not only as a precautionary response to the risk of early attack from Japan, which Churchill insisted was still unlikely, but the consequence of long desired naval reinforcements in the Indian Ocean now becoming available in peacetime.¹⁶

¹² See: D of P minute of 15 February 1941 which set out the rationale for an RN Eastern Fleet in the context of the ABC-1 talks; D of P minuting beginning 6 March ending with VCNS minute of 29 May considering options if the US enters the war and Japan remains neutral; AT 523 of 13 May. All references in ADM 116/4877, TNA.

¹³ The USN commitment to more pro-active intervention in the Atlantic is illustrated in Stark's letter to CinC Pacific Fleet (Kimmel) dated 31 July 1941. Stark stated that, with the full agreement of Secretary Knox, he had pressed the President "to seize the psychological opportunity presented by the Russian-German clash" to implement aggressive Atlantic escort operations and provoke an early clash with Germany. Joint Committee on Investigation of Pearl Harbor Attack, Part 16, Exhibit 110, US Library of Congress.

¹⁴ Cowman, *Dominion or Decline*, p 233-234.

¹⁵ Cowman, Dominion or Decline, p 235 and Haggie, Britannia at Bay, p 203.

¹⁶ Rear Admiral V Danckwerts, Head of BAD Washington, circulated a note within the British Embassy on 19 August recording his conversation with Turner, Head of USN War Plans, following the latter's return from Riviera. Danckwerts noted that the *R-class* were to be withdrawn for 3 month refits to receive enhanced AA armament and protection. They would then be deployed to the Cape area under Vice Admiral

Because historians with the exception of Cowman have usually ignored the influence of ABC-1 on RN plans for Far East reinforcement, they have struggled to provide a satisfactory explanation for the attention suddenly focused on the Indian Ocean in August and nor do they adequately bring out how the exchanges at and around Riviera further influenced thinking within British and US decision-making circles. At one level, as shown in Chapter Four, the plans for Indian Ocean reinforcement and the creation of a new Eastern Fleet during the first half of 1941 were a consequence of ABC-1 and the US refusal to take primary responsibility for securing British and Dutch interests in the Far East. They may therefore be interpreted as a resumption of traditional Far East war planning, broken into its various phases, and fixed on the ultimate goal of relieving Singapore and protecting the British Far East territories with RN forces once resources permitted. By August, recent war losses and continuing uncertainty over ultimate US intentions suggested the maximum practical reinforcement goal achievable by the end of the year was a "Phase 2" concentration in the Indian Ocean which might protect the reinforcement route to Singapore but would not in itself guarantee the security of Malaya, Singapore and the Malay Barrier.¹⁷ However, the first half of 1941 had also focused increasing attention on the vulnerability of the key Empire trade routes in the Indian Ocean, and above all the strategic communications to the Middle East theatre, to attack from IJN raiders.¹⁸ These might be potentially coordinated with German submarine and raider operations. This was the risk always uppermost in Churchill's mind and one he

Tom Phillips who would move from his present post of VCNS. The idea was evidently that from the Cape they could cover raider threats in both the South Atlantic and Indian Oceans. CAB 122/577, TNA. ¹⁷ The concept of initial Phase 2 concentration in the Indian Ocean using Trincomalee or Port T as primary operating base was first set out in AT 666 to CinC China of 4 April 1941, ADM 116/4877, TNA. Pound's minute to the PM of 28 August shows that the Admiralty preferred to maintain the proposed composition for an Eastern Fleet first set out in February but it updated previous planning signals in two respects. First, it provided the times when capital units were expected to reach the Indian Ocean with half by the end of the year and the rest by end January 1942. This reflected the impact of US peacetime Atlantic relief. Second, it emphasised that final formation of an Eastern Fleet was now dependant on the availability of cruisers and, above all, destroyers. This reflected the impact of recent war losses. Churchill, *The Second World War*, Vol III, Appendix K.

¹⁸ See for example D of P minute dated 15 February 1941. This stated that the US Pacific Fleet at Hawaii and the US Asiatic Fleet would not in themselves protect the critical British Empire communications in the Indian Ocean. The risk of Japanese harassment would be a serious one without an RN force at Singapore, or failing that Ceylon, which was sufficient to deter them. ADM 116/4877, TNA.

underlined starkly to US Assistant Secretary Sumner Welles at Riviera.¹⁹ It was a risk to which he was prepared to devote valuable resources in marked contrast to his reluctance to support reinforcement to Malaya.²⁰ It was also the primary risk highlighted by Pound in February and regularly emphasised since.²¹

Thus, at the mid-point of the year, there was common ground between the PM and the Admiralty on the raider threat but potential unresolved differences over any wider naval commitment to protection of the Far East territories where the PM looked to the US to bear the main burden while the Naval Staff remained committed to a fleet at Singapore when possible. It is important to stress that the emphasis on the raider threat did not reflect any hard intelligence of IJN intent. It was rather a reflection of two things: awareness of the vulnerability of British Empire maritime communications and trade to attack; and "mirroring" from German raider practice in two wars. The USN, by contrast, thought it unlikely the IJN would pursue cruiser operations far from base "if national characteristics were taken into account".²² The US prediction would prove the more accurate reading of IJN doctrine. In both pre-war planning and the execution of the war itself, the IJN showed little interest in commerce raiding by either surface or submarine forces.²³ These differences over the Indian Ocean raider threat help explain the difficulty in reaching agreement over ADB-1. For Britain, the ultimate priority, if resources were limited, was defence of Indian Ocean strategic communications. For the US, it was forward defence of the Malay Barrier that mattered to secure the resources of the NEI and Australasia.24

²¹ Minute to PM of 13 February, ADM 205/10, ibid.

¹⁹ Page 5 of Memorandum by US Assistant Secretary of State Sumner Welles drafted at Placentia Bay, 10 August 1941, Exhibit 22B, Joint Committee on the Investigation of the Pearl Harbor Attack, Part 14. Churchill had regularly highlighted this risk earlier in the year, notably at the Defence Committee Meeting on 9 April, when Pound had expressed strong agreement, and in his exchange with Dill on the relative priority of Middle and Far East at the beginning of May. For Defence Committee, see minutes of 12th Meeting, CAB 69/2, TNA. For Dill, see PM minute to CIGS dated 13 May, WO 216/5, TNA.

²⁰ Hence his desire to commit a KGV battleship to the Indian Ocean – see below.

²² See AT BAD Washington to Admiralty of 24 November 1941 quoting US Naval Staff on this. CAB 122/9, TNA.

²³ See Evans and Peattie, *Kaigun, Strategy, Tactics and Technology in the Imperial Japanese Navy 1887 – 1941*, especially Chapters 12 and 14, for background on IJN attitudes here.

²⁴ In considering this argument, it is worth noting Roskill's figures for Allied merchant shipping losses in the Indian Ocean in 1941 and 1942 which were 73,155 tons (20 ships) and 724,485 tons (205 ships) respectively. Roskill, *War at Sea*, Vol 3, Part II, Appendix ZZ. Roskill does not distinguish between losses

In reviewing the impact of the Riviera discussions on Britain's Far East strategy, historians have generally focused on three points: the agreement on Atlantic convoy escort which released RN resources; President Roosevelt's failure to deliver adequately on his promised warning to Japan on the consequences of further aggression; and failure to cut through the ADB impasse. However, there were two other linked threads running through Riviera which were important to the evolution of British, and specifically RN, Far East strategy. These were the consensus that the survival and military effectiveness of Russia was critical to the security of Britain and the US, and the perception, that coalesced within the US leadership, that Japan now posed a global as well as regional risk through the potential damage she could inflict on the wider British and Soviet war efforts.^{25 26} This led the US leadership to seek a means of deterring Japan and to settle on airpower based in the Philippines as an important element of the solution alongside new economic sanctions. At Riviera, the US Chief of Army Staff, General George Marshall notified the British COS of the intent to reinforce the Philippines as a deterrent to further Japanese encroachment to the south, but US thinking here was still at an early stage, and the British were evidently not convinced such a strategy would have much effect.²⁷ Nevertheless it is clear that the

due to German and Japanese action. Clearly those in 1941 were due to German surface raiders since no Uboats operated in the Indian Ocean during this year. In 1942, there were minor U-boat operations late in 1942 accounting for about 57,000 tons. See: Michael Wilson, *A Submariner's War: The Indian Ocean 1939* – *1945*, (UK: Spellmount, 2008), Chapter 8, for an account of U-boat operations in the Indian Ocean. German raider operations also continued and may have achieved a further 100,000 tons looking at Roskill's breakdowns by category. This leaves losses of some 567,485 tons in the Indian Ocean in 1942 down to Japanese action. Roskill records total Allied losses in the Pacific in 1941 and 1942 as 1,008,876 tons (460 ships). If half these were British controlled, which seems a reasonable estimate, then total British controlled merchant losses due to Japanese action in the first year of the Far East war were just over 1 million tons. Two points follow. First, while it is true the Japanese never pursued a coherent strategy of commerce raiding on German lines, initial British losses here were still serious. Second, Japanese intervention in early 1941 might have increased overall British shipping losses that year by some 25%. Churchill and Pound had good reason therefore to focus on this threat. ²⁵The best accounts of Riviera, as regards Far East strategy and US and British planning for reinforcement

²⁵The best accounts of Riviera, as regards Far East strategy and US and British planning for reinforcement are: Theodore A Wilson, *The First Summit, Roosevelt and Churchill at Placentia Bay, 1941*, (Revised version, University Press of Kansas, 1991), and Heinrichs, Threshold of War, chapter 6.

²⁶ Roosevelt's position is well represented in a remark made to Secretary of the Interior Harold Ickes on 1 July that it was "terribly important for the control of the Atlantic to keep peace in the Pacific". He added: "I simply have not got enough Navy to go round – and every little episode in the Pacific means fewer ships in the Atlantic". Quoted in Eri Hotta, *Japan 1941: Countdown to Infamy*, (New York: Knopf, 2013), chapter 7.

²⁷ See: "Summarised records of meetings between British and US Chiefs of Staff" on 9 August, page 4, COS (41) 504 of 20 August 1941, CAB 80/30, TNA; and PM's memo to the Cabinet of Riviera discussions, page 11, WP (41) 202 of 20 August 1941, CAB 66/18/25, TNA. The PM stated here: "The Americans have,

general concept of "deterrence" lodged firmly with both the PM and COS. It undoubtedly explains why the PM's minute to Pound later in the month opened with reference to a "deterrent squadron" in the Indian Ocean.²⁸

The exchange of minutes between Churchill and Pound from 25 to 29 August is important for what it reveals of their respective thinking and intentions at the time but also for a proper understanding of what happened subsequently.²⁹ Although the correspondence is referred to by every historian who has examined the *Force Z* story, there are key aspects which have never been adequately addressed. In drafting his initial minute, Churchill would have been aware of the ABC-1 reinforcement plans which had just been reviewed again at Riviera.³⁰ He also knew that this reinforcement began with deployment of *Force H* as a fast "hunting group" to deter IJN raiders in the Indian Ocean. The actual release of

²⁹ Churchill, Vol 3., Appendix K.

we think, rather exaggerated hopes of the effect of operations, particularly air, from the Philippines against a Japanese expedition to the South China Sea". Britain's Ambassador, Lord Halifax, was also alerted by the President to the despatch of strategic bombers to the Philippines prior to Riviera – AT Gleam 102 of 2 August from BAD Washington, CAB 122/120, TNA. Washington Embassy military staff clearly also received briefings on Philippines reinforcements during the first half of August – see internal memo circulated by Minister Balfour on 19 August, CAB 122/72, TNA.

²⁸ There is a radically different interpretation of the Far East discussions during Riviera in John Costello's book *Days of Infamy* (New York, USA: Nimbus Communications, 1994). See his chapter 3. Costello's thesis is that at Riviera the British COS agreed to dispense with their share of future B-17 production so that it could be diverted to the Philippines. The quid quo pro was a secret agreement that the Philippines B-17 force would then be used to defend British territories in the Far East. In Costello's view the B-17s, "which the US War Department had initially regarded as a quick fix to bolster MacArthur's defence of the Philippines, were to emerge from the Churchill-Roosevelt summit as the "big stick" of an Anglo-American strategy that they mistakenly believed would be a powerful threat to curb Japan from further encroachment". Costello argues that this "secret agreement" then directly drove Churchill to pursue forward naval reinforcement against Admiralty advice. The Costello thesis is not convincingly sourced. There is no direct documentary evidence for any such agreement. His case rests therefore on extrapolation from e.g. single sentences from the COS meeting records lifted out of context. His claim of a US promise to protect British territories also ignores the political constraints facing Roosevelt. Nor does the concept of an agreement at Riviera fit with the timeline under which US plans to reinforce the Philippines were agreed. Most of the key decisions were not taken until September.

³⁰ The Riviera records show that the Far East discussions focused mainly on trying to resolve the dispute over ADB-1 but Stark also reaffirmed the agreed plans for Atlantic substitution and specifically stated it remained US policy to replace *Force H*. He added that he planned to base the new battleships *Washington* and *North Carolina* in the Atlantic and Turner later suggested these might go to *Force H*. Although the British Riviera records do not say so, it is clear from Turner's subsequent debrief to Danckwerts in Washington that Pound evidently stated at Riviera that he would create a new capital ship force based at the Cape. This would comprise the *R-Class* as soon as they received essential upgrades. See references in Riviera records (R) 9 and (R) 15, CAB 99/18, TNA; and also Turner's account given subsequently to Danckwerts, dated 19 August, in CAB 122/577, TNA. Herbert Feis, at p 256, footnote 2, of his classic work *The Road to Pearl Harbour*, (Princeton University Press, 1950), states that at Riviera "The British agreed to send stronger forces to the Far East than had been contemplated before". He sources this to a report by

this force depended on the situation in the Atlantic but early US support here had just been reaffirmed. His opening "It should be possible in the near future to place a deterrent squadron in the Indian Ocean" therefore merely reflected existing Admiralty planning. The suggestion, often made, that this was the opening salvo that led to the deployment of an inappropriate force to Singapore is not justified. Churchill was clear he was talking about deployment in the Indian Ocean "the triangle Aden-Singapore-Simonstown".³¹ The risk he wished to counter was evidently the prospect of IJN raiders highlighted by him at Riviera.³² His proposal that the original *Force H* force should be joined by a fast modern *KGV* battleship reflected a similar suggestion put to Pound by First Lord A V Alexander a few days earlier.³³ The idea had merit since it meant the new force would retain high speed but have the capacity to deal with IJN capital ship raiders or indeed deter them.³⁴

Commander M Goodenough from the minutes of an Admiralty Liaison Meeting of 22 August which it has not been possible to locate. There is no evidence elsewhere that the Admiralty planned stronger forces than those agreed in February and regularly reviewed since but, as Turner indicates, Pound apparently did promise acceleration. It seems likely Feis mistook this acceleration for an increase in strength. ³¹ Churchill repeated that he was focused on the Indian Ocean in a subsequent telegram to the PM of Australia on 2 September, PREM 3/163/3, TNA.

³² As noted in Chapter Five, on the same day (25 August) Churchill minuted Pound on Indian Ocean dispositions, he separately asked him for the list of IJN "effectives" to which NID 4 replied on 28 August. This suggests he was mulling over what the scale of threat in the Indian Ocean might be. As already recorded, the NID response, while generally accurate, included one entirely fictitious 12000 ton pocket battleship type which was a longstanding Admiralty fixation but of course underlined the PM's raider fears. PM memo to FSL of 25 August and NID reply of 28 August, PREM 3/252/4, TNA.

³³ Minute from First Lord to First Sea Lord dated 21 August 1941, PREM 3/171/4, TNA. This minute was essentially a comment on the request by Cunningham despatched the previous day pressing for early despatch of a carrier to the Eastern Mediterranean. Alexander doubted the request could be met and then stated: "If Japan comes in against us, we ought to have one of the *KGVs*, a carrier and a battle-cruiser in the Indian Ocean". This is a remarkable echo of the PM's thinking and it is just possible they had spoken, following the PM's return from Riviera on the morning of the 19th, though Alexander makes no reference to any PM views to Pound. An alternative possibility of course is that Alexander spoke to the PM after writing to Pound in which case the PM was essentially rehearsing an Admiralty view, albeit not Pound's! Apart from the *KGV* point, the minute is interesting for two other reasons. It demonstrates that, for Alexander at least, the Indian Ocean took priority over the Eastern Mediterranean for carriers. It also sums up carrier availability over the next six months. *Victorious* is needed for the Home Fleet, the new *Indomitable* not expected to be operational until November, and *Illustrious* (under repair in the US) not until Christmas with *Formidable* even later. *Ark Royal* and *Furious*, which both badly meet refits, will have to cover Gibraltar between them.

 $^{^{34}}$ Churchill has been much criticised both by members of the Naval Staff at the time and by many historians since for drawing an analogy between the threats posed by a *KGV* battleship in the Indian Ocean and the German *Tirpitz* in the Atlantic. His critics argue that the two situations were completely different. *Tirpitz* could tie down much superior RN forces by the threat she posed to British communications at multiple points all of which had to be defended. By contrast, in the Indian Ocean there were no vital Japanese interests for a *KGV* to threaten. Churchill's point was surely that the presence of a modern fast battleship somewhere in the Indian Ocean would greatly increase the risks of interception for IJN raiders including battle-cruisers. They would either have to deploy disproportionate force or would be dissuaded from operating at any distance from friendly support. This was a perfectly logical analysis if the raider threat was

The Naval Staff also raised deployment of a *KGV* to the proposed Eastern Fleet at a meeting held by Pound immediately after his return from Riviera and Churchill may have known this.³⁵ Churchill's criticism of the *R-class*, able to "neither fight nor run" was equally valid, and reflected the traditional Admiralty view that they were not suitable for the East, though he was careful not to rule out a "convoy escort" role "should we reach that stage".³⁶

Pound's response maintained the proposed ABC-1 Eastern Fleet composition communicated to overseas commanders in May with the two *Nelsons* and the *R-class* joining the *Force H* immediate reinforcement to achieve the planned Phase 2 concentration.³⁷ He argued that the *Nelsons* remained the best "backing" to the *R-class* because they were closer in speed and would create a homogeneous battle-fleet. He defended the *R-class* on grounds of availability, "no longer required in the Atlantic", their value in making up numbers, and of course as escorts. Apart from the last, these arguments for the *R-class* were unconvincing and drew the Churchill riposte that they were easy prey for the IJN and little more than "floating coffins", a view shared by

viewed as real and serious. For a typical example of the critic's view see the letter from Commander Michael Goodenough, SO Operations to CinC Eastern Fleet in 1941, to Roskill dated 8 May 1951, ROSK 4/79, CCA.

³⁵ The First Sea Lord held this meeting on 20 August, the day after he returned to London. A full record of this meeting does not seem to be available but it seems likely it would have reviewed all the naval issues discussed at Riviera, including of course Far East reinforcement. What is known is that it was agreed a KGV might be released for the Far East if the USN were willing to provide an equivalent modern battleship to counter the German *Tirpitz*. This possibility of deploying a KGV clearly reflected Stark's indication at Riviera that he planned to base the new battleships Washington and North Carolina in the Atlantic. If this US deployment went ahead, it would therefore release a KGV. Pound's meeting followed a proposal from the Naval Staff a week earlier that Repulse and the four R-class should be deployed to the Indian Ocean as they became available with *Nelson* and *Rodney* to follow later. With the exception of the possible KGV, these latest deployment plans merely reaffirmed what had been agreed in principle since February but they did suggest the movement to the Indian Ocean would now be accelerated. Details are included in the Report on the Loss of HMS Prince of Wales and HMS Repulse, ADM 199/1149, TNA. These potential naval reinforcements had already been incorporated in the JPC Note prepared for the COS following the Japanese move into southern Indo-China. This recorded existing force levels for each service in the Far East, then identified reinforcements that could be provided in 30 days, and additional forces for "later" despatch. JP (41) 664 of 12 August, "Improvement of our position in the Far East", CAB 79/13, TNA. Alexander does not refer to the 20 August meeting when writing to Pound the following day and possibly was not aware of it. The USN did deploy the new battleship Washington to the Home Fleet in early 1942.

³⁶ Churchill's reference to the *R*-*Class* in his initial minute again clearly reflected his awareness of the Admiralty plans in place since February to use them as a core component of an Eastern Fleet. He was certainly sceptical of the whole case for a traditional battle-fleet (as expressed in his original reaction to the Bellairs message of 11 February during ABC-1) but his specific reservations over the suitability of the R-Class merely reflected traditional Admiralty opinion on their fighting effectiveness. ³⁷ AT 1904B of 13 May, ADM 116/4877, TNA.

Admiral Sir James Somerville, as CinC Eastern Fleet, the following year.³⁸ Pound's argument that three *KGVs* were required at home was a legitimate professional judgement but his argument for homogeneity was more dubious. It could equally be argued that a *KGV* was homogenous with *Force H* units and would create a force more threatening to the IJN. In terms of force structure, the only real point of dispute, as Pound acknowledged, was the trade-off between the two *Nelsons* and a *KGV*. *Nelson* herself was damaged by an Italian torpedo in the Mediterranean just a month later, putting her out of action for six months, so the trade-off then narrowed to a *KGV* versus *Rodney*.

Leaving aside force composition, there appeared to be agreement between PM and First Sea Lord on deployment. Both were at this time focused on the Indian Ocean with whatever forces were finally sent based at Ceylon. Significantly, the only reference to basing capital units at Singapore to enhance "deterrence" came from Pound not Churchill. He suggested this might be desirable in peacetime but the ships would need to be withdrawn to Ceylon in the event of war.³⁹ Roskill's interpretation of the exchange, which influenced many subsequent historians, is therefore highly misleading. He states that "the Admiralty's force would be defensive, but well placed strategically in the centre of a most important theatre, whereas the Prime Minister's force was potentially offensive and was to be based far forward, but in an area which the enemy was threatening to

³⁸ The arguments for deploying the *R-class* to the Indian Ocean were first set out by D of P in his minuting on Far East reinforcement dated 15 February 1941. The Naval Staff view was that: US reinforcement of the Atlantic would make them redundant there; they would be useful as escorts on the Cape – Aden route; the presence of battleships in the Indian Ocean would help keep Japan quiet; and they would be well placed to contribute to an Eastern Fleet in due course. However, D of P was equally clear that neither the *Nelson* class nor the *R-class* were suitable for raider hunting due to their poor speed. See D of P comments made in March and recorded in Chapter Four, footnote 157. In this respect, the PM was correct. ADM 116/4877, TNA.

³⁹ The force Pound suggested might go to Singapore comprised the two *Nelsons*, *Renown* and a carrier. These were the most capable vessels and Pound presumably envisaged the four *R-Class* would remain in the Indian Ocean on convoy escort duty. The intent to withdraw in the event of war reflected his longstanding belief that any fleet based in Singapore in wartime must be "adequate" to take on the major part of the IJN fleet.

dominate".⁴⁰ There is no evidence this was Churchill's intention in August and no such conclusion can fairly be taken from the records.⁴¹

Gwyer made a different, albeit related, point to Roskill in his *Grand Strategy*. He argued that Churchill and Pound were both using the word "deterrent" but in different senses. Churchill wanted a show of strength to prevent Japan entering the war. Pound wanted to deter Japan, in the event of war, from operating in the Indian Ocean. Gwyer was undoubtedly right in judging that Churchill believed a modern ship would have more symbolic impact in conveying political will. However, there is no doubt that he also genuinely believed a modern ship would be militarily more effective in dealing with the raider problem he feared.^{42 43} Gwyer was right too in arguing that Pound's immediate priority, with the forces likely to be available in the next six months, was to keep the Japanese out of the Indian Ocean. However, it is also clear, both from Pound's line of argument in the exchange and of course the whole body of Naval Staff planning since February that, for the Admiralty, this was an interim position. When an Eastern Fleet was finally formed, it intended to base it at Singapore. The constraint to forming that fleet was

⁴⁰ Roskill, Vol 1, p 555-556. Marder broadly follows Roskill and is equally misleading. He states: "There was patently a clash between the Prime Minister's conception of a small but 'high class' squadron that would through a show of strength act as a deterrent to Japanese aggression, and the Admiralty's, which envisaged two larger forces of older capital ships to deter the Japanese Navy". Vol 1, 222-223.

⁴¹ Churchill's view of the position reached after his exchange with Pound is illustrated in his letter to the new Australian Prime Minister Arthur Fadden dated 31 August. Here he stated that the steady reduction of the German and Italian surface fleets made it possible to begin moving heavy ships to the Indian Ocean. The Admiralty was reviewing options but the aim was to put capital ships, including first class units, in the triangle Aden – Singapore – Simonstown before the end of the year without any prejudice to the position in the Eastern Mediterranean. Churchill also added the usual pledge to come to Australia's assistance in the face of any direct threat. PREM 3/156/6, TNA.

 $^{^{42}}$ J M A Gwyer, *Grand Strategy*, Volume III, Part I, p 270 – 271. The distinction drawn by Gwyer is questionable. The evidence in successive papers over the period February – August suggests the Naval Staff also thought the presence of battleships in the Indian Ocean would have a general deterrence effect. ADM 116/4877, ibid.

⁴³ Robin Brodhurst, Pound's recent biographer, offers a variant of the Gwyer argument. He states that Pound's concept was "trade defence" while Churchill "viewed the problem as one of deterrence". This thesis sees that as an oversimplification. The respective positions were in reality much more blurred. The argument was much more about means than intent. Brodhurst also states that Pound's proposed fleet "having a slow speed, but reasonable protection and range of gun, was purely defensive and was not capable of threatening the main Japanese fleet, which could evade battle if it so wished". This is an odd statement on several counts. Pound's fleet was a heterogeneous mix. The *Nelsons* did indeed combine slow speed, reasonable protection and gun range. *Renown* had high speed and good gun range but limited protection. The *R-class* possessed neither adequate protection nor gun range. This fleet clearly did not pose a credible threat to a major IJN fleet which could certainly evade. But nor did it pose credible defence against a major IJN force which would be able to out-manoeuvre and out-range most of their RN counterparts. Robin Brodhurst, *Churchill's Anchor*, p 194.

not the capital ship composition, based on the *Nelsons* and the *R-class*, which the Naval Staff now implied were a match for the IJN, nor the availability of a serious carrier force, but modern cruisers and, above all destroyers. It is revealing that, as regards carriers, Pound planned to deploy no fleet carrier to the East until spring 1942 whereas Churchill noted there were four carriers to divide between Mediterranean and Far East by the end of the year and clearly expected one or more to go to the latter.⁴⁴

An additional valuable perspective on the status of British naval reinforcement plans following these August exchanges is available in USN records in the form of a letter from Stark to CinC Pacific Fleet dated 23 September. Stark stated that he had been informed by the British that they would have four *R-class* battleships on the East Indies Station by the end of December, would retain *Repulse* there until relieved by *Renown* in January, and send one or two modern capital ships to the East Indies early in 1942.⁴⁵ These together with one carrier, four 8 inch cruisers and thirteen 6 inch cruisers, including seven modern, ought to make the task of the Japanese in moving southward considerably more difficult. It should indeed make them think twice if they had taken no action by that time (i.e. the end of the year).⁴⁶ Three points are evident in Stark's letter here: nearly a month after the exchanges with the PM, the deployments preferred by Pound were still proceeding; the focus of RN deployment at this time was still the Indian Ocean; and the growing US interest in the contribution of RN reinforcements as part of a wider deterrence strategy.

⁴⁵ Stark was clearly drawing here on a briefing from British Admiralty Delegation Washington. BAD had received an Admiralty telegram the previous day, 22 September, providing exactly these details. CAB 122/8, TNA. Stark was evidently aware that *Revenge* and *Repulse* were already in the Indian Ocean. "Modern capital ship" is the term used in the Admiralty telegram. It could imply a *KGV* but is more likely to refer to what was still the preferred Admiralty option of one or both *Nelsons*.

⁴⁴ This figure reflected an expected net addition of three modern fleet carriers with *Illustrious* and *Formidable* returning from repair in the USA and *Indomitable* fresh from build. These three would indeed all be allocated to the Eastern Fleet in December.

⁴⁶ Stark letter to CinCPAC (Kimmel) dated 23 September 1941, Joint Committee on Investigation of Pearl Harbor Attack, Part 16, Exhibit 110, US Library of Congress. Stark's figures for the RN forces planned for the Indian Ocean at this time are broadly consistent with those communicated to CinC China in AT 0337 of 22 September, ADM 116/4877, TNA.

The Admiralty shift to an offensive strategy

Roskill and Marder both insist that the August exchange between Pound and the PM ended in a stand-off which was then followed by a hiatus until mid-October when the PM brought the issue of capital ship reinforcement to the Defence Committee.⁴⁷ Their interpretation is wrong in several ways. First, as argued above, the picture they draw from this exchange of a fundamental clash between Churchill and Pound over either Far East strategy or timescales is to overstate a reasonable debate about a force composition which could not be implemented for some months.⁴⁸ Second, there was no hiatus in the Admiralty where there were considerable changes in Far East plans during the next six weeks. The trigger here was the need to revise the first attempt at an Allied joint operating plan for the Far East produced at the ADB conference at Singapore in April. As explained in Chapter Four, the US Chiefs of Staff rejected this in July. It was therefore agreed at Riviera that Britain would produce a revised draft plan known as ADB-2 to be reviewed at a further conference in Singapore in October.⁴⁹ On 26 September, D of P accordingly produced a draft aide memoire, for use by Far East Commanders at this conference, for approval within the Admiralty.⁵⁰

D of P stated that, since ADB-1, the US Fleet had taken on tasks and dispositions originally designed to apply on entry into war with Germany. Consequently it was possible to begin moving capital ships earmarked for the Eastern Fleet into the Indian Ocean much earlier than anticipated and movements should complete early in 1942.⁵¹

⁴⁷ Roskill states: "It proved impossible to reconcile the two points of view and the matter was not discussed again until mid-October...."; Vol 1, 556. Marder states: "for the time being no decision was reached"; Vol 1, p 222-223. Brodhurst, Pound's biographer, also states that "little happened for six weeks on the naval front, until matters moved on the political front". Brodhurst, *Churchill's Anchor*, p 195.

⁴⁸ The first capital units deployed to the Indian Ocean were *Revenge* and *Repulse*. *Revenge* joined East Indies Command in mid-September and *Repulse* at the beginning of October. Burt, British Battleships 1919 – 1945, p 196 and 238. None of the other *R-Class* would be available to deploy until November. D of P Note for FSL dated 29 October 1941, ADM 205/11, TNA.

⁴⁹ The promised draft of ABD-2, "Draft Agreement on the "Outline Plan for the employment of American, Dutch and British Forces in the Far East Area in the event of War with Japan", was completed by end August. A copy showing the amendments to ABD-1 is in CAB 122/8, TNA.

⁵⁰ D of P minute of 26 September 1941, ADM 116/4877, TNA.

⁵¹ For political reasons, the implementation of peacetime US convoy escort in the Western Atlantic proceeded more slowly than anticipated at ABC-1. However, by September, the USN had taken over battleship cover and escort for the North-West Atlantic including the western half of the Denmark Strait.

Phase 1 forces would be more powerful than planned and available quicker and translate more rapidly into Phase 2. It was therefore feasible to adopt a more offensive strategy towards Japan earlier in a war than previously considered desirable. It is clear from his draft that D of P judged that shortage of destroyers would still preclude the deployment of capital ships beyond the Malay Barrier.⁵² However capital ships in the Indian Ocean could release cruisers for strike operations beyond the Barrier. Rear Admiral Sir Henry Harwood, Assistant Chief of Naval Staff (Foreign), commented that, reversing his previous views, he now felt Japanese attack would be sudden and the Eastern Fleet should therefore be able to operate offensively from Singapore from the outbreak of hostilities. Destroyers must be found to enable the forward deployment of capital ships. The minimum RN capital ship strength required depended on pressure exerted by the US Pacific Fleet at Hawaii. The four *R*-class would be an adequate initial force but must be backed by the two *Nelsons* as soon as possible.⁵³ Harwood also suggested the best employment for the Fleet's proposed striking force of 8 inch cruisers was the coast of Japan.⁵⁴ This last idea was beyond optimistic and better described as lunatic. Harwood's proposals for an RN capital force operating offensively from Singapore further evolved at a meeting chaired by the VCNS, Phillips, now also CinC Eastern Fleet designate, on 30

This released the *R-Class* from the Halifax Force but not yet *Force H.* However, the availability of three *KGVs* from new build by the end of the year made the two *Nelsons* potentially available too. This meant the Eastern Fleet first envisaged in February and confirmed by Pound in August could indeed be deployed by January 1942. For good summaries of the implementation of US Atlantic escort post ABC-1, see Leutze, *Bargaining for Supremacy*, Chapter 16, and Clay Blair, *Hitler's U-Boat War*, Vol 1, p 351 – 355. ⁵² The desperate shortage of fleet destroyers at this time is illustrated in a paper prepared for the FSL on this subject on 23 August just over a month before this Far East aide-memoire. Pound was advised that the 103 fleet destroyers available at the outbreak of war had now reduced to 53 effectives. 44 ships had been sunk with a further 15 damaged against only 24 new build to date. A further 12 vessels were expected to complete by end 1941 and 11 in the first quarter of 1942. This gloomy view should, however, be moderated by the position of escort destroyers. Here 68 available at the start of the war had risen to 109 with 97 new build, mainly *Hunt* class. ADM 178/322, TNA. Pound would of course have had these figures much in mind during his end August exchange with Churchill.

⁵³ Harwood had been advocating the deployment of the *R-class* "as far east as possible" to threaten Japan since March. See his minutes of 6 March and 18 May 1941, ADM 116/4877, TNA. His "reversal of view" should therefore be interpreted as meaning he now believed a Japanese attack was imminent rather than implying he had suddenly shifted to supporting forward deployment.

⁵⁴ ACNS (F) minute of 29 September, ADM 116/4877, TNA. Harwood had made his reputation as the victor of the Battle of the River Plate and he would succeed Cunningham as CinC Mediterranean in April 1942 much to the latter's disgust. His various interventions as ACNS (F) generally portray a man of limited intellect rather out of his depth in the strategic prosecution of a naval war. Given the inability of his direct boss Phillips, and indeed Pound, to "suffer fools gladly", it is perhaps surprising he survived. The answer no doubt lies in the fact that he was a term mate of Phillips and they had both served previously under Pound when he was Director of Plans in the early 1920s. See the view of the DNI Vice Admiral J H Godfrey in Chapter VII, p 64, of his Afterthoughts, ADM 223/619, TNA.

September. Phillips emphasised the critical dependence of any battle-fleet at Singapore on destroyers but he was advised there were options for delivering these. The meeting then agreed that, disregarding US prejudices, the RN preference was a single Allied Fleet in the Far East area, with Singapore as its main repair base, but operating from Manila as its advanced operational base so long as the latter could be adequately defended, especially from air attack.⁵⁵ Since the closest Japanese air forces to Manila were 450 miles away in Formosa, providing adequate defence should be feasible and strategically it was ideally placed on the flank of Japanese communications to the south.⁵⁶

These proposals were incorporated in an updated aide memoire drafted by D of P on 2 October and approved successively by Phillips, Pound and the First Lord, A V Alexander, between 10 and 15 October. There were two key changes in this new draft compared to the original. First, it directed that plans should make provision for: "The employment of British forces northward of the Sumatra-Darwin line using British, US or Dutch bases". Second, while not prescribing any final solution, it directed the conference to examine: "The employment of as powerful a British force from Manila as the destroyer strength will permit, or from other bases if the defences of Manila cannot be considered adequate".⁵⁷ These changes marked a fundamental shift from the British deployment strategy set out in both ADB-1 and the initial ADB-2 draft. The RN was making a firm commitment not only to operate in defence of the Malay barrier as the US had constantly pressed but to deploy north of it and with a battle-fleet.

In a little over four weeks therefore, Pound's defensive strategy for the Indian Ocean, commended by Roskill, had been translated by the Naval Staff into an offensive strategy based at Singapore, and ultimately Manila, with a core striking force of old un-modernised *R-class* battleships relying for air cover on optimistic projections of Japanese strike range and capacity and whatever fighter cover the RAF and USAAF could provide. What is

⁵⁵ This should perhaps be viewed as a logical evolution of the Bellairs vision for "Asiatic Reinforcement" at ABC-1 with the RN battle-fleet now substituting for the US Task Force. The "Far East" area referred to here was that defined in ABC-1 and broadly comprised the South China Sea, Philippines, Malaya and the NEI.

⁵⁶ D of P record of VCNS meeting dated 1 October 1941, ADM 116/4877, TNA.

⁵⁷ D of P minute of 2 October, VCNS of 10 October, FSL and First Lord of 15 October and accompanying draft aide-memoire, ADM 116/4877, TNA.

extraordinary in the proposal is that this RN fleet would be far smaller than any Eastern Fleet anticipated pre-war and yet it was also being given a more forward and aggressive role. Its composition also showed scant regard for the lessons of the war to date or known IJN capability. It is clear the plans anticipated significant US support but, at this time, the precise circumstances in which the USN would intervene remained uncertain. On the limited evidence available, it is difficult to explain this dramatic, almost reckless, shift in thinking. The only historian who has tried is Cowman.⁵⁸ He suggests two explanations. The first is Admiralty acceptance, following US rejection of ADB-1 and further insights at Riviera, that effective cooperation with the USN, and certainly a joint operating plan, was only possible with a far stronger RN commitment to defending the Malay Barrier including forward deployment of capital ships. The second was the dramatic shift in US policy towards the Philippines first signposted by Marshall at Riviera. Cowman argues the Admiralty saw an opportunity in this new US commitment. They could take advantage of the US air umbrella to provide a capital ship force forward in the Philippines where the USN still had no intention of deploying major units. This would neatly counter US complaints over lack of commitment to the Malay barrier, align perfectly with RN prewar plans for an advanced operating base north of Singapore, and bring the RN much closer to Pearl Harbour thus facilitating joint operations with the Pacific Fleet.⁵⁹

Cowman's explanation looks logical and it fits well with the USN position set out by Turner, as Head of USN War Plans, to Danckwerts, Head of BAD Washington, on 3 October. Turner had already indicated that the US was unlikely to find the new British

⁵⁸ Christopher Bell acknowledged Cowman's work on the Admiralty's offensive strategy in his article 'The "Singapore Strategy" and the Deterrence of Japan: Winston Churchill, the Admiralty and the Dispatch of Force Z', (*English Historical Review* Vol. 116, No 467, p 604-634, June 2001). However, he made no real attempt to address its implications and he has since remained close to the conventional narrative on Far East naval reinforcement in autumn 1941, notably in his recent book *Churchill and Seapower*. Ashley Jackson is perhaps the only historian who has not only noted Cowman's work but accepts he has provided "an alternative explanation" of the naval debate that autumn that "reverses" the roles traditionally ascribed to Pound and Churchill. However, his exposition of the Cowman alternative is somewhat muddled and seems therefore to have made no impact on mainstream naval historians. *The British Empire and the Second World War*, p 290 – 291.

⁵⁹ Cowman, *Dominion or Decline*, p 244-246.

ADB-2 draft satisfactory.⁶⁰ His letter now made four important points. First, the USN did not regard unified command in the Far East area operating to a single integrated plan as essential. Strategic cooperation would suffice. Second, defence of the Malay Barrier must be primarily a British and Dutch responsibility. Third, the overall military position in the Far East had changed considerably since the spring with the US reinforcement of the Philippines. Finally, the RN should have no fears that the US Pacific Fleet would be inactive in the event of war.⁶¹ However, despite this convenient alignment with the Turner insight, the Cowman view still raises important questions. Was likely US rejection of ADB-2 really an argument for such a radical shift in RN strategy in order "to bind the Americans in"? ABC-1 was still in place and, as Turner effectively acknowledged, strategic cooperation in the Far East would continue with or without a joint operating plan. As regards the Philippines factor, how had the new US policy for defence of the Islands evolved? How far was it communicated to the British war leadership and did they understand the implications? Does the timing of British naval reinforcement planning fit with the shift in US intentions?

The US programme to reinforce the Philippines was by any standard vast and gathered pace remarkably quickly. As late as June, the islands were still viewed as indefensible. By mid-July, in response to the imminent Japanese move into southern Indo-China and the wider shift in the US strategic perspective described earlier, Marshall was contemplating modest reinforcements including a small force of B-17 strategic bombers. However, it was at the meeting of the Joint Chiefs with the President on 7 August to prepare for Riviera that the idea of using the Philippines as a central element in a strategy to contain Japan first got real traction.⁶² By early September, the scale of reinforcement had increased significantly and Secretary of War Henry Stimson was an enthusiastic lobbyist for the concept.⁶³ On 19 September, Marshall advised the Joint Board that the B-17 buildup in the Philippines "would have a profound strategic effect and might be the decisive

⁶⁰ AT 618 from BAD of 2 October, CAB 122/8, TNA. BAD reiterated US objections in a further tel Gleam 150 of 12 October. It stated that the chief US criticism was the continuing weakness of British forces earmarked for defence of the Malay Barrier. This tel was seen by the PM. PREM 3/156/6, TNA. ⁶¹ Letter from Turner dated 3 October, CAB 122/8, TNA.

⁶² Waldo Heinrichs, *Threshold of War*, p148.

⁶³ Heinrichs, ibid, p 176.

element in deterring Japan from undertaking a Pacific War".⁶⁴ By early October, War Department plans anticipated that, by 1 March 1942, Philippines air strength would include 136 first line B-17s with 34 in reserve, 57 first line dive-bombers with 29 in reserve and 130 first line fighters with 65 in reserve.⁶⁵ There would also be a significant force of B-24s capable of reaching Japan. The scale of this commitment is underlined by the fact that more than 50% of planned B-17 production by March 1942 would go to the Philippines.⁶⁶ By October, the War Department was also planning to extend the reach of the B-17 force by exploiting British and Dutch airbases including Singapore and Darwin. Ammunition, fuel and spares would be pre-positioned.⁶⁷ There is copious evidence that, by this time, Marshall, Stimson, and Air Force Chief General H H Arnold, viewed the B-17s as a strategic coercive force capable of countering a Japanese attack not just in the South but also in the event of a move against Russia.⁶⁸

There is also no doubt that Britain's war leadership, at both the political and military levels, were kept broadly aware of both the details of this build-up and the strategic intent behind it. In addition to numerous contacts through Embassy staff in Washington⁶⁹, Stimson briefed Ambassador Lord Halifax in October using charts to demonstrate B-17 regional coverage⁷⁰, the US Commander in the Philippines General Douglas MacArthur, briefed the British CinC Far East, Air Chief Marshall Sir Robert Brooke-Popham, during his visit to Manila in the same month⁷¹, and the COS gave approval to the use of British

⁶⁴ William H Bartsch, *December 8, 1941: MacArthur's Pearl Harbour*, (Texas A & M University Press, 2003), p 98.

⁶⁵ Daniel F Harrington, "A Careless Hope: American Air Power and Japan, 1941", (*Pacific Historical Review*, Vol 16, No 2, May 1979, p 224).

 ⁶⁶ On 8 October, Marshall told Stimson that 95 of 128 B-17s and 35 of the 95 B-24s expected off the production lines by end February 1942 were earmarked for the Philippines. Bartsch, p 102.
 ⁶⁷ Bartsch, p 145 – 146.

⁶⁸ Heinrichs, ibid, chapter 6.

⁶⁹ The earliest briefing to British Embassy staff was probably that given to the Military Attaché Colonel Vogel by the Director of US War Plans, Brigadier Leonard Gerow, on 14 August. Note by Vogel dated 14 August, CAB 122/30, TNA.

⁷⁰ Lord Halifax letter to PM of 11 October 1941, PREM 4/27/9, TNA. This caused the PM to ask Ismay about the background to Philippines reinforcement. Ismay responded that Britain had never pressed for such reinforcement and it had been a complete surprise when it was mentioned by the Americans at Riviera in August after they had insisted during the ABC-1 staff talks that such reinforcement was out of the question. Ismay minute to PM dated 14 August 1941, PREM 3/156/6, TNA.

⁷¹ Bartsch, p 101. Brooke-Popham subsequently directed Far East Air Command to make four airfields in Malaya available to operate B17s but only one of these was complete by the outbreak of war. Despatch of

airbases on 3 October⁷². What is surprising, given this plethora of inputs, is that there is no evidence that any part of the British system conducted an assessment of the implications and effectiveness of this new US strategy.⁷³ The COS never discussed it in detail; there is no JPC analysis and no significant mention in JIC papers. Where reference does appear, for example in the briefing given by the Chief of the Air Staff Air Chief Marshal Sir Charles Portal, on 12 November to Australian Emissary Sir Earle Page, there is little sign the COS saw it as a decisive factor in Far East calculations.⁷⁴⁷⁵ It follows that the British never considered the inherent weaknesses and dangers of the strategy, the time lag before the US forces could reach critical mass and operational effectiveness, the logistic implications of supporting a force of this size at long range, or the risk Japan would be provoked into an early strike. Miller argues that the new Philippines strategy was entirely owned by the US Army and enjoyed no support from the USN who viewed it as fatally flawed because of the problems in maintaining supply. This judgement on the negative stance of the USN looks overstated. As early as 31 July, Stark, in a letter to CinC Pacific Fleet referred to Army plans to reinforce the Philippines with approval and claimed he had been advocating this for some while.⁷⁶ There is no sign of any major disagreement in Joint Board meetings and the USN deployed significant submarine reinforcements to the Philippines through the autumn. Miller does quote Turner, in War

Air Vice Marshal Sir Paul Maltby on Air Operations in Malaya and NEI, para 34, Supplement to London Gazette 26 February 1948, CAB 106/86, TNA.

⁷² A letter from US Army Brigadier General Joseph T McNarney, dated 1 October 1941, sought agreement for the use of British airbases in the Far East area by US heavy bombardment and reconnaissance aircraft. Those identified were: Singapore, Rabaul, Port Moresby and Port Darwin. Supplies of fuel and ammunition would be pre-positioned. In addition, the US hoped at least one base suitable for B-17 operations could be developed in North Borneo. This letter is in COS (41) 223 (O) of 1 October, CAB 80/59, TNA. The COS approved these arrangements two days later at their 341st meeting on 3 October, item 4 of minutes, CAB 79/14, TNA.

⁷³ There was certainly relevant background to draw on here. Group Captain Lawrence Darvall, the senior air staff officer Far East, made an extensive visit to the Philippines in late May and early June 1941. He reported on the strategic value of the Philippines as a regional centre for air operations but also pointed to the existing limitations to airfield infrastructure as well as operational training etc. See "Report on visit to Philippine Islands 29 May – 6 June 1941" and "Notes on Defence Problem of Luzon", AIR 23/1869, TNA. The RAF also had direct experience of operating B-17s and was highly critical of its performance. See letters to the Air Ministry by CinC Bomber Command, Air Marshal Richard Pierse, of 8 October and 3 November, AIR 14/629, TNA.

⁷⁴ WM (41) 112th Conclusions, Minute 1, CAB 65/24/4, TNA.

⁷⁵ All of this represents further evidence against the Costello thesis of a secret agreement at Riviera. See footnote 28 above.

⁷⁶ Stark letter to CinCPAC (Kimmel) dated 31 July 1941, Joint Committee on Investigation of Pearl Harbor Attack, Part 16, Exhibit 110, US Library of Congress.

Plans, expressing reservations over how well the planned US air reinforcements would stand up to determined air attack. He also accepts the RN planned to do what the USN would not, and deploy a battle-fleet in Manila, but regards RN ambitions as deluded.⁷⁷ How far any USN reservations, if they existed, over the security of the Philippines were communicated privately to the RN is not clear but Stark did warn Pound on the vulnerability of Manila on 13 November.⁷⁸

Given this background, the Naval Staff, and certainly Phillips, would have been aware during their discussions at the end of September and in early October of the broad thrust of US plans to reinforce the Philippines. However, they would have had full detail neither of scale nor timing at that stage nor of the ultimate ambitions of Marshall and Stimson. And it is significant that none of the documents charting the evolution of the Admiralty's new offensive strategy between late September and mid-November make any specific reference to the US air build-up let alone link it to RN strategy in a calculated way. So, while Cowman may be right they had it in mind, there is no evidence it was a major, let alone, decisive factor in framing the new strategy.

As regards the US criticisms of RN reluctance to commit forces to defence of the Malay barrier under ADB 1 and 2, the decision to commit to an offensive strategy preceded Turner's letter of 3 October and Phillips emphasised that this was a British preference independent of US "prejudices". Again, it is fair to assume US attitudes had some influence but it seems doubtful they were decisive. It is significant that Stark's letter to CinC Pacific Fleet of 23 September, referred to earlier, appears to regard the presence of RN reinforcements in the Indian Ocean as sufficient deterrent to Japan. There is no suggestion the RN should be pushed to move them on to Singapore.⁷⁹ A close reading of the whole series of planning papers from late September to late November suggests that, for the Naval Staff, the offensive strategy was ultimately motivated by two things: the fact that significant forces for the Eastern theatre, including potentially destroyers, were now

⁷⁷ Miller, p 62.

⁷⁸ Tel BAD to ADM of 13 November 1941, CAB 105/36, TNA. Stark also underlined the vulnerability of Manila through Vice Admiral Ghormley, his Special Naval Observer in London. See Ghormley letter to Pound of 7 November, ADM 205/9, TNA.

⁷⁹ Exhibit 110, Part 16, Joint Committee on Pearl Harbor, ibid.

becoming available; and a fixation on the long cherished concept of interdicting Japanese communications into the South China Sea both from Singapore and an advanced operating base to the north which had regularly featured in pre-war planning, although then within restricted scenarios and with much larger forces.⁸⁰ The alarming aspect of the papers is that, not only is there no direct reference to the arrival of US airpower but, even more important, there is no reference to Japanese strength and what they might do other than an extraordinary comment by Pound to Stark that the air threat to Manila from Formosa was less than previously feared.⁸¹

The Admiralty's offensive planning from September must also be placed alongside wider British perceptions of the evolving risk from Japan that autumn. The completion of the Japanese move into southern Indo-China at the end of July triggered further stocktaking papers by the JIC and JPS through August and early September. The JIC recognised that from Indo-China, Japan could move rapidly into Thailand with minimal forces to provide a stepping stone for an attack on Malaya. However, the dramatic successes achieved by the German attack on Russia brought a new element into the equation, the prospect of a Japanese attack on Siberia. The JIC assessed here that Japan would keep its options open until the Russian position in the West clarified but it would have insufficient forces for an attack on Malaya, as opposed to Thailand, while it retained a northern attack option.⁸² The JIC also doubted Japan would risk hostilities with both Britain and the US while the Russia situation was unresolved although it acknowledged the economic pressures

⁸⁰ This is broadly Ian Cowman's view. He expresses it most strongly in his 1996 article "Defence of the Malay Barrier? The Place of the Philippines in Admiralty Naval War Planning 1925 - 1941", published almost contemporaneously with Dominion or Decline. He concludes this article by stating: "Throughout the interwar period the "Main Fleet to Singapore" concept was part of a wider scheme devoted to the rescue and relief of all British Far Eastern possessions. Operations to the north of the Malay Barrier, ultimately leading to naval penetration of the waters surrounding the Japanese home islands, were the key. Because of its strategic and geographic location, Manila was intended to play a pivotal, if not vital, role in these plans. When the Admiralty decided to base the Eastern Fleet on Manila in mid-October 1941, that decision was not an adhoc gesture emerging from a strategic vacuum, but rather the product of intent and of years of planning based firmly on pre-war principles and practices". As this thesis has demonstrated, this view rather overstates the offensive ambitions in pre-war planning which were always constrained by the limits of resource and time but there is little doubt that the idea of exploiting a forward base to sever IJN communications well north of Singapore did retain a powerful hold on Admiralty thinking. ⁸¹ Para D of AT 1559A of 5 November 1941 to BAD Washington, ADM 116/4877, TNA. ⁸² JIC (41) 320 of 11 August, 'A Simultaneous Move by Japan against Siberia and Thailand', CAB 79/13, TNA. For the reduction of Japanese air forces available for Malaya, approximately 50% down on those estimated in January and May, see JIC (41) 327 of 13 August, 'Probable Scale of Japanese Attack on Malaya', CAB 79/13, TNA.

imposed by US and British sanctions would ultimately force a choice between concessions and war.⁸³ These judgements completely misread the extent to which the combination of economic pressure and the influence of the military within the Japanese leadership would encourage her to resort to force sooner rather than later.⁸⁴ There were two unfortunate consequences here. The judgement that the threat to Malaya had effectively reduced, at least for a while, was convenient because it made it easier for the COS again to defer the long promised air reinforcements for Malaya to meet demands in the Middle East⁸⁵ and the new requirement to provide urgent aid to Russia.⁸⁶ It also encouraged the view that, since Japan would wish to avoid the risk of war with three powers at once (Britain, the US, and Russia, with the Netherlands as a fourth) she was susceptible to pressure.⁸⁷ The Foreign Secretary Anthony Eden reflected this thinking to Churchill on 12 September. He thought the combination of Russia, the USA, China, the British Empire, and the Dutch, was now more than this "probably over-valued military power" could challenge. He and Churchill saw merit therefore in increasing the pressure on Japan through a deterrent naval force of one or more modern capital ships at Singapore.⁸⁸ Overall, these JIC and JPS judgements of early autumn also seriously underestimated the power and flexibility of Japanese strike forces and their ability to project rapidly at long distance once they made their decisions. Rather than injecting urgency and realism into Far East defence therefore, they encouraged Britain, and especially the RN, down a path of strategic illusion. Eden

⁸³ JIC (41) 362 of 13 September, 'Japan's Intentions', CAB 79/14, TNA.

⁸⁴ Once the US declared its oil embargo and Britain followed suit, the Japanese military moved quickly during August and September to develop an integrated plan to seize NEI oil supplies after first neutralising British and US power to intervene through simultaneous attacks on Pearl Harbour, the Philippines and Malaya. These plans were essentially complete by late September and by then the Supreme Command was pressing for a decision in principle for war by 15 October. JM 150, Political Strategy Prior to the Outbreak of War, Part IV, p 8 – 16.

⁸⁵ COS (41) 324th of 16 September, CAB 79/14, TNA.

⁸⁶ The impact of aircraft shipments to Russia can be seen at COS (41) 301st of 28 August which discussed the impact of supplying 200 Hurricanes, CAB 79/14, TNA, and 'Allocations of Aircraft to Russia from American Production and the effect on RAF Expansion', COS (41) 207 (O) of 17 September, CAB 80/59, TNA. The latter paper estimated that, over the 9 months October 1941 - June 1942, the RAF would lose 1800 fighters from UK production and 1800 assorted aircraft from US production. UK fighter squadrons would need to be capped and upgrades to the Middle East and Far East put on hold.

⁸⁷ The Far East Commanders strongly subscribed to this view. See: 'Japan: Our Future Policy', JP (41) 816 of 7 October, CAB 79/14, TNA.

⁸⁸ Christopher M Bell, 'The "Singapore Strategy" and the Deterrence of Japan: Winston Churchill, the Admiralty and the Dispatch of Force Z', p 622-623. Bell, quoting Eden's memoirs, suggests the agreed force was: fast battleship, battle-cruiser, and carrier. This is the *Force H plus* force Churchill aspired to in the correspondence with Pound. See also Marder, Vol 1, p 223.

developed the theme of pressure with the War Cabinet at the end of September. He was optimistic that Britain could achieve a common front against Japan with America and the Dutch and that a display of firmness would deter rather than provoke.⁸⁹

This thinking in London during September coincided with similar views reflected during a Far East conference held in Singapore at the end of the month attended by all senior British political, diplomatic and military representatives across the region. The conclusions were summarised for the COS by CinC Far East, Brooke-Popham, and CinC China, Vice Admiral Sir Geoffrey Layton. They argued that Japan was currently concentrating her forces against Russia in the North and therefore would want to avoid war in the South in the immediate future since this would involve conflict with multiple enemies. The bad weather associated with the seasonal monsoon would also make southern operations undesirable before February although previous assessments suggested little weight should have been given to this weather factor.⁹⁰ It followed that Japan would therefore be susceptible to economic pressure and deterred by military reinforcements. The arrival of US bombers and submarines in the Philippines would help reduce the risk to Malaya but a British Fleet at Singapore was the only real deterrent if and when Japan did turn south. Significantly, it added that even one or two capital ships at Singapore would have a valuable propaganda effect.⁹¹ The COS response on 9 October, drafted by the JPS,

⁸⁹ WP (41) 230 of 30 September, 'Far East Policy', CAB 66/19/3, TNA.

⁹⁰ This view that the North East monsoon would prevent a Japanese attack on Malaya until February certainly became a significant factor in British assessments through the remaining two months to the outbreak of war. However, two authoritative figures based in Malaya at the time insist that, while they accept this view became widespread, it never reflected professional military opinion. Major General I S O Playfair, who was Chief of Staff to the American-British-Dutch-Australian ABDA joint command formed for the Far East theatre in January 1942, stated in a 1943 personal record that landings on the north-east coast of Malaya, sheltered by the Gulf of Thailand had always been regarded as "quite practicable" in the Monsoon season and that the Japanese were known to be well trained and effective in landing operations. Some Personal Reflections on the Malayan Campaign July 1941 – January 1942, CAB 106/193, TNA. Layton's Secretary, Captain D H Doig endorsed this view. He stated that the weather constraint was valid for a seaborne landing on the south-east coast of Malaya where beaches were exposed to swells generated across the whole South China Sea. However, it was less true for landings on the north-east coast which was exposed only to the Gulf of Siam. Doig claimed there was "certainly extant and in Service hands" a considered report that landings on the North-East coast even during the North-East monsoon were perfectly practicable. Doig paper, "Misfortune off Malaya", p 3, Doig Papers, National Museum of the Royal Navy Library, Portsmouth.

⁹¹ CinC FE telegram of 1 October, JP (41) 816 of 7 October, 'Japan – Our Future Policy', attached to COS (41) 348th of 9 October, CAB 79/14, TNA. This telegram is not only one of the first external references to basing at Manila but also one of very few papers circulated at COS level which specifically highlights US reinforcement of the Philippines and its potential to reduce the threat to British territories.

stated that present plans proposed the transfer of several heavy ships to the Indian Ocean and acknowledged the propaganda value of capital ships in Eastern waters. Reflecting the latest Admiralty discussions, it added that, with the build-up of naval forces in the East, it might be possible to pursue a more forward policy in the event of war including use of Manila as an advance base.⁹²

The new thinking on Far East naval reinforcement reflected in these exchanges with CinC Far East and CinC China coincided with a related Admiralty initiative communicated to CinC China on 3 October.⁹³ This confirmed Phillips' appointment as CinC Eastern Fleet but stated that he would now arrive in theatre at the end of the year and absorb the responsibilities of CinC China.⁹⁴ Previously it had been understood that the creation of an Eastern Fleet and therefore Phillips' role would only follow the outbreak of war with Japan and US relief of RN ships in the Atlantic. In a prescient paper prepared for Layton, his Secretary Captain D H Doig, argued that this formal creation of an Eastern Fleet before the outbreak of war with Japan represented a major change in RN policy towards the East with important implications. A powerful RN fleet in the East, able to count on appropriate US support, would make Japanese attack southward a hazardous undertaking.⁹⁵ The risk was that the Japanese would then act pre-emptively to forestall the effect of the fleet's arrival. Given this risk, the RN must decide whether there was to be rapid single assembly of a full fleet or whether constituent units were to accumulate gradually over an extended period. In the latter case, Doig noted that, while deploying a small number of capital ships forward to Singapore could have a useful political or moral effect, such a force might also be a liability, obliging the RN to risk action with only a partial force.⁹⁶ On balance he judged major units were best kept in the Indian Ocean while

⁹² Tel also attached to JP (41) 816 of 7 October.

⁹³ AT 1151 of 3 October 1941.

⁹⁴ In a personal signal to Layton, Pound recognised that he would be extremely disappointed by the early termination of his command but he softened the blow by appointing Layton to the sought after post of CinC Portsmouth. Doig, "Misfortune off Malaya", p 5, Doig papers, ibid.

⁹⁵ This of course aligned directly with Stark's thinking outlined to CinC Pacific Fleet just ten days earlier.
⁹⁶ At this point, in early October, Doig had in mind *Revenge* and *Repulse* which were already in the Indian Ocean. His paper suggests there had already been informal discussion that they should visit Singapore.

Singapore would be better served by destroyer and submarine reinforcements.⁹⁷ Layton declined to raise these issues with The Admiralty.⁹⁸

Two further mysteries surround the Admiralty's offensive planning from the end of September. The first is how far it was communicated outside the RN and coordinated with wider Far East defence measures. As already noted, the COS were aware on 9 October and they not only authorised the response to CinC Far East but also asked the Joint Staff Mission in Washington to brief the US military leadership that additional naval forces were becoming available for the Far East, that their deployment north of the Malay barrier was now being considered, and that Manila might be required as an advanced base.⁹⁹ Meanwhile, on 10 October, the Admiralty informed CinC Mediterranean that *Rodney* and four *R-Class* battleships would be sent to the Indian Ocean "and probably further east as soon as possible". This signal was picked up by the PM who responded: "This major Fleet movement has not been approved by me or the Defence Committee. No action must be taken pending decision."¹⁰⁰

Given this visibility of Admiralty thinking, it is odd that their intent now to base a full battle-fleet at Singapore and deploy it north of the barrier was not explored and tested more fully during the subsequent discussions on Far East naval reinforcement at the Defence Committee Meetings on 17 and 20 October. Cowman has a complicated conspiracy theory to explain the lack of discussion, suggesting the Admiralty resisted release of *Prince of Wales* to distract the PM from the issue of forward deployment which

⁹⁷ Doig told Marder in a letter dated 16 May 1979 that his paper was drafted immediately after the receipt of AT 1151. The content of the paper feels consistent with this claim but the document is an undated draft and there is therefore no definitive proof of its time of origin. There is thus a small risk it was drafted later and reflects hindsight. If it is genuine, it brings out exactly the sort of questions the Admiralty should have been addressing through October and November as the plan to deploy an Eastern Fleet, with *Force Z* as fore-runner, took shape. Doig's paper and his correspondence with Marder are with the Doig collection at the National Museum of the Royal Navy Library, Portsmouth.

⁹⁸ In his correspondence with Marder in 1979, Doig suggested two reasons for this. First, Layton felt that, if he criticised plans for the creation of an Eastern Fleet, he might be accused of acting out of pique. He was very sensitive to this. Second, he was aware the Admiralty had to consider the wider strategic picture. When Doig pressed him again to question the plans for the deployment of *Force Z* in early November, he said – "No, I am not going to butt in here. They must know what they are doing." Doig papers, ibid.
⁹⁹ Tel also attached to JP (41) 816 of 7 October, ibid.

¹⁰⁰ Cowman, Dominion or Decline, p 246.

they feared he would oppose.¹⁰¹ This interpretation depends, however, on Churchill not seeing the earlier COS records, and deliberate deception by the Admiralty. Both seem unlikely although some of Pound's comments on 20 October did border on the disingenuous. A more plausible way to interpret the Defence Committee October records is to assume that potential concentration of a capital ship force at Singapore rather than Ceylon, as units became available, was now an accepted option for the COS and Defence Committee but that any plans for such forward deployment were viewed as hypothetical until units were released, destroyers were available, and a fleet was actually collecting in the Indian Ocean. The two October meetings focused therefore on the composition and timing of the initial build-up of forces and, from the PM's viewpoint, getting a high profile deterrent force in place quickly.¹⁰²

A second mystery is why no historian focused on this Admiralty offensive planning prior to Cowman and Miller. The existence of the papers completely undermines the Roskill view that the Admiralty was pursuing a defensive strategy in comparison to a reckless PM. It is conceivable Roskill did not see the relevant Admiralty files though less plausible no surviving witness from the Naval Staff spoke to him about this planning.¹⁰³ Marder did see the file but does not give it significance.¹⁰⁴ Haggie confirms he did not find the papers when researching *Britannia at Bay* but agrees they are very important, "modifying our view of one of the significant turning points of the war".¹⁰⁵ A related puzzle is that key

¹⁰¹ Cowman, Dominion or Decline, p 255.

¹⁰² It is nevertheless puzzling that Phillips makes no reference to the new Admiralty offensive strategy, and its implications for the whole issue of Far East naval reinforcement, in his letter to Pound of 17 October briefing the latter on the first Defence Committee meeting for which Pound was absent on leave. Phillips was after all writing just two days after Pound had formally approved the new strategy. ADM 178/322, TNA.

¹⁰³ For the limitations on Roskill's access to Admiralty records, see Barry Gough, *Historical Dreadnoughts: Arthur Marder, Stephen Roskill and Battles for Naval History,* (Barnsley, UK: Seaforth Publishing, 2010), p 145. The most authoritative surviving witness from the Naval Staff with whom Roskill corresponded over 25 years was Admiral Sir William Davis who was a Captain in Plans Division in 1941. Another potential witness was Phillips' Operations Officer, Commander Michael Goodenough. Prior to joining the staff of CinC Eastern Fleet, Goodenough was in Naval Plans and attended the Riviera Conference in this capacity giving him a central view of naval strategic planning. He makes a passing, and disparaging, reference in his letter to Roskill, dated 8 May 1951, to more senior members of Phillips' staff wishing to deploy the *R-class* to Singapore but that is all. Yet Goodenough was also with Phillips when he met Hart at Manila on 6 December so he was witness there to all the discussions around forward basing. See ROSK 4/79, CCA, Cambridge.

¹⁰⁴ Marder, Vol 1, p 398, footnote 53.

¹⁰⁵ E-mail to author from Paul Haggie dated 10 July 2013.

witnesses who wrote on the *Force Z* disaster, such as Godfrey and Davis, must have known of these plans, yet make no reference to them in their later memoirs.¹⁰⁶

The decision to deploy *Force Z* in proper context

By early October, two themes were therefore running in parallel. The Admiralty was adopting an offensive strategy because it thought it had the resources to do so, because it aligned with its longstanding strategic principles, and no doubt also to reinforce American commitment to more pro-active Far East naval defence. Meanwhile, there was a growing conviction across the British war leadership generally that clear signals of Allied solidarity and military intent would dissuade a wavering Japanese leadership from further southern adventures. This conviction undoubtedly did take account of the new thinking in Washington regarding Philippines defence as well as all the wider signals of US intent to resist further Japanese aggression.¹⁰⁷ Against this background, the fall of the moderate Prince Konoye government in Japan on 16 October was the trigger for a more formal discussion of British naval reinforcement at the Defence Committee.

The Defence Committee meetings of mid-October, which led to the despatch of *Force* Z^{108} , have been exhaustively analysed by numerous historians.¹⁰⁹ However, as with the

¹⁰⁶ Vice Admiral J H Godfrey, 'Afterthoughts', ADM 223/619, TNA; 'Loss of Prince of Wales and Repulse, 10 December 1941, Recollections of Captain William Davis, Deputy Director of Plans, Admiralty'. ROSK 4/79, CCA, Cambridge.

¹⁰⁷ It is worth noting that the FSL's report on the loss of *Force Z*, submitted on 25 January 1942, summarised the seven weeks between the August exchange with the PM and the Defence Committee meeting on 17 October As follows: "The situation in the Far East meanwhile had further deteriorated and it became necessary to start forming the Eastern Fleet as ships became available". ADM 199/1149, TNA. ¹⁰⁸ For convenience, the term *Force Z* is used throughout this thesis to describe the *Prince of Wales* force. In reality it was known as *Force G* from the departure of *Prince of Wales* from UK until the morning of 8 December when it assumed the title *Force Z*. *Force G* initially comprised *Prince of Wales* and two destroyers until it met *Repulse* off Ceylon on 29 November.

¹⁰⁹ The record of the 17 October meeting is item 1 in DO (41) 65th of 17 October 1941, CAB 69/2, TNA. The record of the second meeting on 20 October is in the Defence Committee Standing File at CAB 69/8, TNA. The reason there were two separate discussions is because the First Sea Lord was absent on 17 October. Robin Brodhurst, Pound's biographer, states that the main discussion on 20 October took place at the COS 360th meeting in the morning chaired by the PM with the Defence Committee then ratifying the COS decision to deploy *Prince of Wales* in the afternoon. However, the quotations Brodhurst ascribes to the COS meeting all come from the Defence Committee meeting. The record of the COS 360th has no reference to discussion of Far East naval reinforcement, the PM did not chair it, and the First Sea Lord was not present either. Brodhurst also gives a file reference CAB 79/24 for the COS 360th meeting whereas it is actually

Churchill's August exchanges with Pound, there are important issues which have received insufficient attention. There is general agreement that the meetings were driven by the political desire for a more visible commitment of British will to resist further Japanese aggression. The records show the PM, the Deputy PM, Clement Attlee, and Foreign Secretary, Anthony Eden, in agreement that, from the political perspective, the desired deterrence effect would best be achieved by a modern battleship. But the records also demonstrate that, for the PM, the idea of a high profile deterrent still fitted neatly with his operational concept of a fast hunting force to deter raiders in the Indian Ocean. Churchill specifically stated on 20 October that he did not fear an attack on Malaya but rather an attack on trade. The fear he had expressed to Sumner Welles two months earlier at Riviera persisted. The clear implication was that the force should deploy initially to Singapore for its deterrence effect but operate in the Indian Ocean although no doubt also in protection of the Malay Barrier where appropriate.¹¹⁰ It is here that the Admiralty offensive planning since late September becomes relevant and indeed crucial. Both Phillips on 17 October, and Pound on 20 October, were now explicit that they intended to base the *R*-class and two Nelsons (when available) at Singapore rather than Ceylon. It was therefore logical Prince of Wales should also deploy direct to Singapore. Had Pound remained wedded to the defensive strategy of August, he could have conceded that the Prince of Wales should go to the East but insisted she base initially at Ceylon rather than Singapore until the full Eastern Fleet was available. Eden would have accepted this since he stated that the "deterrent effect" of Prince of Wales would start at Cape Town. It is likely the PM would have too. Deployment to Ceylon need not have ruled out visits to

contained in CAB 79/15. The claim that there was a separate COS discussion appears therefore to be an error. Brodhurst, *Churchill's Anchor*, p 196-197.

¹¹⁰ The issue of what Churchill really meant by "deterrence" during these Defence Committee exchanges and the earlier August exchange with Pound is clearly a crucial one. Christopher Bell credits Churchill with a much wider political goal than that set out here. This goal comprised two elements: to signal to the Japanese specific British resolve to defend its Far East possessions; and, to demonstrate British alignment with the increasingly robust US attitude to Japan including Philippines reinforcement. His argument has intellectual appeal but the evidence suggests it gives the deterrence concept from August onward more coherence than was in reality the case. Bell's two motives were undoubtedly present but they were two factors within a much more pragmatic and evolutionary approach to managing the risk posed by Japan as the autumn progressed. This chapter also argues that Churchill's intentions have to be viewed against a much more complicated Admiralty position than Bell portrays and indeed a fast evolving intelligence picture in the Far East theatre. *Churchill and Sea Power*, chapter 8.

Singapore to enhance deterrence if war had not broken out.¹¹¹ However, because the Admiralty were now committed to basing the *Nelsons* and *R-class* forward at Singapore, the argument reduced, as Eden pointed out, to a trade-off between the relative merits of *Rodney* and *Prince of Wales* since *Nelson* herself was now unavailable.¹¹² Here, the political and operational value of *Prince of Wales* was bound to win.¹¹³

A striking feature of the October Defence Committee exchanges is not just the Admiralty admission that they planned now to base a battle-fleet at Singapore but their claim that the ships to be deployed were a match for an IJN battle-fleet. Phillips on 17 October insisted in the face of PM scepticism that the *R*-class were a good match for the older IJN battleships. Pound on 20 October implied it was numbers that would impress the Japanese while acknowledging this meant relying on the *R*-class. The PM's scepticism was fully justified. He would have recalled the assessment Phillips had tendered in February 1940 which compared IJN and RN battleship capability and is worth quoting in detail. Phillips then stated that the four IJN Kongo class battle-cruisers were equal to the modernised Renown (a judgement that almost certainly under-rated Renown) while the Fuso and Yamashiro class battleships were broadly equivalent to the modernised Queen Elizabeths and superior to the un-modernised *Barham* and *Malaya*, let alone the *R*-class which he did not bother to rate. Overall, the IJN had ten "good" ships at that time while the RN had only six "good" and seven "poor" (meaning four *R-class*, two *Malayas*, and *Repulse*). This was "not a very nice position for the British Empire even if we were not fighting Germany". The contrast between Phillips' previous view of the inadequacies of the R*class* and the advice he was now tendering eighteen months later is quite extraordinary but has gone unremarked by successive historians.¹¹⁴ ¹¹⁵

¹¹¹ Pound had of course advocated just such a "visiting policy" in August.

¹¹² *Nelson* was out of action until end March following damage from Italian torpedo attack during the Malta convoy, Operation 'Halberd'. In the event, *Rodney* also had to go into refit in February 1942. Allowing for work-ups, it is therefore unlikely either *Nelson* would have reached the Far East before August 1942. EPS (41) 242 (Also JP (41) 1088) of 22 December, CAB 79/16, TNA.

¹¹³ *Rodney* was never available to deploy to the East before mid-December due to the need to give leave to her crew who had been away from UK for six months, see brief for FSL dated 29 October 1941, ADM 205/11, TNA. It also soon became apparent that she needed her guns changed before she could undertake further operations. This required a refit to be programmed between February and May 1942. R A Burt, *British Battleships 1919-1945*, p 413.

¹¹⁴ Phillips' minute of 6 February 1940 to Pound as First Sea Lord and Churchill as First Lord, ADM 205/5, TNA. The context for this minute is given in Chapter Five, footnote 30.

Roskill, Marder and many other historians¹¹⁶ suggest the decision to deploy *Prince of* Wales on 20 October was the start of a self- contained tragedy ending with the its destruction, together with *Repulse*, on 10 December. They imply their loss was virtually inevitable once the decision was made and place prime responsibility on Churchill for ignoring professional advice. Here, they accept the claim of senior naval officers that Churchill insisted on the substitution of a small inappropriate force in place of a "balanced fleet". Pound is widely criticised for giving in to a dominant PM. The above paragraphs demonstrate this view is wrong. The positions taken by Churchill and the Admiralty at these meetings were essentially the reverse of those assigned to them by Roskill and fellow historians. Churchill wanted a small powerful force that could double as a high profile deterrent and an effective, economical, defensive hunting force in the Indian Ocean. Its presence in Singapore was only necessary if it facilitated this dual purpose. It was the Admiralty who now wanted a battle-fleet based at Singapore able to operate offensively in the South China Sea despite the fact it would largely comprise slow obsolete vessels no match for the IJN. It is fairer therefore to see Force Z as the first instalment, or forerunner, of a fleet the Admiralty were preparing to deploy to Singapore anyway between December 1941 and March 1942.¹¹⁷

Although the Roskill interpretation of the August and October exchanges between Churchill and the Admiralty has been accepted virtually unchallenged for some 60 years, it is striking that Gwyer took a very different line to Roskill on the October meetings in his *Grand Strategy* in 1964. He argued that both protagonists had shifted their ground. Churchill was now most exercised by the threat to the Indian Ocean and wanted a fast

¹¹⁵ While Roskill makes no comment on the role proposed for the *R-class* at the two Defence Committee meetings, he certainly doubted their fighting value. In a post war letter to Cunningham dated 22 July 1959, he stated: "Everyone who had the *Royal Sovereigns*, especially James Somerville, called them a liability rather than an asset!". Cunningham Papers, Add MS 52563, British Library.

¹¹⁶ E.g. Haggie, Barnett, Murfett, Farrell and Willmott.

¹¹⁷ The Admiralty brief prepared for the First Lord, A V Alexander, in preparation for his statement to a secret session of the House of Commons on 19 December, stated that *Force Z* was sent to Singapore "prior to the concentration of the Eastern Fleet" because "it was hoped they would act as a deterrent to the Japanese and avert war". ADM 1/11043, TNA. Admiral J H Godfrey, DNI 1939-42, described *Force Z* as "the forerunner" of a large "Pacific Fleet" (sic) in his unpublished memoir, 'Afterthoughts', ADM 223/619, TNA.

modern force to deal with this. Pound was now claiming that a single battleship would not deter Japan and what was needed was a substantial battle-fleet based at Singapore. This would oblige Japan to detach a major part of her fleet to cover any southern operation. Gwyer states that this line was very different from that taken in August when Pound argued that such a force, while it might show itself in Singapore in peacetime, must withdraw to Ceylon in event of war. Gwyer concluded that the new Pound view indeed destroyed the whole basis of his earlier and perhaps sounder argument "that we could do nothing effective against Japan until we could form a properly balanced fleet, including cruisers and destroyers, which would not be available until 1942".¹¹⁸ Gwyer is of course right that Pound had changed his view which aligned with the new "offensive" thinking within the Naval Staff. The record suggests Churchill, and no doubt others, were bemused by the concept of a battle-fleet at Singapore dominated by aging *R*-class and Phillips' and Pound's far from convincing defence of this. Indeed it is surprising Churchill did not challenge their position more robustly. Gwyer is also right to emphasise Churchill's focus on the Indian Ocean but this chapter has argued that was consistent with his thinking throughout 1941.

In order better to understand the consequences of the October Defence Committee decisions and where responsibility for them lies, it is useful to consider what would have happened if Pound had won the argument. Timing is crucial here. Had Pound won on 20 October, it is probable there would have been no capital units in Singapore when the Japanese attacked, no immediate forces sent there, and therefore no immediate losses. An Eastern Fleet would have gathered in the Indian Ocean in early 1942, just as it did in reality, but no doubt strengthened by the *Force Z* units. This would have been a powerful and "balanced fleet" adequate to safeguard vital communications to the Middle East, India and Australasia, and cover the central Indian Ocean. This picture appears to vindicate Pound but reflects the happy consequence of the war breaking out precisely when it did rather than real Admiralty intent. Had Pound won and the Japanese delayed their attack until mid-February¹¹⁹, four *R-class* and *Repulse* would probably have been in Singapore

¹¹⁸Gwyer, *Grand Strategy* III, Part I, p 272.

¹¹⁹ This was the end of the monsoon season and, as demonstrated earlier, always seen by Far East Command as a more credible time for a Japanese attack.

and without even one modern carrier this was hardly a "balanced fleet".¹²⁰ It might have caused some change to Japanese plans but it is hard to see it intervening successfully or withstanding an IJN attack. It would either have suffered a worse disaster than *Force Z* or had to retreat to Ceylon or Darwin. Once it retreated, its composition was quite unsuited either to helping hold the Barrier or countering a major IJN raiding force in the Indian Ocean. Churchill's case for a high quality Indian Ocean hunting group then looks more credible.¹²¹

The two October Defence Committee meetings had certainly therefore highlighted continuing differences between PM and Naval Staff even if they were broadly the reverse of those traditionally ascribed to them. This then raises the question of whether those differences remained extant or whether, at least in the short term, they had for practical purposes been resolved, even if not in the way the Naval Staff desired. Cowman insists there were unsolved differences over Eastern Fleet composition, destination and role. Indeed he puts this starkly. He states that Churchill believed *Prince of Wales* was bound for Cape Town, the compromise destination agreed on 20 October, while the Admiralty already intended her to go on to Singapore. Churchill believed Prince of Wales would spearhead a small deterrent squadron based in Singapore to provide fire support to *R*-class ships protecting vital Indian Ocean communications and trade. The Admiralty meanwhile intended to base the *R*-class in Singapore, and ultimately Manila, as the core of a battlefleet operating north of Singapore against Japanese lines of communication. Cowman sees no evidence Churchill was aware of the Admiralty's new offensive intent or its negotiations over this with the Americans. Cowman is undoubtedly right to see a continuing difference between Churchill's focus on the security of the Indian Ocean and the growing Admiralty fixation on an offensive strategy. However, he almost certainly overstates how much this mattered at this stage. As already argued earlier in this chapter,

¹²⁰ It is unlikely *Rodney* would have been there, footnote 112.

¹²¹ Various key documents, and the subsequent historic accounts, of naval reinforcement to the Far East in late 1941 make rather free use of the term "balanced fleet" without specifying exactly what this means. It suited some participants in 1941 decisions and later historians to suggest a "balanced fleet" meant the inclusion of aircraft carriers thus addressing the criticism that Japanese air power had been deliberately ignored. This is disingenuous. This chapter shows that the Naval Staff never firmly committed to providing fleet carriers. They only earmarked a single carrier as part of long term reinforcements. It is clear that for both the Naval Staff and Far East commanders at the time, "balanced fleet" referred to an appropriate force of supporting cruisers and destroyers to accompany the much discussed battle-fleet.

Churchill rightly had reservations about the value of the *R-class* but no doubt felt a debate about their deployment north of the barrier was hypothetical until they arrived in theatre and much would then depend on US intentions and indeed Japanese moves. As regards basing, Singapore was one logical choice to base a fleet so long as peace prevailed or the Japanese kept their distance.¹²² As regards composition, once it became clear *Rodney* would not be available until mid-1942 that point of debate was closed off.¹²³

Evolving Admiralty strategy and its risks

The evolution of Admiralty strategy certainly did not stop with the despatch of *Force Z*. By the end of October, the Americans had formally rejected the ADB-2 redraft of ADB-1 as still insufficient to deal with the Malay Barrier. This caused Pound to propose a fresh start to Stark, drawing on the Admiralty thinking of late September and October. Pound noted that, thanks to Rainbow 5, the RN had begun moving capital ships to the East. By January, six capital ships should now be in the area and the Admiralty now proposed to operate this force north of the Malay Barrier.¹²⁴ ABD-1 and 2 were no longer appropriate and Pound proposed developing fresh plans based on the original ABC-1 principles. He also raised the possibility of basing in the Philippines, noting that the air threat "may not be quite so serious as previously thought". He sought help with destroyers which remained the major constraint on RN deployment and suggested Phillips should lead on negotiating new arrangements on arrival in Singapore as CinC Eastern Fleet.¹²⁵ The US Chiefs responded to Pound's message just over a week later.¹²⁶ They welcomed the British naval reinforcements noting that six battleships would be in the Far East by early 1942 but hoped that an aircraft carrier could also be included. CNO promised that two

¹²³ The briefing note prepared for the First Lord dated 17 December, following the loss of *Force Z*, in preparation for his statement to a secret session of Parliament, states that a key reason for deploying *Prince of Wales* to the Far East was the non-availability of *Rodney*. ADM 1/11043, TNA.

¹²² In terms of long term logistic support for a fleet, heavy repair and maintenance, and not least docking for capital ships, the only options were Singapore or Durban.

¹²⁴ The six ships were: *Prince of Wales*, *Repulse*, and the four remaining *R-class*.

¹²⁵ AT 253 of 5 November, ADM 116/4877, TNA.

¹²⁶ In fact, Pound received an informal response conveying Stark's views in a letter from the USN Special Observer in London, Vice Admiral R L Ghormley, on 7 November. Ghormley was responding to soundings from D of P at the end of October conveying the Admiralty's new thinking on forward deployment north of the Barrier. ADM 205/9, TNA.

divisions of destroyers would be made available to support the RN Eastern Fleet as soon as the US was at war. The Chiefs drew attention to the programme of US air reinforcements (clearly a reference to the Philippines) and hoped Britain could make a similar commitment of additional air resources given the reduced risk to the UK home territory. British air reinforcements would help promote a powerful deterrent to any Japanese move south. They endorsed the idea of reverting to ABC-1 as the basis for joint planning in theatre but also identified additional territories to be held by the Associated Powers of which Luzon, Philippines, was the most important. Finally, they cautioned against the early basing of an RN battle-fleet in Manila which was still poorly defended and exposed to attack from multiple directions.¹²⁷

This US response of 13 November was assessed in detail in successive JPS documents over the next three weeks.¹²⁸ The JPS recommended acceptance of the US amendments to ABC-1 and that talks should now proceed in theatre beginning with an early meeting between Phillips as CinC Eastern Fleet, and his opposite number Admiral Thomas Hart. They advised against any early British air reinforcements, quoting here: the need to supply Russia; to maintain adequate strength in UK against the risk of invasion in the spring; and the requirement to build up Bomber Command.¹²⁹ The COS approved these recommendations on 25 November.¹³⁰ The full package of papers was then widely circulated in Whitehall. By end November therefore, all the main elements of the British war leadership were aware of the full planned scale of the RN build-up in the East, the possibility of forward basing in Manila and the US attitude on this, and the US air build-up linked to the new commitment to hold the Philippines.

 ¹²⁷ Telegram Gleam 163 from BAD Washington of 13 November 1941, copy attached to JP (41) 991 of 21 November, CAB 84/37, TNA. Hart had also communicated reservations regarding Manila to the USN Delegation in London on 6 November, OPNAV to SPENAVO of 6 November, CAB 122/9, TNA.
 ¹²⁸ See JP (41) 971 of 16 November and JP (41) 991 of 21 November 1941, both in CAB 84/37 TNA and COS (41) 727 of 7 December 1941, CAB 80/32, TNA.

¹²⁹ It is remarkable that neither the JPS, nor the COS, addressed the fundamental contradiction between no British air reinforcement and their endorsement of a substantial fleet now to be based forward in Singapore and operating northward. If they were implicitly depending on the US for air cover, the feasibility of extending this across the South China Sea and the approaches to Singapore was not considered. ¹³⁰ COS 397th meeting of 25 November, CAB 79/15, TNA.

There were also important War Cabinet discussions relating to the role and status of a potential Eastern battle-fleet on 5 and 12 November. The Australian Emissary Sir Earle Page was present at both of these. Churchill's comments on 5 November were significant. He told Page it was intended to build up a battle squadron in Singapore which could be used for the protection of the vital supply lines between Australia and the Middle East. He noted that Prince of Wales was now en route to Cape Town and likely to continue to Singapore. Whether she would remain there permanently had yet to be decided but he hoped she would do so until either Rodney or Nelson was available. In any case her appearance at Cape Town would have a deterrent effect on Japan. It is clear from the context that Churchill's reference here to building up a battle squadron went beyond Force Z though he made no reference to operations north of the Barrier.¹³¹ Pound further updated the War Cabinet on the formation of the Eastern Fleet battle-fleet on 12 November, again largely for Page's benefit. Significantly, he implied its six ships would remain in Singapore to contest a Japanese move south even if the US remained neutral. He also noted that the US was adopting a more forward policy and strengthening its naval forces in the Philippines with nine destroyers and 12 submarines. The CAS Portal referred to the Philippines air reinforcements but significantly downplayed the numbers and displayed no awareness of the scale of US ambitions.¹³² Neither Pound nor Portal suggested the Philippines were a major factor in their thinking. Pound also noted that the defence of the Malay Barrier had not been resolved with the Americans.¹³³ Importantly, the PM gave no sign at this meeting that he had either reservations or anxieties over

¹³¹ WM (41) 109th Conclusions, Minute 2, Confidential Annex, CAB 65/24/2, TNA.

¹³² Perhaps the best insight into the scale of US ambition is the privileged off the record press briefing given by Marshall to seven selected US journalists on 15 November, three days after this War Cabinet meeting. Marshall was recorded by the Washington *Time* correspondent Robert Sherrod as stating that the US was building up its forces in the Philippines to conduct an offensive war against Japan. If war comes, "we'll fight mercilessly". Flying Fortresses will be dispatched immediately to set the paper cities of Japan on fire. Although B-17s could not make the round trip to Japan from the Philippines, they could fly on to Vladivostok to refuel. B-24s, which could do the round trip, would be dispatched shortly. Aviation fuel and bombs were being pre-positioned throughout the region. Challenged after the war, Marshall accepted Sherrod's account was essentially correct. He stated that the planned Philippines airfields; overestimation of aircraft effective range; and underestimation of the difficulty of hitting ships. *Papers of George Catlett Marshall*, ed. Larry I. Bland, Sharon Ritenour Stevens, and Clarence E. Wunderlin, Jr. (Lexington, Va.: George C. Marshall Foundation, 1981-). Electronic version based on The *Papers of George Catlett Marshall*, vol. 2, "*We Cannot Delay*," *July 1, 1939-December 6, 1941* (Baltimore and London: Johns Hopkins University Press, 1986), pp. 676-681.

¹³³ WM (41) 112th conclusions, minute 1, confidential annex, CAB 65/25/4, TNA.

Pound's dispositions and intentions for the theatre. PM and Admiralty appeared to have reached a consensus on Eastern Fleet composition and deployment at least over the next three months although it is clear that the PM was still thinking primarily of the defence of the Indian Ocean while Pound was focusing northward.

A striking feature of the planning to base in Singapore and operate north of the Malay Barrier is the complete absence of reference to the risk of IJN air attack and the provision of adequate fighter defence whether land-based or from carriers. There is no evidence of Admiralty pressure for additional air reinforcements to Malaya in this period, despite the encouragement from the US Chiefs, let alone making this a condition of forward deployment of the Eastern Fleet, nor do planners appear to have viewed a carrier as essential to operations in the South China Sea. D of P stated at the end of September that, apart from the small Hermes in the Indian Ocean, no carrier was available for the Far East until April 1942 unless the new Indomitable was moved from Force H where she was due on completion of work-up in November but he did not recommend this.¹³⁴ Almost every historian who has written on Force Z, from Roskill onward, has accepted that Indomitable was allocated to Force Z after the 20 October War Cabinet but was prevented from joining by running aground in Jamaica.¹³⁵ The most recent historian of *Force Z*, Arthur Nicholson, raises some important questions regarding this claim.¹³⁶ He demonstrates that Indomitable never received orders to join Force Z prior to her grounding and could never have reached Singapore by early December even without the grounding given the timing of her planned work-up.¹³⁷ In addition, none of the various Admiralty and JPS planning

¹³⁴ D of P minute of 29 September, ADM 116/4877, TNA. The allocation of *Indomitable* to *Force H* was in line with the Admiralty dispositions agreed in late August and notified to the PM in Pound's minute to him of 28 August. However, it was also agreed then that *Indomitable* could be sent east in emergency.

¹³⁵ This is also the line in the Naval Staff History. It states (p 2): "It had originally been intended to include an aircraft carrier in the squadron but owing to the recent grounding of *Indomitable* none was available". Battle Summary No 14, Loss of HM Ships Prince of Wales and Repulse, ADM 234/330, TNA. This is oddly phrased. *Prince of Wales* sailed from UK on 25 October but *Indomitable* did not go aground until nine days later on 3 November. If she was to join the force there was ample time to issue the relevant orders but this never happened. The History goes on to say that "only the extreme urgency of the political situation" could justify continuing without a carrier. This is a blatant piece of post facto justification. ¹³⁶ Arthur Nicholson, *Hostages to Fortune, Winston Churchill and the Loss of the Prince of Wales and Repulse*, (UK: Sutton Publishing Ltd., 2005), p 41-44.

¹³⁷ *Indomitable* ran aground in Kingston, Jamaica, on 3 November. There is general agreement that this happened right at the start of a three week work-up. Nicholson, quoting the Fleet Air Arm historian, David Hobbs, states *Indomitable* was originally due to complete work-up by 22 November and was then

papers in the period from early October to mid-December show *Indomitable* allocated to the Eastern Fleet and, significantly, Phillips gave no indication he anticipated her joining his fleet when he met with the Hart, on 6 December.¹³⁸ Perhaps the most compelling evidence that *Indomitable* was never allocated to *Force Z* is the content of the First Lord's secret session speech reporting on the loss of the force to Parliament on 19 December. This states firmly that no carrier was available and gives no indication *Indomitable* was ever considered.¹³⁹ Churchill certainly advocated the inclusion of a fleet carrier with the *Force Z* package on 17 October and it is possible this triggered informal discussion within the Admiralty as to whether *Indomitable* might be included.¹⁴⁰ Such discussion would be

programmed to arrive at Gibraltar on 29 November. To have any chance of joining *Force Z* by 8 December, she would have needed to be in Cape Town by 23 November at the latest. Achieving this was possible only if she had not run aground and had completely abandoned the bulk of her work-up. There is no suggestion abandoning the work-up was ever considered and indeed she completed the full three weeks after returning to Kingston in late November following her repairs at Norfolk. Simple time/distance therefore absolutely rules out *Indomitable's* presence on 10 December and speculation by Marder and others on the difference she would have made is pointless. Nicholson, p 41. For two first-hand accounts of Indomitable's time in Kingston, the grounding, and the work-up, see: Hugh Popham, *Sea Flight*, (Seaforth Publishing, 2010), p 70 - 83; and, Gordon Wallace, *Carrier Observer*, (Airlife, 1993) p 44 - 50. For Marder's comments, see *Old Friends, New Enemies*, Vol 1, p 229 – 230.

¹³⁸ The most definitive final statement of planned RN strength in the Eastern theatre (i.e. the combined Far East, Indian Ocean and Australasia areas) is that given in Annex II of COS (41) 727 of 7 December, 'Far East: United States – British – Dutch Staff Conversations', CAB 80/32, TNA. This identifies RN strength by warship category in two columns: planned strength in early 1942; and additional reinforcements that "may" be sent later. Five battleships are listed in the early 1942 column (which would be *Prince of Wales* and the four *R-class*), one battle-cruiser (*Repulse*) and one aircraft carrier (clearly *Hermes*). One carrier is also listed in the "possible reinforcements" column. This document, which was cleared personally by Pound, is definitive evidence that *Indomitable* was not formally allocated to the Eastern theatre as late as 7 December.

¹³⁹ The First Lord, A V Alexander, delivered a report on "The loss of the *Prince of Wales* and *Repulse*" to the House of Commons sitting in secret session on 19 December. Alexander spoke in place of the PM who was by then en route to the US. Hansard records a secret session took place that day but not the content. The text of the First Lord's statement and the prior Admiralty briefing notes are in ADM 1/11043, TNA. The carrier issue is dealt with at p 12 and 13 of the statement. "The question has been raised as to why there was no aircraft carrier with our ships. The simple answer is that none was available." The statement adds that *Ark Royal* had been sunk, *Illustrious* and *Formidable* were still under repair, *Furious* was in refit, *Eagle* in dock, and *Victorious* required by the Home Fleet. *Indomitable* was not mentioned in the statement but does feature in the briefing notes. These state that there were urgent calls to provide two modern carriers in the Eastern Mediterranean and one for *Force H*. A pencil note states that the only carrier available here was *Indomitable* which was working up but is now (17 December) en route for Durban. The briefing note also states that it was planned to send *Ark Royal* to the Eastern Fleet after completion of her refit in the US about April 1942. This was in accord with Pound's August minute to the PM.

¹⁴⁰ The Admiralty informed the PM in a minute on 17 October that it was intended to allocate *Formidable* and *Illustrious* to the Mediterranean once they completed their repairs in the US at the end of the year. This may have been the result of a PM query over carrier allocation with an eye to the forthcoming Defence Committee meeting. PREM 3/171/4, TNA. However, five weeks later, and with the Japanese threat ever more imminent, the PM asked Pound for his latest thoughts on carrier distribution. There was no reference here to *Indomitable's* allocation to *Force Z* and indeed the PM said he was reluctant to "waste" any modern

consistent with post war claims by both Churchill¹⁴¹ and Alexander¹⁴² that *Indomitable* was supposed to join *Force Z*. However, the evidence is clear that, if there was such discussion, it never translated into a firm plan or orders.¹⁴³ Given this lack of evidence for her deployment, there must be some suspicion that the *Indomitable* story rests on dubious *post facto* attempts by key players to suggest they were more pro-active in addressing the air threat than the evidence bears out.

Both the disregard for the air threat evident in the Admiralty's autumn offensive planning and the apparent conviction that the *R*-class represented a viable strike force remain very hard to explain. In assessing and judging Admiralty thinking here, it is useful to compare the challenges posed by operations in the Mediterranean where the RN had now been heavily engaged for eighteen months and the vision projected for the South China Sea. There were striking similarities between the two areas. Geographically they were of similar size. In each sea, the RN aspired to assert control primarily from bases at each extremity, Singapore and Manila therefore broadly equating to Alexandria and Gibraltar. In each area, the bulk of one long land boundary was under enemy control such that it could expect, at a minimum, to dominate the central part of the sea. There were many parallels too between the size and composition of the Axis air and naval forces in the Mediterranean and those Japan was likely to make available for the South China Sea.

carrier by sending it round the Cape at this stage or at least until events in the Mediterranean clarified. PM minute to FSL of 23 November 1941, ADM 205/10, TNA.

¹⁴¹ PM minute M 265/53 dated 11 August 1953, ROSK 6/26, CCA.

¹⁴² Alexander wrote to the official historian Professor J R M Butler on 14 November 1952 responding to queries raised by the latter on behalf of Roskill. An extract relating to *Force Z* is worth quoting in full: "There was some difficulty because we had great arguments with the PM about air cover and Pound and I stood out against sending a squadron without a carrier. On (sic) pressure we agreed to try and speed up the "working up" of a new carrier just completed and on the understanding that after working up in the West Indies she would rendezvous with *Prince of Wales* in Cape Town. Unfortunately the carrier was stranded on a reef in the West Indies during fog and it was too late to go back on the promise made to Australia and New Zealand". In a PS, Alexander believed the carrier was *Indomitable*. This testimony supports the idea of informal soundings over *Indomitable* but his other claims look dubious. Pound did not raise air cover as an issue either during his August exchanges with the PM or at the Defence Committee sessions in October. None of the other Admiralty papers suggest either concern about carrier support for an Eastern Fleet or much determination to prioritise this. It is possible there was consideration given to expediting *Indomitable's* work-up but unless it was abandoned altogether she could never have reached Cape Town in time to join *Prince of Wales*. ROSK 6/26, CCA.

¹⁴³ It is significant that the FSL's report on the loss of *Force Z*, dated 25 January 1942, makes no reference to *Indomitable*. It merely states (para 10) that "there was no aircraft carrier available except *Victorious* which was working up with the Home Fleet". ADM 199/1149, TNA.

There were differences too. The most obvious was the IJN's carrier capability. The IJN was also generally a more formidable foe than the Italian Navy in both capability and fighting efficiency. However, as the RN considered the problems involved in contesting the South China Sea, there is nothing in the IJN armoury, or the way it would be deployed, with the exception perhaps of the Long Lance torpedo that lay clearly outside Mediterranean experience and could not be reasonably anticipated from available intelligence.

Many historians would of course add the long range land-based torpedo strike aircraft to the list of IJN innovations, arguing that the sinking of *Force Z* marks a watershed in naval warfare where the RN was surprised and overwhelmed by a new phenomenon. Similar points are made regarding the quality of IJN carrier strike aircraft in the Indian Ocean the following April. However, in reality, neither experience was genuinely new. The RN had suffered periodic but very effective attacks from Italian land-based torpedo aircraft since late 1940.¹⁴⁴ These Regia Aeronautica aircraft had very similar capability and used broadly similar techniques to the IJNAF torpedo aircraft.¹⁴⁵ The IJNAF dive-bombers deployed at Ceylon were novel only in that they were carrier launched. The experience at the receiving end was no different from the numerous attacks by German dive-bombers on RN warships in the Mediterranean during 1941.

The relevance of Mediterranean experience can be taken a stage further. In late September, the RN mounted a major convoy operation known as Halberd out of Gibraltar to relieve Malta. To achieve its purpose, the escort had to be strong enough to command the air and sea space around the convoy during its transit. This meant holding off a significant Italian battle-fleet and major air strike forces based in Sardinia and Sicily. During Halberd, the Italians would deploy 29 torpedo bombers, 24 high level bombers, 9 dive-bombers and 68 fighters, almost all during the single afternoon of 26 September.

¹⁴⁴ Cunningham described the onset of Italian torpedo attacks using SM79s at p 279 of *A Sailor's Odyssey*. He notes that these attacks, often conducted in twilight, were "nerve wracking and dangerous". Three Mediterranean Fleet cruisers, *Liverpool, Glasgow* and *Kent* were badly damaged by such attacks during the last four months of 1940 and the cruiser *Manchester* the following summer.

¹⁴⁵ The primary Italian torpedo bomber was the Savoia-Marchetti tri-motor SM 79 Sparviero which had a maximum speed in 1941 of about 270 mph and a range of around 1150 miles. The IJNAF G3M "Nell" had a lower speed at 232 mph but much greater range – up to 2365 miles.

The overall scale of attack here was quite close to the Japanese total that would attack *Force Z* on 10 December though the Japanese would have no fighters.¹⁴⁶ And the largest Italian torpedo attack with 28 aircraft was greater than any of the individual Japanese attacks.¹⁴⁷

The reason Halberd was a success while Force Z would meet disaster lay not in any marked inferiority of Italian performance compared to the IJNAF but rather in the scale and quality of RN forces deployed. The RN convoy escort comprised three battleships¹⁴⁸, one fleet carrier¹⁴⁹, five cruisers¹⁵⁰ and eighteen destroyers. In addition, nine submarines were available to ambush Italian warships and 27 long range fighters were available in Malta. The majority of the RN warships were the most modern and effective in their class and were experienced and well trained. This was a modern balanced task force. It retained significant strike power but was equipped to defend itself in three dimensions. It is also noteworthy that, while a fleet carrier was critical to air defence, it did not rely on this alone. The RN (with RAF support) deployed this scale and quality of force because it judged it the minimum necessary to secure the Halberd corridor, against the anticipated Italian air, surface and submarine opposition. It demonstrates therefore that, by autumn 1941, the RN would never deploy an unprotected battle-fleet in the central Mediterranean in range of Italian bombers or torpedo aircraft and certainly not against numbers equivalent to those the Japanese might credibly deploy in the South China Sea.¹⁵¹ It is equally hard to envisage Home or Mediterranean Fleet Commanders being willing to

¹⁵⁰ Including two brand new *Dido* class AA cruisers.

¹⁴⁶ Marder estimates some 71 IJNAF strike aircraft attacked the *Force Z* battleships on 10 December, *Old Friends, New Enemies*, Vol 1, p 467 – 474.

¹⁴⁷ For a good description of Halberd, and comparative RN and Italian strengths, see Jack Greene and Alessandro Massignani, *The Naval War in the Mediterranean 1940 1943*, (UK: Chatham Publishing, 2002), p181 – 191.

¹⁴⁸ *Rodney*, *Nelson* and *Prince of Wales*.

¹⁴⁹ *Ark Royal* with, according to H T Lenton, possibly up to 24 Fulmar II fighters. *Ark Royal* was probably the most operationally efficient carrier in the RN inventory at this time.

¹⁵¹ Middlebrook and Mahoney note the potential relevance of Halberd to the subsequent loss of *Force Z* at p 51-52 of their book *Battleship* partly because of the coincidental presence of *Prince of Wales*. Arguably, however, they miss the point of a comparison between the two operations. While accepting the presence of a strong escort and a carrier were important factors in the defence, they suggest it demonstrated that the well fought battleship still had little to fear from air attack. As argued in this section, the real lesson is rather different. It is that a well-balanced task force, including integral fighter support and layered defence, could defend itself against quite heavy levels of air attack, but that, without such layered defence, it would be at heavy risk.

deploy *R-class* battleships, with their limited gun power, poor protection and low speed, in a scenario such as Halberd where they might face a surface engagement with modernised opponents or prolonged air attack. Their lack of speed alone, at least five knots less than the slowest IJN capital ships, rendered their role as a "strike force" in the Eastern theatre ridiculous.

Previous chapters have shown that intelligence estimates of Japanese airpower were accurate enough to discourage any complacency about the potential threat this posed in the South China Sea. The view that the Japanese air-forces were on a par with the Italians had certainly gained currency but Italian air performance at sea during 1941 suggested no comfort could be drawn from this analogy.¹⁵² The Italians had successfully torpedoed the battleship Nelson during Halberd. The lesson surely was that a weaker force without fighter cover could expect to suffer much greater damage. Overall therefore, given all that it knew of the IJN, and all it had learnt in the Mediterranean, the RN should have judged a Halberd type force as the absolute minimum to conduct even the most limited offensive operation north of Singapore and then only if IJN carriers were absent. In the event, there is a surreal quality to the autumn offensive planning. The Naval Staff, from Pound downward, seem so gripped by the use of a battle-fleet north of the barrier to threaten Japanese communications and bind in the Americans that they put aside all the hard tactical lessons and innovations learned in the European war. They seized on this new strategy with the only resources they could make available rather than those that all previous experience and calculation from 1937 onward suggested they needed, above all carriers.153

The risks in this new strategy would be explicable, and up to a point defensible, if the Admiralty, with the support of the JPS, JIC and COS, had made a careful assessment of the combined impact on Japanese intentions and freedom of manoeuvre of the proposed new Eastern Fleet, US strategic airpower in the Philippines, and the deterrent value of the

¹⁵² See the views of Cunningham on the high quality of Italian maritime air capability quoted earlier in Chapter Five, footnote 136.

¹⁵³ The reassessment of Italian naval capability provided by James Sadkovich, and already noted in Chapter Five, is relevant to the argument set out in this section. "Understanding Defeat: Reappraising Italy's Role in World War II".

Pacific Fleet, all in the context of the latest intelligence. The obvious trigger for such an assessment would have been the US Joint Chiefs' telegram to Pound of 13 November.¹⁵⁴ There is no evidence that such an evaluation was ever considered let alone executed although there is evidence to demonstrate that the British war leadership had a sufficiently accurate picture of US thinking and capability to produce one if it had drawn on all the available sources.¹⁵⁵ As shown above, the JPS papers produced in response to the US telegram of 13 November fell far short of such a comprehensive review of reinforcement and deterrence strategy. They merely endorsed the framework for new discussions between British and US theatre commanders while providing self-serving arguments for continuing to delay British air reinforcements.

Just as no comprehensive British risk assessment was produced at the time in November 1941, so historians since have largely ignored the key questions such a review might have tackled. Most historians examining Far East naval reinforcement in late 1941 make only passing, if any, reference to the exchanges between Pound and the US Chiefs and to the related papers on both sides of the Atlantic. Yet these exchanges are fundamentally important to achieving a proper understanding of British and US intentions and calculations in the theatre in the final weeks before the outbreak of war and to events in the first phase of the war. British historians have focused almost entirely on *Force Z* rather than wider Admiralty planning and largely ignore the developments in US reinforcement strategy centred on the Philippines. American historians have looked at events through an exclusively US optic which ignores British developments. Given these gaps, important questions are as follows. Did the US military and political leadership better identify and understand the risks inherent in their reinforcement strategy than the British did? Did British reinforcement have significant influence on US thinking and calculations? Was the failure of reinforcement and deterrence essentially one of timing?

¹⁵⁴ See footnote 127 above.

¹⁵⁵ For example, ATs Gleam 164 of 14 November and Gleam 166 of 19 November, both from BAD Washington, CAB 105/36, TNA, gave very detailed and accurate summaries of current US strength in the Philippines and the timetable of planned reinforcements. Air Strength was given as follows:

⁻ B-17: 35 in place, 35 to be delivered December, 30 in January and 65 in February.

⁻ P40 fighters: 61 in place, 64 en route, and further 95 planned.

⁻ A-24 dive-bombers: 52 to be in place by 30 November.

⁻ Older aircraft: 135 in place.

⁻ B-24 bombers – to follow in early 1942.

Did the prospect of reinforcement by the Associated Powers provoke the Japanese to act in December? Would planned reinforcement have altered Japanese calculations by say March 1942? Or was the nature of the joint reinforcement package always fatally flawed?

Two successive memoranda produced for the US President on 5 and 27 November, under the joint signature of Stark and Marshall, make a substantial contribution to these questions. The 5 November memo stated that the US Pacific Fleet was inferior to the Japanese Fleet and could not undertake offensive operations in the Western Pacific without substantial reinforcement.¹⁵⁶ Such reinforcement, including merchant ships needed for supply, could only come from the Atlantic and would risk British defeat there. Existing war plans for the Far East were therefore defensive and based on holding the Philippines and the British and Dutch East Indies. Present US strength in the Philippines would make a Japanese attack a hazardous undertaking but, by mid-December, US air and submarine strength would be a positive threat to any Japanese operations south of Formosa. By February/March, when US air strength reached its planned target in the Philippines, it might well be a deciding factor in deterring Japanese operations in the South. By that time, British naval and air reinforcements would also have arrived at Singapore. The defensive strength of the entire southern area would have reached impressive proportions. The memo concluded that the ABC-1 principles remained sound. Germany was the primary enemy and war with Japan must not risk the Atlantic. War should be avoided while completing reinforcements and the US should respond only to attack on its own territories or those of Britain and the Netherlands.¹⁵⁷ In a briefing to the Joint Board, two days earlier, Rear Admiral R E Ingersoll, the Assistant Chief of Naval Operations, emphasised the difficulty of supporting operations in the Far East given the threat the Japanese could pose to strategic lines of communication, the limitations to existing facilities at Singapore and Manila, and defences at the latter, and the difficulty of

¹⁵⁶ This was a notably bleaker view than Stark had taken in his letter to Kimmel of 23 September referenced earlier in this chapter even though Pacific Fleet force levels had not changed. In September, Stark acknowledged offensive sweeps by the Pacific Fleet towards the Mandates might not draw substantial IJN forces in their direction. However, he thought they ought to have an important effect in pinning the IJN to northern waters or to bases in the Western Pacific and thus diverting them away from the Philippines and Malay Barrier.

¹⁵⁷ Memorandum for the President dated 5 November 1941, Exhibit 16, Joint Committee on Investigation of Pearl Harbor, Vol 14, p 1061.

providing more naval support without compromising aid to Britain.¹⁵⁸ The memorandum of 27 September, drafted against the signs of imminent breakdown in the diplomatic negotiations with Japan, again emphasised the need to gain time for military reinforcement to complete.¹⁵⁹

Turner, as Head of USN War Plans, provided important additional information, as well as some differences in perspective, to these November documents in his testimony to the Hart Inquiry into Pearl Harbour. He stated that, while the Navy Department accepted the major military effort of the US as a whole must be directed at Germany as primary enemy, they believed the principal effort of the USN should be directed at the Central Pacific. He emphasised therefore that, from the outbreak of a war in late 1941, the Pacific Fleet was expected to operate offensively against the IJN in the area of the Marshall and Gilbert Islands although it would lack the resources initially to seize and hold territory.¹⁶⁰ This focus on the Central Pacific differed from the British view that the USN should prioritise the Atlantic and Far East area. Turner also confirmed that, in the autumn of 1941, the British had promised to establish an Eastern Fleet comprising six battleships and two or three carriers. This was to be based in the Indian Ocean, centred on Trincomalee, but using Singapore as an advanced base. He noted that, in the event, they had moved *Prince* of Wales and Repulse forward to Singapore with three further battleships and a carrier to follow shortly after. This Eastern commitment was a loyal effort to meet the commitments agreed under ABC-1.¹⁶¹

The US strategy for deterring and containing Japan, as set out in the November memoranda and taking account of the forward role ascribed to the Pacific Fleet by Turner, does have a certain intellectual coherence and, from the perspective of the US leadership,

¹⁵⁸ Minutes of the Joint Board Meeting of 3 November, Exhibit 16, Joint Committee of Investigation of Pearl Harbor Attack, Vol 14, p 1062.

¹⁵⁹ Memorandum for the President of 27 November, Exhibit 17, Joint Committee of Investigation of Pearl Harbor Attack, Vol 14, p 1083.

¹⁶⁰ This view perhaps reconciles Stark's letter of 23 September with the Joint Board view on 5 November. ¹⁶¹ Turner testimony, Hart Inquiry, Joint Committee of Investigation into Pearl Harbor, Vol 26, p 263 – 287. Interestingly, Turner also stated that there was a clear consensus within the Navy Department that, in the event of war breaking out with Japan, every effort should be made to trigger simultaneous war with Germany through offensive US action.

the naval and air reinforcements anticipated from Britain gave it added credibility.¹⁶² There were, however, fundamental flaws in this vision. First, as the US Chiefs recognised, time was required to get the forces in place. Time was also needed to provide the necessary support and training to make them effective and this would have taken far longer than the March target regularly quoted for the Philippines forces. Second, the linkage between these defensive elements: Philippines strategic air; Pacific Fleet offensive operations; and British reinforcements at Singapore; remained aspirational rather than real. In the case of British air reinforcements, the US assumed a commitment the British were not willing to make while the RN made unrealistic assumptions about Manila. Finally, both Britain and the US underestimated the scale and ambition of Japanese operations if they struck quickly.

Miller argues that the US position in the Philippines was untenable even in the best of circumstances where war was delayed six months and all air reinforcements were complete for the simple reason that the IJN could easily cut all US supply routes.¹⁶³ If this is correct, then, by moving forward to Singapore, the RN was sacrificing a potentially strong defensive position in the Indian Ocean, as projected by Pound in August, to bolster a defensive shield the US could not deliver. Miller arguably overlooks some critical issues regarding Japanese perception. By the spring of 1942, the radar equipped fighter defences in the Philippines would have made the raids the Japanese executed at the start of the Far East war a very risky undertaking. The B-17 force would have been of doubtful effectiveness against IJN forces at sea but very dangerous to Japanese airbases in Indo-China.¹⁶⁴ The modern US submarines, under a good air umbrella, would also have looked highly menacing. The proposed RN battle-fleet at Singapore would have had all the limitations set out earlier in this chapter but it would have appeared to the Japanese comparable to the threat from the US Pacific Fleet battle-fleet to whose removal they

¹⁶² The President certainly made the link between US and British reinforcements and deterrence. In his message to the PM of 7 November, two days after the US Chiefs' joint memo, he spoke of - "continuing efforts to strengthen our defences in the Philippine Islands, paralleled by similar efforts by you in the Singapore area, will tend to increase Japan's hesitation"... PREM 3/469, TNA. ¹⁶³ Miller, p 63.

¹⁶⁴ The Indo-China airbases were too far from the Philippines at 900 - 1000 miles to allow effective attack so the credibility of this threat would rely on availability of regional airbases in e.g. Borneo and Malaya and Japanese awareness of this.

devoted so much effort in mounting the Pearl harbour raid. To the Japanese, the Allied defences might well have seemed to take on the "impressive proportions" envisaged in the US Chiefs' 5 November memo and they might well have been dissuaded.¹⁶⁵ Overall therefore, there is a respectable argument that the Associated Powers did have the basis for a credible deterrence strategy in the autumn of 1941 and that failure lay in timing and execution, and above all not recognising the short term risks posed by early Japanese action, rather than the concept itself.¹⁶⁶

¹⁶⁵ Japanese sources lend some support to this argument. At the Imperial Conference on 5 November, which decided on war, the Chief of the Army General Staff, General Hajime Sugiyama, identified four arguments against delay: Japan could not match US war production especially airpower; US defences in the Philippines would make rapid progress; Defence cooperation between the US, Britain, the NEI, and Russia would increase, especially combined power in the southern region; and Russia might intervene in the north in the spring. JM 152, Political Strategy Prior to the Outbreak of War, Part V, p 12.

¹⁶⁶ Marder, or rather the former students who completed the Conclusion of *Old Friends, New Enemies* on his behalf, presents a variant of this argument. This Conclusion states that, however feeble a deterrent *Force Z* represented, its despatch to Singapore was in part intended to create the nucleus of a multi-national fleet to control the South China Sea and protect the Indies. The power of *Force Z* lay not only in its ability to operate independently but also in its scope to rally the disparate forces, British, Dutch, and US, not least the substantial modern submarine striking power, already in the region. Vol 2, p 548. The last part of this chapter argues that the Admiralty were indeed reaching towards this idea with their putative Eastern Fleet based forward at Singapore even if it was never formally articulated.

Chapter Seven

The deployment of *Force Z* and its consequences: Inevitable disaster?

The previous chapter argued that traditional accounts of the naval reinforcement debate in the autumn of 1941 are misleading. This chapter examines the separate but related question of whether the decision taken on 20 October, whatever its merits, to deploy a small deterrent force centred on *Prince of Wales*, led inexorably to the subsequent destruction of the force. A majority of historians has argued explicitly or implicitly that it did.¹ This chapter does not describe the operational deployment of *Force Z* following the Japanese attack on 8 December, which is well documented elsewhere.² It concentrates rather on questions relating to the movement and role of the force prior to its arrival in Singapore, and the decision to deploy north on 8 December, that have either not been raised at all or not satisfactorily answered. How did the intelligence picture regarding Japanese intentions evolve during the passage of *Prince of Wales* to Singapore? Did it provide a convincing case for holding *Force Z* in the Indian Ocean? Did Phillips and his staff make sufficient use of intelligence on Japanese capability available in Singapore? How far did the Admiralty's recent offensive planning influence Phillips' thinking? What conclusions can be drawn from Phillips' discussions with Hart on 6 December? What

¹ Christopher Bell is a notable exception here. In both his article 'The "Singapore Strategy" and the Deterrence of Japan: Winston Churchill, the Admiralty and the Dispatch of Force Z', and chapter 8 of his recent book, *Churchill and Sea Power*, he argues that a clear distinction should be drawn between "Churchill's decision to place two capital ships at Singapore on the eve of war", and "the subsequent decision, taken thousands of miles away", that resulted in the ships being caught off the coast of Malaya. He states that Churchill undeniably made their destruction possible, even probable, but not necessarily inevitable. This chapter certainly agrees with Bell that the decision to deploy *Force Z* did not make its destruction inevitable. However, it disagrees with much of his reasoning and the motives he ascribes to Churchill, Pound, and Phillips.

² The best accounts here are still those in Marder, *Old Friends, New Enemies* Vol 1, and Martin Middlebrook and Patrick Mahoney, *Battleship: The Loss of the Prince of Wales and the Repulse.* The latest research which demonstrates in detail why the first IJN torpedo hit proved fatal to *Prince of Wales* is by William H Garzke, Robert O Dulin, and Kevin V Denlay, in *Death of a Battleship: The Loss of HMS Prince of Wales, December 10 1941, A Marine Forensics Analysis of the Sinking.* Paper originally presented at the Royal Institute of Naval Architects in September 2009, updated in 2010 and 2012, and placed on www.pacificwrecks.com website.

were the practical consequences for RN strategy in the East from the loss of *Force Z*? Did it matter as much as most historians claim?³

Admiralty choices during the passage east

Despite the new Admiralty enthusiasm for placing a battle-fleet at Singapore, only two *Rclass*, would potentially reach there by the end of the year to join *Prince of Wales* and *Repulse*.^{4 5} It followed that, if war came before then, any initial capital units based there would not, as Pound had argued on 20 October, be strong enough to meet the scale of force the IJN could allocate to an attack southward.⁶ The force would also be exposed to air attack in harbour and air or submarine attack in any area north of the Malay Barrier. This called for plans to hold them in the Indian Ocean or withdraw them from Singapore in good time if the situation deteriorated, in line with the view adopted by Pound in his exchanges with the PM in August.⁷ Arguably, operational caution was in conflict here with the political need for a visible deterrent. But deterrence rested on Japanese awareness that high profile reinforcements were in the Far East theatre not on their specific location in Singapore as Eden had recognised on 20 October and Churchill confirmed at the War Cabinet on 5 November.⁸ The 20 October meeting had also agreed only to deploy *Prince of Wales* to Cape Town.⁹ The reason for this was primarily the

³ See for example the views of Haggie, Marder and Barnett recorded at p 388.

⁴ *Revenge* was already in the Indian Ocean. A brief for the FSL dated 29 October anticipated that *Royal Sovereign* would sail for the Far East with convoy WS 12 on 10 November and *Ramillies* with WS 14 on 30 November. *Resolution* was expected to be available to deploy on 21 December. All vessels would have completed refits and a short work-up. The refits included improvements to AA armament and protection. It is likely that *Resolution* and *Royal Sovereign* (though certainly not *Ramillies* and probably not *Revenge*) also had their main armament equipped for supercharge firing which increased their maximum gun range to about 26,000 yards with pre-1938 4crh ammunition and 28,732 yards with the latest 6crh shells. ADM 205/11, TNA. *Royal Sovereign* could therefore potentially reach Singapore by end December together with *Revenge*. In the event, *Royal Sovereign* did not reach Durban until 17 December while *Ramillies* and *Resolution* did not leave UK for the Indian Ocean until early January 1942. Burt, *British Battleships*, p 413. ⁵ On 22 November, the Admiralty announced that the four *R-class* would form the Third Battle Squadron, under Rear Admiral Bonham-Carter, AT to SO Force G of 22 November, CAB 122/9, TNA.

⁶ Record of 20 October meeting, CAB 69/8, ibid.

⁷ Pound minute of 28 August, Churchill, *The Grand Alliance*, Appendix K.

⁸ CAB 65/24/2, ibid.

⁹ Given this decision, it is surprising that the Admiralty sent a signal to relevant overseas commanders the following day stating that *Prince of Wales* was bound for Singapore via Cape Town. There was no qualification placed on the Singapore destination and key addressees such as CinC China would have taken it as settled. The signal was released by Harwood as ACNS (F). There is a copy in ROSK 4/79, CCA. The Naval Staff History, perhaps not entirely convincingly, explains this signal as follows: "This went beyond

possibility she might be required to meet a Home Fleet emergency while her new sister *Duke of York* was still working up but it was clearly also an opportunity to review the Far East threat. On 20 October, Pound thought the Japanese were more likely to attack northwards against the Soviet Union. Key questions are therefore whether there was intelligence available during the passage of *Force Z* to justify a reassessment of the deployment and, if so, why no action was taken.

The first point to address is the planned review at Cape Town where *Prince of Wales* arrived with her two escorting destroyers¹⁰ early on 16 November and sailed the afternoon of 18 November. Pound confirmed to the PM on 2 November during the passage south that he intended to review the situation just before arrival at the Cape.¹¹ However, no historian who has examined the *Force Z* story has found any evidence that this promised review took place either prior to arrival at the Cape or during the visit itself. Roskill investigated the issue thoroughly, expecting Pound to take every opportunity to stall the *Force Z* deployment as an unwise initiative executed against Admiralty advice.¹² There is no evidence of such stalling and nor is there any sign of pressure from the PM to pre-empt a review or rush the force onward to Singapore.^{13 14} What is clear from Admiralty signals is that, by 9 November, Pound wanted Phillips to get to Singapore urgently and this meant foreshortening *Prince of Wales* ' stay in Cape Town to 48 hours.¹⁵ It is unlikely this surprised Phillips who had already told Vice Admiral Sir Algernon Willis, CinC South Atlantic, during a brief stop in Freetown on 5 November that he was definitely headed for

the decision reached at the Defence Committee Meeting but was probably intended mainly to ensure that adequate administrative preparations were made for a not improbable move". Battle Summary 14 (revised), Loss of HM Ships Prince of Wales and Repulse, p 2, ADM 234/330, TNA.

¹⁰ Electra and Express.

¹¹ FSL minute of 2 November, ADM 205/10, TNA.

¹² ROSK 4/79, CCA, Cambridge. Roskill indeed became almost obsessed with this issue. In a letter to Cunningham, dated 30 March 1953, he wrote: "I have tried very hard to get WSC to come clean about ordering *Prince of Wales* and *Repulse* to Singapore against DP's repeated opposition. I am sure he approved the order but the Admiralty gave it." Cunningham Papers, Add MS 52563, British Library.

¹³ In the PM correspondence that does exist regarding the deployment, mainly in ADM 205/10, the PM asks reasonable questions but at all times falls in with Pound's advice and decisions.

 $^{^{14}}$ The PM clearly felt the decision to proceed beyond Cape Town had still to be made as late as 5 November – see record of the War Cabinet meeting that day in CAB 65/24/2, TNA.

¹⁵ AT FSL to NOIC Simonstown, ADM 234/330, TNA. In his minute to the PM of 2 November, Pound indicated the *Prince of Wales* would stay in Cape Town about a week.

Singapore and was anxious to make early contact with US commanders in the Far East.¹⁶ Two days later, on 11 November, the Admiralty issued orders for the onward movement of Prince of Wales to Ceylon, where she was to rendezvous with Repulse, and for both ships then to proceed to Singapore.¹⁷ The obvious development between Pound's confirmation of the Cape Town review on 2 November and the executive order to proceed to Singapore, apparently without the review, on 11 November was Pound's important exchange with Stark on the forward deployment of an RN battle-fleet able to operate north from Singapore under ABC-1 rather than ABD principles.¹⁸ The urgency in pushing Prince of Wales on to Singapore was to facilitate the early meeting between Phillips and Hart. This is confirmed by the PM's questioning of the suggestion in Pound's 11 November executive signal that Phillips dispense with his destroyer escort to speed his passage east.¹⁹ The obvious conclusion therefore is that the famous missing review was a victim not of relentless pressure from the PM to move the force east but rather of the momentum generated by the Admiralty's new offensive strategy. Since Pound was now more firmly committed to forward deployment than the PM, the only reason to halt the deployment was a new operational requirement in the Atlantic. Without this, it is likely Pound saw no cause to persist with a review, the PM would defer to Pound's judgement, and its absence, so remarked by successive historians, is actually unsurprising.²⁰ Reality was again the reverse of that implied by Roskill. Far from the PM urging the Force Z elements east without regard for the military risks, it was actually the Admiralty making the running.²¹ This is a crucial point. It meant that, through November, as intelligence

¹⁶ Willis letter to Roskill dated 16 May 1953, ROSK 4/79, CCA. The Naval Staff History states: "It seems to have been accepted by Admiral Phillips from the moment he left England that Singapore was his destination". BS 14, ADM 234/330, TNA.

¹⁷ AT Admiralty to SO Force G of 11 November, ADM 234/330, TNA.

¹⁸ See Chapter Six.

¹⁹ The PM said – "I should like to talk over with you again the idea of *PoW* being entirely separated from her two destroyers. I do not quite see what all this haste is to arrive at Singapore for a pow wow. This is one of those cases where I am for 'Safety First'". Minute to Pound of 11 November, ADM 205/10, TNA. ²⁰ A further factor may be that, by now, it was clear to Pound that *Rodney* could not be available in the Far East until February at the earliest and *Nelson* much later. There was thus now no alternative to *Prince of Wales* to bolster the *R-class*. See brief for FSL dated 29 October, ibid.

²¹ The dangers of relying on the memory of even the most authoritative witness over controversial issues such as the Cape Town review is evident in the recollection of Phillips' Operations officer, Commander M Goodenough, as passed to Roskill in 1951. Goodenough said Phillips thought it "useless to stay in South Africa and desirable to move to Ceylon" but he thought he might have also received "private instructions" which he suggested emanated at the instigation of the PM urging him on. Phillips certainly did want to press on but he had received a direct Admiralty order to do so a week earlier as Goodenough must have known.

increasingly pointed to the risk of early hostile action by Japan, nobody in the British war leadership in London was counselling caution over the potential exposure of *Force Z*, if deterrence were to fail, until too late. Two people did, however, warn Phillips at this time of the dangers in placing an inferior force in a potentially vulnerable location like Singapore. These were Willis at Freetown²² and Field Marshal J C Smuts who Phillips met in South Africa²³.

If a review had been conducted immediately prior to *Prince of Wales*' arrival in Cape Town, what issues might it have raised? A review around 15 November would have found no pressing reason to hold Prince of Wales in the Atlantic matched by a distinct rise in the risk of conflict with Japan. During the first half of November, a steady stream of diplomatic and intelligence reports reached London and Washington describing a rapid build-up of Japanese forces in Indo-China.²⁴ At the same time negotiations between Japan and the US in Washington were reaching a climax. The impact of sanctions meant Japan must cut a deal, which implied concessions, or take action to break the stranglehold which meant risking war with one or more of the Associated Powers. The JIC drew these strands together in an assessment on 18 November.²⁵ Its conclusions reflected a growing consensus that invasion of Thailand, including the strategically important Kra Isthmus, would be Japan's most likely move but that no final decision had yet been taken.²⁶ Given this background, the case for deterrence stood and there was good reason to convince the Japanese Prince of Wales was a key element in early Far East naval reinforcement. It also made sense to have Prince of Wales in the Indian Ocean with Repulse and Revenge as an immediate Phase 1 package to protect vital communications should the situation continue

Goodenough also ignored the implications of Pound's message to Stark which he must surely have seen when it was received as well. Goodenough letter to Roskill dated 8 May 1951, ROSK 4/79, CCA.

²² Willis letter to Roskill of 16 May 1953, ibid. Willis counselled Phillips to keep his force on the move and avoid being tied to a single base – "the fleet in being concept". He believed Phillips agreed.

²³ Smuts' warning message to Churchill after Phillips' visit is well known and can be seen at p 68 of Middlebrook and Mahoney, *Battleship*. Less known are comments he made to Vice Admiral Sir Philip Vian and his Flag Captain Guy Grantham the following year. Smuts said he had told Phillips that once *Force Z* reached the East Indies it should hide, ever shifting its location, and making sudden attacks on Japanese targets of opportunity. Once located in a base, e.g. Singapore the force was as good as sunk. Letter, Grantham to Roskill of 3 February 1953, ROSK 4/79, CCA.

²⁴ This is well summarised by Ong Chit Chung, *Operation Matador*, ibid, p 224 – 228.

²⁵ JIC (41) 439 of 18 November 1941, Japanese Intentions, CAB 81/105, TNA.

²⁶ In fact Japan had decided on war at the Imperial Conference held on 5 November. Ian Kershaw, *Fateful Choices: Ten Decisions that changed the World 1940 – 1941*, p 364 – 366, (London, Allen Lane, 2007).

to deteriorate. Neither of these arguments, however, required the force to be in Singapore. The logical outcome of a Cape Town review would surely have been agreement to concentrate the deterrent force in Ceylon and then review options. If Phillips had to meet Hart urgently, he could fly from Ceylon, as indeed he did. He did not need a fleet to transport him beyond that point.

The Admiralty did take measures to bring the arrival of *Prince of Wales* at Cape Town and her likely destination to Japanese attention.²⁷ Tokyo was indeed alerted and DNI knew this on 22 November.²⁸ Potential deterrence had therefore begun to take effect in Cape Town, as Eden and Churchill anticipated, and Tokyo was also alerted by their London Embassy to the link with Churchill's Guildhall speech on 10 November.²⁹ There were options further to enhance this deterrence potential by publicising the complete *Force Z* at Ceylon where *Prince of Wales* met *Repulse* on 29 November.³⁰ Pound also discussed with Churchill exposing the old battleship *Centurion* which was in the area, disguised as a *KGV* battleship.³¹ However, during the passage to Ceylon, confirmation that the Japanese were fully aware of *Prince of Wales* and her destination was matched by continuing evidence of the build-up of Japanese military forces in the South.³² The JIC produced a further assessment on 28 November concluding that the risks of early Japanese action were increasing.³³ This drew on excellent sigint coverage of Japanese force levels in Indo-

²⁷ FSL minute to PM of 18 November 1941, ADM 205/10, TNA.

²⁸ The Japanese Consul General Cape Town reported the visit of *Prince of Wales* between 16 - 18 November to MFA Tokyo on 19 November. He specifically stated she was bound for Malaya. This was decrypted by GC&CS and issued as report 098017 on 22 November. A second intercept was circulated as 098052 the following day. See: HW 12/270, TNA. See also NID report 00421 of 23 November, ADM 223/321, TNA.

²⁹ The Japanese Charge in London confirmed naval reinforcements, including *Prince of Wales* were being sent East in a message to MFA Tokyo on 21 November which drew attention to Churchill's Guildhall speech. This was circulated by GC&CS as report 998240 on 27 November, also in HW 12/270. ³⁰ Marder, Vol 1., p 391-392.

³¹ FSL minute to PM of 2 November, ADM 205/10, TNA.

³² Vice Admiral Nobutake Kondo, Naval Commander of the IJN Southern Task Force, claimed he learnt of the arrival of *Force Z* in Singapore "towards the end of November". After consulting HQ Combined Fleet, he then moved his covering force from Formosa to Camranh Bay in southern Indo-China. See: "Some Opinions Concerning the War", a summary of the interviews he gave to American historian Gordon Prange in 1948, included in Donald M Goldstein and Katherine V Dillon, *The Pacific War Papers: Japanese Documents of World War II*, (Washington: Potomac Books, 2004). *Force Z* did not reach Singapore until 2 December so either Kondo only learnt of their arrival then or he was alerted before their arrival.
³³ JIC (41) 439 of 18 November, 'Japan's Intentions', and JIC (41) 449 of 28 November, 'Possible Japanese Action', CAB 81/105, TNA.

China but also some important humint reports on their intentions, including targeting of the Kra Isthmus, from SIS.^{34 35} The JIC still expected a step by step approach beginning with a move into Thailand but, from mid-November, there was accumulating evidence of a more direct and imminent threat to Malaya.³⁶ Meanwhile, further intercepts, including the "winds alert message" on 25 November also indicated that the Japanese anticipated a high likelihood of imminent hostilities with Britain and the US.³⁷ On 28 November, the US Army War Plans Division advised the JPS that negotiations with the Japanese were at the point of breakdown and offensive action against Thailand, the NEI or the Philippines was possible at any time.³⁸ A similar message reached the Admiralty from CNO at the same time and was relayed to Far East naval commanders the following day.³⁹ By the time *Force Z* concentrated in Ceylon therefore, it appeared increasingly unlikely either its own presence in the Far East theatre, or any other British and US measures, would have the desired deterrence effect.^{40 41} Pound was sufficiently concerned by the growing sense

³⁶ Ong Chit Chung, p 228.

³⁴ A summary of the latest intelligence pointing to an attack on Thailand was sent by CinC Far East and CinC China on 30 November and is available in ADM 199/1477, TNA. It is representative of the material available in FECB which the JIC was able to draw on.

³⁵ Keith Jeffery, *MI6: The History of the Secret Intelligence Service 1909 – 1949*, p 574 – 577.

³⁷ Tokyo advised key overseas posts "we cannot make any further concessions" and "the outlook is not bright". This was circulated as report 095151. The "Winds Alert", decrypted on 25 November and circulated as report 098127, was sent by the Ministry of Foreign Affairs in Tokyo to the Charge d' Affaires in London on 19 November. It advised that trigger phrases would be used to denote the imminent breaking of diplomatic relations. The trigger for America was: "Easterly wind, rain". For Britain, "Westerly wind, fine". See HW 12/270 and also NID 00429 of 25 November, ADM 223/321, both TNA. GCHQ's post war official history of HMS Anderson shows that the "Winds Alert" message was subsequently discussed between FECB and the US Station Cast in Corregidor and joint arrangements were made to maximise the chances of picking up an "Execute" message. Hong Kong intercepted this on the evening of 7 December (6 December in Hawaii). HW 50/52, TNA. Captain D H Doig, Secretary to CinC China stated in a letter to Marder dated 20 October 1978 that he was shown the "Winds Alert" intercept by Captain Kenneth Harkness, COIS in Singapore. This confirms it was available to FECB. Doig papers, National Museum of the Royal Navy, Portsmouth.

³⁸ Caesar 560 from Joint Military Staff in Washington of 28 November, CAB 122/73, TNA.

³⁹ AT to CinC China of 29 November, ADM 199/1477, TNA.

⁴⁰ Phillips' Operations Officer, Commander M Goodenough, told Roskill in 1951 that "the situation had worsened considerably by Ceylon" so the deteriorating situation was certainly a topic within the staff. Letter Goodenough to Roskill dated 8 May 1951, ROSK 4/79, CCA.

⁴¹ In making an argument that the deterrence effect of *Force Z* applied as much in Ceylon as Singapore, it is important to draw a distinction between British and Japanese perceptions. From the British viewpoint, if deterrence was still judged possible, then exercising it from Ceylon made sense. The Japanese had, however, already effectively discounted any force Britain might send in the foreseeable future. Japanese intelligence in the immediate run-up to war assumed the RN forces in the Indian Ocean comprised: six battleships, two carriers, six heavy cruisers, and ten light cruisers. They were not dissuaded and evidently felt this could be managed. See: JM 107, Malaya Invasion Naval Operations. It is worth noting that figures provided at the Imperial Conference on 5 November gave a much more accurate estimate of total RN surface

of crisis to encourage Admiral Phillips, in a signal late on 28 November, to fly direct from Ceylon to Singapore so that he would be in a position to assume command of the Eastern theatre "should war develop" and to hasten the promised talks with the Americans.⁴²

Had Pound or Phillips wanted to exercise caution, there were sufficient grounds here for holding *Force Z* at least temporarily in Ceylon on the basis that deterrence applied as much there as Singapore while the intelligence justified waiting for Japanese intentions to clarify.⁴³ Both of them were aware that all pre-war and more recent contingency planning had envisaged concentrating Eastern reinforcements in safe waters clear of potential Japanese attack. Once in Singapore, *Force Z* would not only be exposed but political and military circumstances would make withdrawal harder. Pound would later state that *Force Z* could only be considered a raiding force which was not "sufficiently powerful to disrupt enemy sea communications in the South China Sea".⁴⁴ It is hard to see therefore how the situation he now faced differed from that postulated in his discussion with the PM in August when he had stated that any small capital ship force temporarily deployed in Singapore would need to be withdrawn to Ceylon in the event of war.⁴⁵ Marder quotes Vice Admiral Sir Henry Moore, Phillips' successor as VCNS, claiming that he tried to convince Pound to signal Phillips to lose himself in the Pacific as soon as *Force Z* had refuelled in Singapore. Pound, however, was reluctant to second guess Phillips.⁴⁶

forces expected to be available east of Suez at the end of the month. *Force Z* was not included here because its deployment could not yet be known. The Japanese also erroneously credited the RN with 15 submarines. Figures for US strength in the Pacific were, however, significantly overstated. JM 152, Political Strategy Prior to the Outbreak of War, Part V, p 13 - 15.

⁴² AT to SO Force G of 28 November, ADM 234/330, TNA.

⁴³ The DNI, Vice Admiral J H Godfrey, claimed later in his unpublished memoirs that this was his view but it is not clear he said so at the time. Marder, Vol 1, p 499.

⁴⁴ FSL report on loss of HM ships *Prince of Wales* and *Repulse*, ADM 199/1149, TNA.

⁴⁵ FSL minute to PM of 28 August, Appendix K of Churchill, The Grand Alliance, ibid. The hypothetical force considered here as a deterrent in Singapore but to be withdrawn to Trincomalee in the event of war comprised: *Nelson, Rodney, Renown*, and a fleet carrier, which was a significantly more powerful than *Force Z*.

⁴⁶ Marder, *Old Friends, New Enemies*, Vol 1, p 402, quoting a letter from Moore dated 23 June 1976. The reference here to *Force Z* "losing itself in the Pacific" is suspiciously similar to ideas aired at the later meeting, recorded by Churchill, at the Admiralty on 9 December at which Moore was also present. There must be a slight doubt whether he really spoke in these terms to Pound at this time or whether it was a convenient post facto memory displaying wisdom after the event. In any case, as discussed later in the chapter, the whole concept of *Force Z* losing itself in the Pacific was meaningless. It had to base somewhere. There was also limited purpose in going on to Singapore just to refuel if the Japanese were already well aware RN heavy ships were in the Indian Ocean as Moore and Pound knew from the intelligence reports that they were.

Nevertheless, he was clearly sufficiently anxious about the growing exposure of *Force Z* at Singapore to take up this advice just a few days later. Successive signals to Phillips on 1 and 3 December asked him to consider sailing the ships away from the base.⁴⁷ As far as the PM is concerned, his attitude throughout the deployment to date suggests he would have been entirely receptive to arguments for holding *Force Z* in Ceylon. There is certainly no evidence he pressed for *Force Z* to push on regardless.

In the event, Pound did not hold the force back perhaps because he did not judge attack on Malaya, as opposed to Thailand, to be sufficiently imminent when it left Ceylon and felt there would be time to review options at Singapore if required.⁴⁸ However, the fact that Admiralty thinking was now so firmly fixed on forward deployment at Singapore, following the exchanges with the Americans earlier in the month, must also have weighed heavily in the balance. There is evidence to support this view in the Admiralty brief for the First Lord prepared for his statement to the secret session of Parliament on 19 December. This states that Force Z was sent to Singapore "prior to the concentration of the Eastern Fleet" because "it was hoped they would act as a deterrent to the Japanese and avert war". However, if the Japanese "decided to take the plunge", it was hoped the presence of the two ships at Singapore would "cause them sufficient anxiety" to deter them from immediately sending an expeditionary force into the Gulf of Siam. The note insists it was well understood the Japanese had the capability to deploy a much superior force southward but it was felt the presence of the US Fleet in Hawaii would restrain them.⁴⁹ This appears to be the first reference to a second dimension to deterrence. It was not used by Churchill in the October meetings and does not appear in other Admiralty papers prior to the arrival of the ships in Singapore.⁵⁰ However, if the Admiralty was now preparing to operate offensively north of Singapore, it was logical to project this additional deterrence objective on to Force Z. Personal factors were no doubt influential

⁴⁷ AT FSL to SO Force G of 1 December and AT FSL to SO Force G of 3 December, both ADM 234/330, TNA.

⁴⁸ Force Z left Colombo on 30 November. CinCEF War Diary, ADM 223/494, TNA.

⁴⁹ Alexander did indeed quote this second deterrence objective when he spoke to the House on 19 December. The briefing note and record of the speech are in ADM 1/11043, TNA.

⁵⁰ It does, however, appear in the formal FSL report on the loss of *Force Z* submitted to the PM on 25 January 1942. This sets out the "dual" deterrence goal in identical language to that used in the earlier brief for Alexander. ADM 199/1149, TNA. Several historians have quoted the deterrence goal in full from the FSL report but none have suggested the second dimension was significant.

too. Moore's claim that Pound was reluctant to dictate to Phillips, who knew Admiralty thinking and had been steeped in Far East war planning throughout his career, rings true. Pound was also no doubt sensitive to the point that Phillips would hardly relish taking over in Singapore without a fleet.⁵¹

Decisions for Phillips at Singapore

Force Z arrived in Singapore on 2 December, six days before the Japanese attack. Events between the sighting of Japanese transports in the Gulf of Siam on 6 December and the subsequent destruction of the force have been closely scrutinised. Historians generally agree that, with the force in Singapore when seaborne landings commenced, its commitment to attack was virtually inevitable and, having entered a killing ground, the odds of then surviving unscathed were low. There are, however, important questions relating to the period between Phillips' arrival in Singapore by air from Ceylon on 29 November⁵² and his departure to meet Hart, in Manila on 4 December. Intelligence suggesting an imminent attack on Malaya built up rapidly in this period and is again well summarised by Ong Chit Chung.⁵³ Phillips had to absorb a fast moving picture in an unfamiliar environment with a new and untested staff⁵⁴ but it must have been clear to him by the time his small force arrived late on 2 December that it was in an exposed position with significant reinforcements still weeks away. Perhaps the best and certainly the most concise insight into how the British war leadership assessed the Japanese threat at this stage is in the message sent by the SIS representative in Manila to his counterpart in

⁵¹ This underlines the primary argument in Doig's paper to Layton of early October, referenced in the previous chapter. By creating an Eastern Fleet and CinC to lead it in advance of war breaking out, the Admiralty had created momentum that was now hard to check.

⁵² This is the date given by Layton in para 21 of his "Supplementary Report on Events in the Far East 1940-45", ADM 199/1472B, TNA.

⁵³ Ong Chit Chung, p 228-231. He notes that, with the agreement of the Governor, Brooke-Popham put Far East forces on war alert on 28 November. The CinC Eastern Fleet War Diary states that extensive air reconnaissance coverage over the South China Sea was initiated next day and Dutch submarines were placed on alert. ADM 223/494, TNA.

⁵⁴ Most of his staff were also not available to him until *Prince of Wales* arrived on 2 December. However, he did have his Chief of Staff, Rear Admiral Arthur Palliser, and his Operations Officer, Commander Michael Goodenough, with him during the initial period in Singapore. This is demonstrated by the famous photograph showing these officers waiting with Phillips on the dockside for *Prince of Wales*' arrival.

Honolulu on 3 December. The message comprised a text sent earlier by the SIS Chief Sir Stewart Menzies. It read:

"We have received considerable intelligence confirming following developments in Indo-China.

- A. 1. Accelerated Japanese preparation of airfields and railways.
 - 2. Arrival since 10 November of additional 100,000 repeat 100,000 troops and considerable quantities fighters, medium bombers, tanks and guns (75mm).
- B. Estimate of specific quantities have already been telegraphed Washington 21
 November by American Military Intelligence here.
- C. *Our considered opinion concludes that Japan envisages early hostilities with Britain and the US.* Japan does not repeat not intend to attack Russia at present but will act in South.

You may inform Chiefs of American Military and Naval Intelligence Honolulu. (Emphasis added)."

It is clear from the original that the "Our" in Part C referred to SIS Headquarters. It is inconceivable this assessment would not have been shared with the JIC and the PM whom Menzies saw daily.⁵⁵ It is also inconceivable it would not have been copied to FECB from which much of the raw intelligence in paragraph A originated. The significance of the message is that it is a much sharper and more decisive assessment than the 28 November JIC Assessment which kept more options open.⁵⁶ It is impossible to know whether

⁵⁵ Confirmation that the COS now shared the assessment here that war might be imminent lies in their instruction to the JIC to provide a daily intelligence sitrep to Far East commanders. COS 405th meeting of 2 December, Items 1 and 2, CAB 79/16, TNA. Michael Goodman in his new official history agrees that, by end November, JIC papers conveyed "the inevitability of war". *The Official History of the Joint Intelligence Committee*, Vol 1, p 104.

⁵⁶GCHQ's post war assessment of "war warning" intelligence states that, through November, sigint demonstrated intense Japanese activity in every country that was a potential target for attack. It showed them winding up commitments and perfecting espionage operations with Manila and Singapore getting particular attention. The imminence of war was more directly indicated in the diplomatic traffic, including the "Winds Alert" on 25 November. The assessment stressed, however, that this intelligence evidence was "cumulative" rather than "sensational" until the beginning of December by which time it was clear hostilities were only days away. HW 50/52, TNA.

Phillips saw the SIS message but FECB would have been negligent if they did not make an exceptional effort to ensure he did.⁵⁷

As already stated, signals from a clearly nervous Pound on 1 and 3 December suggested *Force Z* should be sent away from Singapore.⁵⁸ Although Pound suggested sending the force eastward⁵⁹, the only realistic options were to return to Ceylon or go to Darwin.⁶⁰ Phillips no doubt felt an immediate retreat would be politically awkward and Singapore had the only dock capable of dealing with urgent defects to *Prince of Wales*.⁶¹ However, he must also have been heavily influenced by the offensive strategy of which he was a prime architect. If he sent his ships away, it would be difficult to convince Hart that Britain was now firmly committed to defending the Malay Barrier let alone to the forward vision to which the Admiralty now aspired.⁶² Overall therefore, immediate departure of

⁵⁷ For background on this message, drawn from SIS archives, see Keith Jeffery, *MI6*, ibid, p 576 – 577, and Henry C Clausen, *Pearl Harbour Final Judgement*, (USA: Da Capo Press, 2001), p113 – 114. There is also useful background at p 84 of the NSA monograph by Robert J Hanyok and David P Mowry, *West Wind Clear: Cryptology and the Winds Message Controversy – A Documentary History*, (Center for Cryptologic History: US National Security Agency, 2008) which explores Clausen's efforts to clarify sourcing. GC&CS acknowledged to him in 1945 that the source of paragraph C was a sigint report. The monograph concluded that the sigint report was a Japanese diplomatic message of 1 December from Tokyo to Hsinking China stating "great care shall be taken not to antagonise Russia". Jeffery states that an earlier message from SIS Manila to Honolulu survives in the archives and is dated 26 November. This cited secret sources and stated the Japanese would attack the Kra Isthmus from the sea on 1 December without any ultimatum or warning. Attacking forces would proceed direct from Hainan and Formosa and the main landing point would be in the Songkhla (aka Singora) area.

⁵⁸ Text of Admiralty signals given by Nicholson, *Hostages to Fortune*, p 198. The briefing paper prepared for the First Lord's secret session speech on 19 December suggests these signals were primarily triggered by concern about the threat from IJN submarines known to be moving south. ADM 1/11043, TNA.

⁵⁹ It is not clear what Pound meant by going "eastward". A later meeting in the Cabinet War Room on 9 December would talk about the force "vanishing among the innumerable islands" of the Malay Barrier, Marder, Vol 1., p 404-405. This was a meaningless concept without a base from which to operate.
⁶⁰ Goodenough, Phillips' SO Plans told Roskill in his letter dated 8 May 1951 that Phillips did plan to get *Force Z* away before the outbreak of hostilities if possible and saw Darwin as the only credible base. ROSK 4/79, CCA, Cambridge. The naval facilities available in Darwin at this time, along with the staus of port defences, are described in a new Australian book by Dr Tom Lewis and Peter Ingman, *Carrier Attack Darwin 1942*, (Avonmore Books, 2013). They also note the importance of Darwin as a vital staging point for the US B17 force in transit to the Philippines. Another option as a base for *Force Z* which is never mentioned is Balikpapan in southern Borneo where elements of the US Asiatic Fleet were based at this time. However, this would have offered little more than refuelling and defences were rudimentary although it was beyond the range of Japanese air attack.

⁶¹ *Prince of Wales* underwent a three day docking on 4 December, Nicholson, *Hostages to Fortune*, p 54. The nearest battleship dock otherwise was back at Durban.

 $^{^{62}}$ Goodenough also claimed to Roskill that during the passage out East he had advised Phillips to deploy the *R*-class on convoy escort in the Indian Ocean. However, "more senior members of the staff" envisaged a combined battle-fleet operating in the South China Sea. Goodenough ended this with an exclamation mark conveying his incredulity.

the Force was never likely though *Repulse* did set out on a courtesy visit to Darwin before the sighting of Japanese transports provoked her recall.⁶³

The most important issue influencing a decision either for immediate withdrawal pre-war or later deployment into the South China Sea was the effectiveness of Japanese airpower. If the Japanese air threat to Singapore, its immediate environs, and the southern part of the South China Sea, was judged low or at least manageable, perhaps on a par with that of the Italians to Alexandria, then Phillips could initially wait on events and use *Force Z* and the reinforcements en route to complicate Japanese planning. If the threat was significant, he would be at serious risk as soon as hostilities opened. Marder explored the Japanese air threat to *Force Z* more comprehensively than any other historian before or since. He concluded that "neither Phillips nor the Singapore intelligence authorities had reliable information on the strength, types, disposition, or efficiency of enemy aircraft in the Indo-China area".⁶⁴ This conclusion reflected the assessment given in the Naval Staff History in 1955.⁶⁵ It also reflected the view in the First Sea Lord's report on the loss of *Force Z* in early 1942. That stated that, prior to sailing, *Force Z* had only "vague information about bomber forces based in Indo-China".⁶⁶

Marder's conclusion, however, neither accurately reflects the evidence regarding intelligence on the air threat which he unearthed during his research nor the further information that has emerged on British knowledge of Japanese air capability over the last 30 years. It can safely be assumed that Phillips' staff had NID intelligence reports issued up to mid-October available in *Prince of Wales* when she left UK. As stated in Chapter Five, included here were Weekly Intelligence Reports covering upgrades to Indo-China

⁶³ Marder, Vol 1, p 396. Apart from its role as a courtesy call and in providing reassurance to the Australians, this visit was presumably intended to explore Darwin's suitability as an operational base. The Admiralty brief prepared for the First Lord's secret session speech on 19 December suggests the departure of *Repulse* was a consequence of Pound's warning signals. ADM 1/11043, TNA. This seems unlikely. The CinCEF War Diary states that she was to spend a few days in Darwin and then return to Singapore. ADM 223/494, TNA.

⁶⁴ Marder Vol 1, p 413.

⁶⁵ "Loss of HM Ships Prince of Wales and Repulse", BS 14, p 8, ADM 234/330, TNA. Marder's judgement is in fact almost a precise transliteration of the Staff History judgement.

⁶⁶ "Loss of HMS Prince of Wales and HMS Repulse", Appendix, 25 January 1942, ADM 199/1149, TNA.

airbases and the ability of IJNAF heavy bombers to reach Singapore.⁶⁷ There was plenty here to stimulate searching questions to FECB on arrival regarding the latest threat picture. However, it is certain Phillips was not as well briefed as he could or should have been on what FECB knew. There is convincing evidence that he did not visit FECB or receive a personal briefing and it is doubtful his staff had the right level of contact either.⁶⁸ The intelligence now available to FECB was inevitably incomplete but quite good enough to demonstrate that the latest estimates of Japanese aircraft numbers, together with their known capability, especially the IJNAF component, would make any foray north of Singapore a high risk enterprise.^{69 70} FECB were also aware the aircraft in Indo-China now included torpedo bombers. Evidence for this comes from two sources: Wing Commander Roy Chappell, the Head of the Air Section in FECB; and Captain Doig, CinC China's Secretary, who claimed to have discussed this in detail with FECB staff during 1941. Chappell stated in 1978 that he was asked by Brooke-Popham to provide an assessment of the current air threat to Force Z just two hours before its departure on the afternoon of 8 December. He advised that Phillips could expect to be attacked by at least 100 aircraft operating from bases in Indo-China around Saigon and comprising high level

⁶⁷ For example WIRs 76 of 2 August and 77 of 29 August, Chapter Five, footnote 27 refers.

⁶⁸ Captain Kenneth Harkness, Chief of Intelligence Staff (COIS) FECB, told Marder in 1978 that he had no contact with either Phillips or his staff before the sailing of *Force Z*. Harkness, letter to Marder dated 11 July 1978. Arthur J Marder Papers, MS-F02, Special Collections and Archives, The UC Irvine Libraries, Irvine, California. Harkness also confirmed this in correspondence with Doig the same year. Doig papers. A separate letter in the Marder papers from the Head of the Air Section in FECB, Wing Commander R Chappell, to Harkness, dated 14 October 1978, states that the RAF Section were not consulted about the air threat by either Phillips or his staff until a request came from Brooke-Popham shortly before sailing. Marder naturally drew on this correspondence in *Old Friends, New Enemies*, Vol 1, but also appears to go against this evidence in footnote 73, p 413, where he suggests Goodenough did meet Harkness although he gives no source for this.

⁶⁹ Ong Chit Chung, p 229, quoting numerous documentary sources, states that, on 2 December, FECB reported the total number of aircraft in Indo-China to be 300 with 180 in the South including 90 heavy bombers. By 4 December, the estimated total had risen to 450 and by 6 December to 500. It is clear that the primary source for FECB tracking of air strength in Indo-China was through radio traffic analysis. In his paper prepared for Marder, "History of the Special Intelligence Organisation in the Far East" Lt Cdr S W Francis emphasises the success in identifying air movements in the Saigon area in late 1941 and states: "By means of D/F and study of radio traffic, movements and locations of Japanese Air Force squadrons were plotted. Call signs were in the main confirmed by use of Radio Finger Printing equipment and possible sighting reports and known sighting reports and known squadron connections". Marder papers. ⁷⁰ The FECB estimates compare favourably with a Japanese total given in JM 107, p 6, of 564 aircraft

committed to operations in Thailand and Malaya at the start of the war. These split into 447 IJAAF (72 recce, 168 fighters, 108 light bombers, 99 heavy bombers) and 117 IJNAF (nine recce, 36 fighters, 72 land-based bombers).

bombers and above all torpedo bombers.⁷¹ In correspondence with Marder, Chappell insisted that the IJN especially favoured torpedo bombing and were highly trained in it. He emphasised the attackers would be land-based because of intelligence that there were no carriers in the area.⁷² Doig's recollection was that FECB knew that both the IJN land-based attack bombers, the Type 96 Nell and Type 1 Betty, were torpedo capable but believed their effective range was limited to 300 miles whereas in reality it was at least twice that.⁷³

It seems most unlikely that Chappell's intelligence, assuming it was passed on by Brooke-Popham, was properly absorbed and understood by either Phillips or key members of his staff.⁷⁴ In his post action report, drafted within hours on the destroyer *Express*, the Captain of the Fleet, Captain L H Bell, stated that the Admiral was well aware of the threat from airbases in Indo-China but expected strikes from here to be hastily organised

⁷¹ Chappell's reference to Saigon is significant. This is indeed where the IJN attack aircraft were based so FECB had located them correctly and it also perhaps confirms the accuracy of Chappell's memory. Marder states in his footnote 75, p 416, that Phillips and his staff were working on the assumption that the aircraft were based at Ca Mau, 150 miles south-west of Saigon, supposedly based on FECB advice. Ca Mau was a reasonable worst case estimate (bringing the bases closer to *Force Z's* track) but it also underlines that Phillips' staff had not properly exploited what FECB in fact knew.

 $^{^{72}}$ Letters from Chappell, FECB Air Section to Harkness, COIS Singapore, dated 14 October 1978 and to Marder dated 6 December 1978. Arthur J Marder papers. Chappell passed his assessment to Brooke-Popham before *Force Z* sailed and assumed it had been forwarded but could not confirm this. Chappell was 81 when he wrote to Marder and his health was failing. There is a risk his memory was failing also but his information to Harkness and Marder was consistent and looks authentic. Harkness also claimed to recall the number of aircraft quoted by Chappell. Chappell was certainly well placed to comment on IJN air capability. He had trained IJN aircrew at Yokohama in 1930 – 31 and had been Air Attaché at the Embassy in Tokyo from 1935 – 38. Letter to Marder of 23 November 1978 refers.

⁷³ Doig's claims are set out in Note 2 of his paper "Misfortune off Malaya" which is with his papers at the National Museum of the Royal Navy, Portsmouth. Some questions can be raised over the accuracy of his account. It is not clear he understood the difference between the Type 96 and Betty or Type 1. He states that estimates of the performance of IJN torpedo aircraft were based on the assumption they would carry the 24 inch "Long Lance" torpedo. The Long Lance was never adapted to aerial use and its weight would have ruled this out as a practical proposition. The IJN aerial torpedo was the 18 inch Type 91. It is also doubtful the RN had any intelligence on the Long Lance at this stage of the war. There must be some suspicion therefore that Doig's comments reflect later knowledge and hindsight.

⁷⁴ Marder judges Chappell's intelligence was probably not passed on. See footnote 105, p 433 – 434, Vol I. Middlebrook and Mahoney have an interesting reference at p 304. They note "hearsay evidence" that the Intelligence Officer on Phillips' staff found, on his return to Singapore after the sinkings, that the naval staff ashore had known of the presence of Japanese torpedo bombers in Indo-China while *Force Z* had been at sea but had not thought it necessary to send a warning signal. They were not able to follow this up because the officer concerned was dead. Phillips' SO (I) was Commander J R M Laird. He would have been the natural link to FECB. However, Marder claims, though without giving a source, that Goodenough insisted to Laird that he would deal with FECB. Marder, footnote 73, p 413, Vol I. Marder suggests Goodenough did see Harkness the COIS but Harkness is adamant he did not.

and to comprise aircraft armed with fragmentation bombs rather than anti-ship bombs or torpedoes.⁷⁵ They also assumed a maximum range of around 300 miles, similar to Doig, based on Mediterranean experience.⁷⁶ The failure of the staff to engage directly with Chappell who clearly could have provided a wealth of valuable background was negligent and demonstrates that the carefully promoted RN line after the loss of *Force Z*, repeated by Roskill and others, that little was known of IJN air capability in the theatre is wrong. A final oddity of this aspect of the story is why Brooke-Popham was engaging with Chappell. In his 1942 despatch, Brooke-Popham said he had been asked By Phillips' Chief of Staff Rear Admiral A F E Palliser for an estimate of the air threat and responded with "50 or 60 bombers five hours after location".⁷⁷ This does not fit with Chappell's evidence. It may be therefore that Brooke-Popham gave Palliser an initial response based on his previous understanding but then turned to Chappell for a more informed view. However, the fact remains that Palliser was apparently dealing with FECB at one remove and would have gained much more from direct contact. It is also surprising that he did not seek Layton's advice on this.

FECB was not the only source of expertise on the air threat. There was the knowledge of RAF staff to draw on. The evidence available to judge the quality of their information and advice is fragmentary. As already noted in Chapter Five, they appear to have seriously underestimated the scale of air attack the Japanese would be able to generate from bases in Indo-China and potentially Thailand on a sustained basis. Estimates here were based on the number of airfields judged capable of operating heavy bombers and the capacity needed to support adequate reconnaissance and fighter escort. However, the picture here was changing very rapidly during October and November as the Japanese put major effort into airfield construction. There are also the papers noted previously which confirm RAF knowledge of IJAAF and IJNAF aircraft capability was good. This includes that prepared for Brooke-Popham by his Chief of Staff, Group Captain L Darvall, which estimated that

⁷⁵ Captain Bell post action report dated 10 December, ADM 199/1149, TNA.

⁷⁶See Marder, p 415 – 417 for discussion of the range of attacking aircraft. Goodenough told Roskill in his letter of 8 May 1951 that Kuantan where *Force Z* was ultimately attacked was judged, at 450 miles from Indo-China, to be out of effective air strike range. ROSK 4/79, CCA.

⁷⁷ "Despatch on the Far East by Air Chief Marshal Sir Robert Brooke-Popham", dated 8 September 1942, para 110, WP (42) 403, CAB 66/28/33, TNA.

heavy bombers could carry a bomb-load of 4000lbs up to 1000 miles and also noted a long range fighter capable of reaching 1500 miles.⁷⁸ There was clearly enough information here to warn Phillips and his staff to err on the side of caution regarding Japanese strike range.

Given the intelligence which the evidence demonstrates was available in FECB, and the related assessments available from RAF staff, it is reasonable to judge that Phillips and his staff made three fatal errors in assessing the air risk to Force Z. These were: the failure to recognise the land-based torpedo threat from Indo-China; the failure to recognise that a significant proportion of the Indo-China strike aircraft belonged to the IJNAF and could therefore be expected to be well trained and equipped for anti-ship operations; and the underestimation of effective strike range from Indo-China bases by a factor of half. Only the last of these errors was excusable.⁷⁹ These errors appear to have been compounded by underestimation of the size of potential attack forces though the accuracy with which FECB monitored the build-up of Japanese air strength, and its breakdown by aircraft type, in Indo-China through November should have allowed no illusions here. If Force Z could not operate safely against an invasion force, and would be at risk anywhere north of Singapore, there was clearly little military purpose in staying there. This begs the question as to whether Phillips would have considered withdrawal if he had been better briefed on the threat during his first days in Singapore. Any view here is hypothetical but it seems likely he would still have taken comfort in several factors. He would probably have judged Singapore itself to be too distant from Indo-China for the Japanese air groups there to be a serious threat to the ships while in the base or on passage out and no doubt counted on the monsoon limiting flying operations. He also took immediate steps to ensure fighter cover if the fleet did sortie, including deployment of aircraft to northern airfields, and he could not reasonably have anticipated the rapid collapse of British land and air-forces in the north of Malaya in the first two days of war.⁸⁰ The conclusion must

⁷⁸ The relevant paper carries Darvall's initials but is undated. It must, however post-date the move into Indo-China so was probably written in September or October. The fighter was clearly the Zero. See: Chapter Five, footnote 26.

⁷⁹ This reflects the difficulty in assessing realistic combat range under full war conditions set against theoretical ranges calculated from aircraft performance data.

⁸⁰ Goodenough to Roskill.

be that, despite the evidence of imminent Japanese action, he would have felt he had time to consider the options for *Force Z*.

If assessment of the air threat defined the limits of safe operation north of Singapore, assessment of IJN surface and submarine forces was important in judging whether Force Z had sufficient power to achieve any useful military effect. Because Force Z succumbed to air attack, British knowledge of IJN surface strength and the implications this posed has received less attention in the historical coverage of *Force Z* than it merits. The best guide to British knowledge of IJN dispositions in the immediate pre-war period is arguably in the NID history prepared in 1946 by Hillgarth and Barrett.⁸¹ This gives a detailed picture of the respective estimates in NID 4 and FECB and the interaction between them. By 1 December, coinciding with Phillips' arrival, FECB had identified "a special Japanese force" created under the command of CinC Second Fleet, Vice Admiral Kondo Nobutake, to undertake operations in the south probably focused on Thailand but possibly including a landing on the Kra Isthmus. The force was estimated to comprise eight 8 inch cruisers, twelve 6 inch cruisers, four aircraft carriers, 52 destroyers and 18 submarines.⁸² This was a broadly accurate assessment of the IJN Southern Task Force that had indeed been created to support the attacks on the Philippines and Malaya commencing 8 December.⁸³ FECB had not at that stage identified the battle-cruisers, Kongo and Haruna which were also included and were almost certainly unaware that the carriers comprised only the light carrier *Ryujo* and seaplane carriers.⁸⁴ FECB also underestimated the number of heavy cruisers because the RN believed the Mogami class were still armed with 6 inch weapons. Nevertheless, the identification and construction of this Southern Task Force order of battle, which must have been done largely on the basis of traffic analysis, was an

⁸¹ Hillgarth and Barrett memorandum, "History of the Far East and Pacific War", "Pearl Harbour and the Loss of Prince of Wales and Repulse", ADM 223/494, TNA.

⁸² The NID 4 version of this report, NID 4/23 - Naval Situation in the Far East: Situation up to 1 December – can be seen in WO 208/1080, TNA. The report stated that the Southern Task Force or "Special Force" had been organised to support forthcoming operations in the South, most likely an attack on Thailand, but possibly including a landing on the Kra Isthmus. Although the report got the composition of the Southern Task Force correct, it was wrong in stating that the bulk of the Combined Fleet remained in Japan. That was true of the battleships but the Carrier Fleet with two of the *Kongos* was now en route for Pearl Harbour.
⁸³ Roskill gives the composition of the Southern Force at Appendix L of *War at Sea* Vol II.

⁸⁴ The NID 4 sitrep of 1 December assessed that the IJN First Fleet which remained in Home waters comprised all ten battleships, four carriers, four 8 inch cruisers, four six inch cruisers, 40 destroyers and 15 submarines.

impressive achievement by FECB.⁸⁵ It was a further signal of Japanese intent to weigh alongside the other war warnings. Layton would certainly have followed the development of this intelligence and presumably would have given Phillips a headline summary. Phillips would have recognised that this was a substantial IJN force compared to what he had immediately available but, if account was taken of his reinforcements en route and the US and Dutch forces, he must have judged it need not rule out carefully planned interventions by *Prince of Wales* and *Repulse* which were superior to any individual IJN units. Nor did it immediately threaten their security in Singapore. The intelligence was also available to Pound and the Naval Staff in London and it may have contributed to his signals of 1 and 3 December suggesting *Force Z* should move away from Singapore. The second signal showed particular worry over the submarine threat which worried Phillips too.⁸⁶

In assessing Phillips' understanding and thinking in these initial days at Singapore, not least in regard to Japanese airpower, there is another important factor neglected in the established historiography. This is the contribution and attitude of Layton as outgoing CinC China. Layton has received a very good press from both Roskill and Marder based primarily on his perceived outstanding performance as CinC Ceylon from March 1942 to 1945.⁸⁷ His performance as CinC Eastern Fleet after the death of Phillips, admittedly with few resources, is perhaps less convincing.⁸⁸ But it is the silence on his input and influence

⁸⁵ An example of the specific inputs which contributed to this orbat is the FECB report dated 15 November stating that the Seventh Cruiser Squadron had left Japan for Saigon. NID 4 correctly commented that this comprised the four heavy cruisers *Kumano, Mogami, Mikuma* and *Suzuya*, but repeated the error that they were armed with 6 inch guns. WO 208/653, TNA. The despatch of the Seventh Cruiser Squadron to join what the Japanese called the "Malaya Force" at this time is confirmed in JM 107, p 4 and 12. ⁸⁶ Marder, p 418, quoting Captain of the Fleet L H Bell.

⁸⁷ Roskill described Layton's appointment as CinC Ceylon as "without doubt one of the best Churchill ever made". *Churchill and the Admirals*, p 203. For Marder's view, see "An Unconventional Officer: Layton", *Old Friends, New Enemies*, Vol 2, p 6 - 10. It is clear Marder relied heavily on a portrait of Layton prepared for him by Doig, who was Layton's Secretary for a total of nine years including all his time in the Far East. His note "Geoffrey Layton" is in the Doig papers at the National Museum of the Royal Navy, Portsmouth.
⁸⁸ Layton wrote a coruscating critique of British performance in the battle for Malaya in a report, "Remarks on the Operations in Malaya and the Defence of Singapore", written in early 1942, which is in ADM 199/1472A. He later expanded on some points in his "Supplementary Report on Events in the Far East 1940 - 45", dated 25 April 1947, which is in ADM 199/1472B. Both files are in TNA. Layton emphasised the failure of London to allocate the resources known to be necessary to defend the Far East, but also widespread failures of leadership, and a disappointing performance by the US Asiatic Fleet especially its submarines. In doing so, however, he raised questions about ambiguity in his own attitude to reinforcement through 1941 as well as his failure to anticipate and address Japanese coastal infiltration which was a naval

between Phillips' arrival and the departure of *Force Z* on its final operation on the evening of 8 December that is striking.⁸⁹

Layton had been in post since September 1940. He knew the Far East area well⁹⁰, knew the IJN and had a high regard for its capabilities⁹¹, had played a key role in the negotiations with the US and Dutch through 1941, and was respected by Hart and his staff.⁹² Layton made little secret of his disappointment at being superseded by Phillips whom he viewed as a staff officer lacking in experience for senior operational command.⁹³ Given Phillips' forceful character and potential sensitivity to being patronised by an Admiral of greater seniority in the Navy List, their relationship and handover would not have been easy at the best of times let alone under the pressure of an imminent war.⁹⁴ It may also have been further complicated by the decision made on Phillips' arrival that, while he would formally assume the new role of CinC Eastern Fleet on 3 December, Layton should remain in post as CinC China, responsible for "local command and administration", for a further week until completion of the British Naval Conference to

responsibility. He also displayed notably poor judgement and poor leadership on at least two specific occasions: his address to the *Force Z* survivors in Singapore on 11 December; and his "I'm alright Jack" departure signal when he decided to abandon Singapore for Colombo on 4 January 1942. Marder, Vol 1, p 488, and Vol 2, p 20.

⁸⁹ It is notable that Doig says very little about this in either his formal notes or his correspondence with Marder. He does confirm that Phillips arrived in Singapore the evening of 29 November. This means he had four full days in Singapore prior to his departure by air to Manila on 4 December. Doig papers, ibid. ⁹⁰ He had been Chief of Staff on the China Station before the war.

⁹¹ Doig's "Geoffrey Layton", Section II, and Marder, Vol 2, p 8.

⁹² James Leutze in his biography of Hart, *A Different Kind of Victory*, at p 196, quotes Hart saying in early 1941: "Vice Admiral Layton has my people's entire liking and respect – as a fine example of the blue water school of the RN. He is direct, frank and forceful. In as much as he holds back on anything to do with long range planning, there is the possibility important decisions may not be reached soon enough". The final sentence reflected the difficulties over practical implementation of the ABC-1 agreement.

⁹³ Marder, p 393 - 4. Layton was not alone in this view. Somerville and Cunningham felt the same. According to Doig, Layton regarded Phillips as a "theorist who clung to his opinions even when all the facts were against him". He also felt he lacked practical experience.

⁹⁴ Goodenough's letter to Roskill of 8 May 1951 offers further evidence that their handover was unlikely to have been a comfortable one. Here Goodenough stated that Far East commanders had failed to appreciate the fundamental change in the strategic picture brought about by the Japanese occupation of southern Indo-China. An attack on Malaya now merely involved a "ferrying operation" rather than a long sea voyage. This seems an outrageous slur that points more to arrogance on the part of Goodenough, and perhaps Phillips, than any failings by Layton or Brooke-Popham. Indo-China certainly gave Japan a good jumping off point with much reduced warning of attack but the most critical problem it brought to the fore was the imbalance of airpower which Far East commanders had constantly stressed and London had ignored. Brooke-Popham had also driven forward Matador which was designed to counter the new risk to northern Malaya. ROSK 4/79, CCA.

develop Pound's post ABD strategy.⁹⁵ The China command would then merge into the Eastern Fleet and Layton would depart.⁹⁶ This temporary division of responsibility meant Layton retained control of FECB, liaison with the RAF on reconnaissance into the Gulf of Siam, and the Dutch submarines lent to his command which would be a valuable asset in detecting and then attacking any convoys heading for the Kra or Malaya once they were declared hostile.⁹⁷

There were three critical issues on which Layton had the expertise and experience, and indeed the duty, to advise and guide Phillips. They were arguably the most important matters for Phillips to address between his arrival in Singapore and his departure for Manila. Yet the historical record on how far Layton offered and Phillips accepted his help is unclear. The silence in the historical record on the level of Phillips' engagement with Layton is matched by an equal silence on his contact with Brooke-Popham. In his 1942 despatch, Brooke-Popham mentions that there was no opportunity for "full consultation" with Phillips before he departed on *Force Z's* final voyage.⁹⁸ Such consultation should also have been a major priority for Phillips and it is hard to believe it could not be arranged during the four days Phillips spent in Singapore before departing for Manila.

The first issue for discussion with Layton (and indeed Brooke-Popham) was the overall intelligence picture. As CinC China, Layton was the beneficiary of the RN's longstanding primacy in Far East intelligence, he supervised FECB and visited it regularly, he oversaw the sigint relationship with the USN at Corregidor in the Philippines, and he received regular reporting from DNI in London and Washington.⁹⁹ It may be assumed that he shared some intelligence insights in private discussion with Phillips but he apparently did not arrange, let alone insist on, a proper professional briefing for Phillips and his staff

 ⁹⁵ AT Senior Officer Force G to Admiralty of 1 December, ADM 234/330, TNA, and Marder, p 393.
 ⁹⁶ He had been appointed CinC Portsmouth, Marder, p 393.

 $^{^{97}}$ Layton, no doubt with his own axes to grind, paints a rather chaotic picture of Admiralty decisions regarding naval command in the Far East in paras 13 – 19 of his "Supplementary Report. Significantly, he states that he believed, and firmly recommended to the FSL, that command should be exercised from ashore because of the sheer size and complexity of the area.

⁹⁸ Brooke-Popham despatch, para 107, CAB 66/28/33.

⁹⁹ In his letter to Marder dated 20 October 1978, Doig states that "both Admiral Layton and myself were in regular, almost constant, contact with Harkness (COIS Far East) and FECB". "You may take it that Layton had all information on the IJN available in the FECB." Doig papers, Royal Naval Museum, Portsmouth.

from the FECB experts.¹⁰⁰ Such a briefing would have tested current assumptions regarding Japanese intentions and underlined the sheer scale of air, surface, and submarine force the IJN could now potentially bring to bear from Indo-China and in the South China Sea. In the event, as noted above, *Force Z* would deploy on 8 December believing the main air threat was from Army bombers in Indo-China when FECB knew they were Navy bombers and torpedo capable.¹⁰¹

The second issue was the implications the latest intelligence posed for existing Far East war plans and the role of *Force Z*. The war plans were enshrined in a document known as PLENAPS which had been updated by Layton as recently as 12 November and defined how the Associated Powers would respond to Japanese action against the Philippines, Malaya or the NEI.¹⁰² If deterrence had failed, as seemed all too likely by 1 December, and a Japanese move into Thailand and the Kra Peninsular, and conceivably Malaya, was imminent, did PLENAPS remain a suitable framework for responding and what were the options for the embryonic Eastern Fleet in the event of conflict? Doig's paper for Layton in early October highlighting the potential exposure of a small force in Singapore was clearly relevant here. Layton later claimed he had never been consulted on the decisions regarding naval reinforcement in autumn 1941 rather implying he disagreed with them.¹⁰³ If this was his implication, he was being somewhat disingenuous. He had been kept well informed of reinforcement plans by the Admiralty as they evolved over the course of the year and, as Doig's evidence demonstrates, had chosen not to intervene.¹⁰⁴ While not consulted specifically on the *Force Z* deterrent concept, given the circumstances in which that deployment was agreed, it aligned closely with the recommendation he and Brooke-

¹⁰⁰ In his letter to Marder dated 11 July 1978, Harkness is adamant he did not meet or brief Phillips. He was also unaware of any contacts FECB had with Phillips' staff though accepted some informal individual contact could have occurred. Harkness' evidence shows that no briefing was set up by Layton which Phillips then declined to take up. Harkness was also not informed that *Force Z* was sailing on 8 December. Harkness confirmed these points to Doig during their correspondence in 1978, Doig papers. ¹⁰¹ Report of Captain L Bell, Captain of the Fleet, ADM 199/1149, TNA.

¹⁰² PLENAPS stood for "Plans for the Employment of Naval and Air Forces of the Associated Powers".

They were based on agreement reached by the British and Dutch in April 1941 but also took account of the likely deployment of US forces in the event of US war with Japan. AIR 23/1873 and ADM 1/11926, TNA. ¹⁰³ Layton, "Remarks on the operations in Malaya and defence of Singapore", para 14.

¹⁰⁴ For example: in a letter to Layton from Pound dated 15 September 1941, advising of the intent to move the *R*-*class* together with *Rodney* and *Nelson* into the Indian Ocean, Layton papers, British Library; and earlier in signals such as AT 927 of 13 May and AT 666 of 4 April, both from Admiralty to CinC China. ADM 116/4877, TNA.

Popham had put forward to the COS earlier in October.¹⁰⁵ He had also played a central role in the ADB negotiations and no obvious differences had emerged during these between him and the Naval Staff. Where he did perhaps have cause for complaint was over the Admiralty's new offensive strategy. Here he does not appear to have been properly informed.¹⁰⁶ However, the immediate issue for discussion between Layton and Phillips on the latter's arrival was the role and vulnerability of *Force Z* and the existing China fleet assets if the Japanese triggered hostilities before any further reinforcements arrived.

Layton had been able to monitor the Japanese air build-up in Indo-China through FECB during November; he had experienced the impact of German bombing off Norway in 1940, and must have had clear views on how far the evidence of growing IJN air strength would curtail operations in the South China Sea. He also had a good picture of the surface forces the IJN could commit to the South and their capability. Against this background, the historian may argue that there were only ever three choices for *Force Z*, once it reached Singapore, namely those put by Phillips at his pre-sailing meeting on 8 December. These were to hold fast in Singapore awaiting reinforcements; to retreat to Ceylon or Australia; or to mount judicious raids against Japanese attacking forces.¹⁰⁷ Although this last option was arguably in accord with the principles of PLENAPS, it is tempting to argue that Layton would have seen the hazards it posed for *Force Z* more clearly than Phillips. Layton was subsequently wont to suggest this without ever quite committing himself.¹⁰⁸ It is a short step then to imagine Layton might have encouraged Phillips to get *Force Z* back to Ceylon as soon as possible even though there is no evidence that he did.

Such reasoning overlooks three important things that historians take for granted in judging the naval outlook in Singapore in early December but which Layton and Phillips did not

¹⁰⁵ CinC FE tel of 1 October, JP (41) 816 of 7 October, ibid.

¹⁰⁶ He was not copied on Pound's signal to Stark of 5 November proposing the post ABD policy whereas Phillips as SO Force G was.

¹⁰⁷ See Middlebrook and Mahoney, *Battleship*, p 105 – 106, and Marder Vol 1, p 414.

¹⁰⁸ Layton would later suggest to his staff, though significantly not to Pound, that he disagreed with Phillips' decision to deploy *Force Z* on 8 December. For his criticisms of the deployment, see Marder, p 423 and 488. By contrast, his letter of 18 December 1941 to Pound stated he would have done exactly the same as Phillips but only if air cover was definitely available. Layton papers, British Library.

know. These were, first, that the Far East Command would fail to execute Operation Matador, the plan to pre-empt the Japanese by seizing the strategically vital Kra Isthmus before they did.¹⁰⁹ Second, that the deterrent value of the US Pacific Fleet would be removed by the attack on Pearl Harbour. And, third, that the substantial modern submarine force of the US Asiatic Fleet, on which Layton clearly set much store, would completely fail to inflict any damage on the IJN.¹¹⁰ Had Matador been successfully executed, had the Pacific Fleet remained as a factor on the Japanese flank, however distant, and had the Asiatic Fleet submarines started laying into Japanese convoys, all of which Layton and Phillips could reasonably anticipate as possibilities from their vantage point at the beginning of December, then the case for Force Z holding its position at Singapore, as the nucleus of a "fleet in being" and meanwhile ready to make judicious interventions looks more credible. Phillips with the experience and authority of an ex-VCNS could indeed reasonably argue that, in terms of capital units, with Revenge already in the Indian Ocean, and with US forces to throw into the balance, his position in Singapore was little different to that of the Mediterranean Fleet at Alexandria in mid-1941 following the losses at Crete, and no more vulnerable. It is unlikely Layton would have seen matters differently and argued against a Phillips assessment that there was time to consider the options for *Force Z* once it arrived. There were indeed always three options Facing *Force* Z but historians have not sufficiently acknowledged that the balance of argument between those options looked very different on 1 December from that a week later.

The third area where Layton's advice was important to Phillips was the relationship with the Americans and the forthcoming meeting with Hart to negotiate new post ABD plans which had been a key factor in hastening *Force Z's* passage to Singapore. The Americans had refused to endorse ABD-2 for the same reasons they had rejected ABD-1.¹¹¹ They were not convinced the RN was willing to make a serious commitment to the forward

¹⁰⁹ The concept for Matador, the reasons it was not finally implemented, and the lost opportunity it represented, is discussed exhaustively by Ong Chit Chung, ibid.

 $^{^{110}}$ Layton's expectations of the US Asiatic Fleet and his subsequent disappointment are set out in paras 25 and 26 of his "Supplementary Report", ibid, in ADM 199/1472B, TNA. Doig also emphasises this in his "Geoffrey Layton", Section II. ¹¹¹ The text of ADB-2 is available in CAB 122/8.

defence of the Malay Barrier and, without this, in their view the whole Far East area would collapse under Japanese attack. In consequence they had refused to place the Asiatic Fleet under RN strategic direction as agreed in ABC-1.¹¹² The picture had now changed radically following Pound's mid-November exchanges with Stark but also British endorsement of the US decision to hold the Philippines. The recent developments had, however, created considerable confusion over the role and status of the Asiatic Fleet. In September, Hart was planning in the event of war to fight a defensive battle north of the Barrier operating from Balikpapan in Borneo and Singapore broadly in accord with ABD-2 principles. By end October, in a dramatic change of plan, he had decided to concentrate all his forces in the Philippines, and was even contemplating more offensive operations under MacArthur's air umbrella, only to have these proposals rejected by Stark.¹¹³ The end of November therefore found his fleet evenly divided between Manila and Balikpapan and no coherent strategy agreed with Washington.¹¹⁴

It seems likely that on 1 December, neither Layton nor Phillips had a complete picture of recent developments in London, Washington, and Manila since neither had received all the relevant signals. It should, however, have been clear to them, if they pooled their knowledge, that there were three pressing questions to address with Hart if war was now imminent. In the light of the latest intelligence, these questions took priority over Pound's plans for a new ABC-1 based understanding on Far East naval defence built around all the planned British and US reinforcements available by March 1942. The immediate questions were: whether Hart (and MacArthur) judged it possible to hold the Philippines with existing forces; whether the existing Eastern Fleet of *Force Z* plus and the Asiatic Fleet could possibly keep open communications between Singapore and Manila; and, most important of all, confirmation that, if the Philippines could not be held, Hart would retire his forces south-west to Singapore.¹¹⁵

¹¹² See Naval Staff History, ADM 234/384, TNA.

¹¹³ See Leutze, *A Different Kind of Victory*, p 211 – 221, for a well sourced account of these shifts in policy and plans.

¹¹⁴ AT BAD to Admiralty 373 of 1 December, CAB 122/9, TNA.

¹¹⁵ In the event, Hart failed to do this much to Layton's disappointment and anger, Layton "Supplementary Report", ADM 199/1472B.

Phillips' meetings with MacArthur and Hart on 6 December receive surprisingly little attention in the historical coverage of the controversies around Far East naval reinforcement in 1941 and the loss of *Force Z*. This partly reflects the limited records, which are virtually all on the US side, but more a view that the substance of the talks was completely overtaken by the Japanese attacks the following day and therefore had no real bearing on subsequent events.¹¹⁶ The meetings, however, deserve more scrutiny for two reasons. First, they represent the culmination of the Admiralty's offensive strategy initiated in Phillips' office on 30 September and expose the flaws in that strategy. Second, they offer a good insight into Phillips' thinking and priorities in these final days of his life.

Phillips' immediate priority, as it appeared to Hart, was to secure the transfer of the two divisions of US destroyers to support the Eastern Fleet as promised by Stark the previous month.¹¹⁷ Phillips argued that the US had made a clear commitment to provide these destroyers in the event of war with Japan and this now seemed imminent. If Japan attacked, he intended to take his battle-fleet north from Singapore to counter any landings and needed the destroyers to protect it. Hart initially hedged on destroyers and would only make a provisional commitment to release one division from the two currently based at Balikpapan.¹¹⁸

Looking more widely, the Admirals agreed the initiative would lie with Japan in the early stages of a war and this rendered precise Allied planning difficult. They nevertheless agreed on initial dispositions which should take effect in the event of imminent hostilities. These aimed at countering the most likely offensive actions and preventing IJN movement through the Malay Barrier which they judged "of great importance". The proposed

¹¹⁶ Hart completed a detailed record "Report of the Conference in Manila 6 December 1941" which is in the Hart Papers at the US Navy Operational Archives. His summary signal to Stark and Stark's reply are in the Joint Committee on the Investigation of the Pearl Harbor Attack, Part 4, p 1930 -1936. This was presented to the Committee during their session with Turner as Head of War Plans at the time. Turner provides some additional and useful context. Leutze includes relevant extracts from Hart's diary in his account at p 224-225 of his biography. Marder, Cowman, and Leutze offer the best accounts of the conference but none are comprehensive.

¹¹⁷ Ghormley letter to Pound of 7 November, ADM 205/9.

¹¹⁸ Leutze, *A Different Kind of Victory*, p 225. Hart did in fact release these four destroyers to Phillips before they parted on the afternoon of 6 December following the news that a probable Japanese invasion convoy had been sighted by RAF reconnaissance in the Gulf of Siam. The four destroyers reached Singapore on 9 December and met the surviving *Force Z* destroyers at sea the following afternoon.

deployments broadly reflected the framework already agreed under PLENAPS but took account of the new RN reinforcements. The key RN contribution would now be the Eastern Fleet battle-fleet based in Singapore which would operate as a striking force against Japanese moves into the South China Sea, against the NEI, or through the Barrier. Phillips told Hart he expected to have four capital ships available before the end of the month, Revenge and Royal Sovereign joining Force Z, but no carrier before spring 1942.¹¹⁹ In addition to the Singapore battle-fleet, two other forces would be deployed to meet the expected Japanese attack: a cruiser group based at East Borneo and the US submarine fleet which would remain based in the Philippines. Further light forces would protect the waters of Australasia and the Indian Ocean. The Admirals also agreed that, as reinforcements arrived, more offensive operations would become possible and these would be better conducted from Manila which should be developed to accommodate the RN Eastern Fleet by 1 April.¹²⁰ Hart recorded he was impressed by Phillips who seemed offensively minded and genuinely determined to contribute serious RN forces to holding the Barrier. However, he thought the primary RN goal was still protection of strategic communications in the Indian Ocean and the tendency to disperse forces to achieve this had not disappeared.¹²¹

The formal report and recommendations from the meeting hardly amounted to a coherent joint strategy for the Far East naval area and certainly fell well short of the elusive "joint operating plan" which had been pursued ever since the conclusion of ABC-1. The outcome is best described as a commitment to work together, a series of rather broad aspirations, and an initial distribution of forces which the Admirals hoped would achieve these. There are two striking omissions from the record. The first is any attempt to set their aspirations and forces against current IJN capability and intent. Given the latest intelligence regarding the Southern Task Force, on which Hart¹²², if not Phillips, was well sighted, was it really possible to contest a seaborne invasion force against either the Philippines or the Kra Isthmus with existing forces as opposed to those available by

¹¹⁹ Thus confirming he did not expect *Indomitable*. Chapter Six refers.

¹²⁰ Admiral Hart's summary telegram of this meeting sent to US CNO Fleet Admiral Stark and passed by him to Pound is in the *Joint Committee on the Investigation of the Pearl Harbour Attack*, Vol 4., p 1930-36. ¹²¹ Leutze, *A Different Kind of Victory*, p 225.

¹²² For Hart's interest in and handling of intelligence, see Leutze, p 207.

March 1942? The second omission was any reference to the air balance which would clearly be crucial to effective operations in the South China Sea. PLENAPS, as a naval and air plan, had made some effort to address this but recent Japanese reinforcements in Indo-China were clearly changing the picture rapidly. A further issue that was either not addressed or not resolved was where Hart would withdraw with his remaining forces if the Philippines could not be held. His failure to support Layton at Singapore would prove contentious later.¹²³ Despite these omissions the Conference recommendations were approved by Stark as CNO on 7 December as the IJN was moving in on Pearl Harbour. Pound's response would be overtaken by events.

From the British perspective, the conference recommendations gave initial practical effect to the offensive strategy which the Admiralty had been developing since late September. Phillips not only confirmed the RN was committed to building up a battle-fleet at Singapore capable of operating forward in the South China Sea but he also made clear he would remain at Singapore while he awaited reinforcements. His whole stance at the meeting suggests he never seriously contemplated withdrawal to the Indian Ocean or to Darwin. Despite Pound's earlier caution, his final exchanges with Phillips following the conference and indeed the outbreak of war suggest he too remained committed to concentrating the *R*-class and whatever cruisers could be spared with *Force Z* at Singapore.¹²⁴ Phillips' plea to Hart for the immediate release of US destroyers so that he could intervene against any Japanese landings, by implication even with his current limited force, was also highly significant. It suggests his decision to sortie on 8 December reflected the offensive approach he had favoured since September and was not just a reaction to immediate events.¹²⁵

In the light of subsequent events, it is difficult to understand how Phillips left the conference on 6 December, as he clearly did, convinced that forward deployment in defence of Malaya and the wider barrier was viable even with the existing balance of

¹²³ Leutze describes the controversy here at p 236-237. See also Doig's view in "Geoffrey Layton", Section II, p 1.

¹²⁴ Text of signals given by Nicholson, *Hostages to Fortune*, p 208 (No 37), and p 213 (No 46).

¹²⁵ He confirmed his intention to intervene as the meeting broke up on the afternoon of 6 December following the news that the Japanese convoys had been sighted. Leutze, p 226.

forces. Possibly he was influenced by bombastic guarantees from MacArthur and he would have taken the containing role of the US Pacific Fleet into account too.¹²⁶ However, it is also important to recognise that, on paper, the combined ADB^{127} forces which the Admirals expected to have available by end December looked significant. Excluding the forces committed south and west of the Barrier, they comprised: three battleships, one battle-cruiser, four heavy cruisers, five light cruisers, 24 destroyers and 40 submarines.¹²⁸ In total, this appeared a credible counterweight to the IJN Southern Task Force especially when US air reinforcements in the Philippines were added to the balance. There were, however, important flaws in a paper balance based on "bean counting". First, with the notable exception of Prince of Wales, and in theory the US Tambor class submarines, the Allied units were outclassed by their IJN counterparts in both capability and in some cases fighting efficiency. Second, both the putative Eastern Fleet itself and its US and Dutch Allies were a heterogeneous mix that had not trained together and were thus ill matched for joint operations. Contesting the Barrier against IJN surface forces depended heavily on the credibility of the Singapore battle-fleet strike force. Yet, as indicated earlier, the *R*-class were quite unsuited to this role and equally unsuited to operating with Prince of Wales and Repulse where they had a speed deficit of 10 knots.¹²⁹ Third, the US submarine force, of which much was expected by RN commanders, would prove totally ineffective in its first months of combat achieving no useful results against the IJN. Finally, and most important, the assessments and dispositions of 6 December woefully underestimated the Japanese ability to achieve rapid air supremacy and to conduct long range maritime strike.

As emphasised earlier, Phillips could not know that the US submarine force would prove ineffective or that the US Pacific Fleet and MacArthur's air force would both be removed from the board in short order by the Japanese. He should, however, have displayed more

¹²⁶ For MacArthur's attitude, see Bartsch, *December 8 1941, MacArthur's Pearl Harbor*, p 193. See also Costello, *Days of Infamy*, p 148.

¹²⁷ American/Dutch/British.

¹²⁸ These were to be distributed as follows: At Singapore: three battleships, one battle-cruiser, one heavy cruiser, four light cruisers, 20 destroyers, four submarines; East Borneo: three heavy cruisers, one light cruiser, four destroyers; Manila: 29 submarines; NEI: seven submarines; Australasia: one heavy cruiser, two light cruisers; Indian Ocean: one heavy cruiser, ten light cruisers.

 $^{^{129}}$ The designed speed of the *R*-class was 21 knots but, by this time, most of them struggled consistently to deliver 18 knots.

awareness of the limitations posed by the *R*-class and the lack of modern vessels amongst his cruisers and destroyers. His attitude to the Japanese air threat is examined in more detail below but he showed little sign in Manila that he saw this as a serious constraint on his ability to operate forward in the South China Sea. It is conceivable that Phillips saw his position and prospects as not dissimilar to that facing Cunningham when he had sortied from Alexandria in July 1940, immediately after the outbreak of war, to challenge Italian communications with Libya in the Central Mediterranean and had fought the successful action off Calabria despite severe Italian bombing. The IJN was a much more formidable opponent, as Phillips would certainly have accepted, but this was in theory offset by the overall US contribution so the analogy still had some validity at least in bolstering the case to stay in Singapore. In reality, given the speed and scale of the Japanese attack and the limitations of Allied airpower after the destruction of MacArthur's air assets, it is impossible to envisage scenarios where Phillips and Hart could ever have successfully challenged a Japanese attack on Malaya or the Philippines. Their only real hope was to secure communications to Australia and the Indian Ocean and to slow the Japanese advance through judicious raids beyond the reach of their airpower buying time for reinforcements.

Given its presence in Singapore when the Japanese attacked Malaya in the early hours of 8 December, it would have been immensely difficult for *Force Z* to stand idly by with a seaborne invasion underway in the north which the RN had spent two decades planning to counter.¹³⁰ But it was even harder for Phillips to stand aside, given his commitment to the offensive policy north of the Barrier and the attitude he had displayed in his discussions with Hart. As ex-VCNS, he would also have been acutely aware of the potential damage done to Britain's defensive prospects in northern Malaya by the decision not to execute Operation Matador. There were also more personal factors which should not be underestimated. Phillips had been relentless during his time as VCNS, along with Churchill and Pound, in hounding senior commanders who were judged to have failed to

¹³⁰ GCHQ's post war assessment of "war warning" intelligence states that Hong Kong intercepted the Japanese "Winds Execute" message advising diplomatic posts of imminent hostilities against the US and Britain at about 2300 (local) on 7 December. FECB was immediately informed by priority signal and duty staff there informed the COIS and CinC China. They therefore had about two hours advance warning before news arrived of the landings in Northern Malaya. HW 50/52, TNA.

"engage the enemy more closely".¹³¹ Knowing the scepticism in some quarters over his appointment, this was not a charge he would have been willing to bring on himself. He would have wanted to prove he was a "fighting Admiral" as well as a highly regarded staff officer.

Several historians have focused here on the Admiralty signal to Phillips on 7 December asking what action might be taken against the Japanese convoys sighted the previous day if they were confirmed to be heading for Thailand, Malaya or the NEI.¹³² They have interpreted this as a typical Churchill inspired "prodding" signal "something must be done" and argue Phillips would have read it as a spur to action. Despite its attractions to those wedded to an anti-Churchill line, this signal must be placed in the context both of discussions in London and other guidance sent to Phillips. Exchanges between the PM and COS demonstrate that they were agreed it was militarily advantageous to attack the convoys at sea but both were also aware of the political risks in any pre-emptive action and the need, above all to ensure US support.¹³³ Following clarification of the US attitude, the Admiralty sent Phillips updated guidance on rules of engagement. These authorised him to respond to any Japanese attack on British, US, Dutch or Thai territory but to await further instructions on pre-emptive action at sea.¹³⁴ As London wrestled with its options, it was perfectly reasonable for the Admiralty in its first signal to seek Phillips' views on what seemed possible on the ground.¹³⁵ It is also unlikely Phillips needed any "prodding". Given his comments in Manila, it seems likely he returned already disposed

¹³¹ Two well-known examples are; the criticism of Somerville for not pursuing the Italian Fleet during the action off Cape Spartivento in November 1940; and the criticism of Rear Admiral Frederick Wake-Walker and Captain John Leach of *Prince of Wales* for breaking off the action with *Bismarck* after the sinking of the *Hood* on 24 May 1941. For Somerville, see Roskill, *Churchill and the Admirals*, p 169-170. For Wake-Walker, Ludovic Kennedy, *Pursuit: The Sinking of the Bismarck*, (London: William Collins, 1974), p 224. ¹³² See Nicholson, *Hostages to Fortune*, p 202, No 19, for a copy of this signal.

¹³³ See the COS note to the PM of 6.15pm on 6 December and the PM note clarifying potential rules of engagement after consultation with the Americans of 12.30 pm on 7 December. PREM 3/158/6, TNA. ¹³⁴ See Nicholson, *Hostages to Fortune*, p 206, No 28, for a copy of this signal. The promised further instructions on action against convoys at sea were never sent since the requirement was overtaken by the Japanese landings. This signal reflected instructions from the PM that Phillips should be kept informed of the wider political context and exchanges with the Americans. PM note of 12.30pm on 7 December, PREM 3/158/6.

¹³⁵ The COS note of 6.15pm on 6 December shows that Pound was aware *Prince of Wales* was in dock and that *Repulse* was absent from Singapore. There were therefore clear limits on Phillips' immediate ability to act against the convoys. PREM 3/158/6.

to intervene against any landings.¹³⁶ What the exchanges between the PM and COS do, however, demonstrate unambiguously is that they assumed action against the convoys was militarily feasible with the existing British naval and air forces based in Malaya if the political constraints could be addressed.¹³⁷ It followed that, once the Japanese landings began early on 8 December, Phillips could reasonably assume London would expect him to retaliate against the expedition if he judged the risk benefit equation made sense. Churchill's post war claim that Phillips' subsequent sortie on 8 December was contrary to the wishes of the Defence Committee was distinctly disingenuous.¹³⁸

It is indeed unlikely that any RN Admiral on the spot, faced with the circumstances on 8 December, would have stayed in port or retreated and the official Admiralty report into the loss of *Force Z* recognised this.¹³⁹ Others would probably have adopted a similar plan for intervention to Phillips although they might have executed it differently. The senior RN officers who later criticised Phillips have not been entirely convincing because they have usually failed to distinguish between the situation on 8 December and different decisions that might have been made before the outbreak of war. Thus, Somerville, Godfrey and Willis¹⁴⁰ all suggested they would have avoided being in Singapore in the first place by

¹³⁶ Or against convoys at sea if he received political clearance.

¹³⁷ A COS note sent to the PM on the afternoon of 7 December but overtaken by news of the Pearl Harbour attack included the language: "from the purely military point of view, we should like to attack a Japanese expedition before it reached its objective" so long as the "weight of attack is sufficient to make firing the first shot worthwhile". There is no indication here that either Pound or the other COS considered an attack by Force Z on the convoys transiting the Gulf of Siam, which they knew were escorted by powerful IJN surface forces, and should have known would have good air cover too, an unacceptably risky proposition. COS note of 7 December returned without being shown to the PM, PREM 3/158/6, TNA. ¹³⁸ In 1953, Churchill was shown Roskill's initial draft of the War at Sea Vol 1 which claimed he had overruled the Admiralty in demanding the deployment of Prince of Wales to Singapore. In a minute to his naval assistant Commodore Allen, he rejected the charge of political interference and insisted that the purpose of Force Z was deterrence and that, on arrival at Singapore, the intention was that the force should "disappear" in the Malay Archipelago. He added: "The last thing in the world that the Defence Committee wished was that anything like the movement which Admiral Phillips thought it right to make to intercept a Japanese invasion force should have been made by his two vessels without even air cover". PM minute M 265/53 dated 11 August 1953, ROSK 6/26, CCA. This was a highly selective account. It was true that the Defence Committee, when it met on the evening of 9 December, favoured "disappearance" but no final decision was made. Phillips knew nothing of this meeting. What he did believe, quite correctly, was that two days earlier London appeared keen to exploit any opportunity for bold intervention against a Japanese expedition. ¹³⁹ ADM 199/1149, TNA. So did the brief prepared for the First Lord's secret session statement on 19 December although admittedly this had a defensive purpose politically. ADM 1/11043, TNA. ¹⁴⁰ Willis was CinC South Atlantic at this time and would become deputy to Somerville as CinC Eastern Fleet in early 1942. As already noted in footnote 22, he met Phillips at Freetown during Prince of Wales' passage out. Marder states (p 499, Vol 1) that Willis advised Phillips to withdraw westward to Ceylon in the

halting at Ceylon or going to Darwin.¹⁴¹ The previous chapter has demonstrated that there was indeed a strong case for holding *Force Z* at Ceylon but the critics invariably display too much hindsight and ignore the powerful Admiralty momentum built up by November for fleet concentration at Singapore. Some senior RN critics argued that Layton would have halted *Force Z* short of Singapore or sent it away. The evidence in this chapter and the previous one demonstrates that Layton had ample opportunity to present such arguments but did not do so. He was also certainly consulted by Phillips on the morning of 8 December and there is no evidence he argued against the sortie although he later insisted to Pound that he underlined the need for fighter support.¹⁴²

Phillips knew he was taking a calculated risk in seeking to disrupt the landings. His willingness to intervene ultimately depended on three things: fighter cover; surprise; and bad weather. Marder explored the balance of argument for intervention and the thinking behind Phillips' plan in exhaustive detail and no subsequent historian has added significantly to the core thread of his analysis or challenged his interpretation. The question therefore is whether any new information is now available that changes Marder's portrayal of events or his judgement of Phillips' decisions. The most obvious candidate here is the intelligence picture where, as already demonstrated above, there is now a more rounded understanding, especially of FECB. If Phillips had known everything FECB did on 8 December, would he have acted any differently? He would clearly have been more anxious about the scale of air attack and above all the threat of torpedo bombing during the long retirement from an engagement at Singora. He was still willing to continue the operation after receiving a signal from Palliser early on 9 December confirming there

event of war. The account Willis wrote in 1966/67 states that he told Phillips "he must avoid getting caught" at Singapore since it was "not a fleet's job to defend its base". He should therefore "disappear among the islands". As stated elsewhere, the phrase "disappear among the islands" is convenient, especially with hindsight, but also meaningless. *Force Z* had to base somewhere and, if not Singapore, that meant Ceylon or Darwin. Willis papers, IWM.

¹⁴¹ Marder has a good summary of the various positions taken by the critics and the wider arguments around Phillips' decision to intervene on 8 December at p 498 – 504 of Vol 1. As Chapter Eight will demonstrate, a strong case can be made that Somerville took rather greater risks in his actions off Ceylon in April 1942 than did Phillips off Malaya. Somerville had less excuse because IJN potential was by then clearer and he had much more at stake namely the loss of a major fleet as opposed to a task force.

¹⁴² In a letter to Pound dated 18 December, Layton said he spoke to Phillips twice about the proposed sortie during the morning of 8 December. He claimed he told Phillips that "if I were in his shoes I should do the same as he was going to do but I should not start on it unless the RAF would guarantee reconnaissance and fighter protection". Layton papers, British Library.

would be no fighter support. He did so in the belief he still had surprise and he also had the benefit of bad weather.¹⁴³ Once it was clear surprise too was lost, he aborted the operation late on 9 December because he rightly judged the risk equation had completely turned against him. The landing ships would have gone and he would face concentrated attack from fully alerted air and surface forces. Would access to FECB's full intelligence have caused Phillips to call off the whole operation earlier on receiving Palliser's signal? It is impossible to say with certainty. However, the signal conveyed a bleak picture of a fast deteriorating situation and the suggestion Japanese bomber forces were now operating from Thailand. Awareness of the scale of the torpedo threat, even if aircraft range was underestimated, and that he was facing trained IJNAF crews specialising in maritime attack, could well have made the difference here.¹⁴⁴ If it had turned back at this point, *Force Z* would have been back in Singapore late on 9 December.

Once Phillips decided to stand on during 9 December, better intelligence on the torpedo threat would probably not have altered the subsequent decision to go to Kuantan after he had turned back. Even with better knowledge of potential IJNAF strike range, prevailing war experience from Europe and the Mediterranean would still have argued that *Force Z* was now too distant at 450 miles from Indo-China to be at unacceptable risk.¹⁴⁵ It might,

¹⁴³ Captain L H Bell, the Captain of the Fleet, testified to Marder in 1978 that, when Phillips received Palliser's signal, he and the staff decided to discard Singora as a target because it would add up to four hours to the time the force was exposed to air attack during its withdrawal. Phillips was still, however, prepared to attack Kota Bharu if he still had surprise and perhaps bad weather. If this testimony is true, it helps to explain Phillips' willingness to continue. It would also demonstrate careful thought about how the risk of air attack might be managed. However, the signals Phillips transmitted to *Force Z* during the afternoon of 9 December, more than 12 hours after Palliser's signal, show that Singora was then still the target. Bell also stated that Singora was the target in his immediate post action report. It is clearly possible there was some discussion about switching to Kota Bharu but Bell's 1978 letter has to be regarded as unreliable. Marder, *Old Friends, New Enemies*, Vol I, p 429 – 430. If there was debate over the relative merits of Singora and Kota Bharu, it is worth noting that the landing force at the former was much larger, ten transports compared to three, and the strategic impact of a successful landing there was much greater. Phillips and his team, however, are unlikely to have known this.

¹⁴⁴ Bell claimed to Marder that Singora involved an extra 120 miles, or four hours, exposure to air attack compared to Kota Bharu. That is probably a significant underestimate.

¹⁴⁵ The Admiralty briefing paper prepared for the First Lord's secret session statement on 19 December certainly endorsed this as a reasonable assessment. ADM 1/11043, TNA. This assessment was not solely an issue of the theoretical strike range of an armed aircraft as some historians imply. It also reflected the increasing difficulty, as range increased, of finding and fixing an enemy force sufficiently accurately in the first place to enable the strike to take place. In 1941, in the absence of radio fixing aids or radar, navigating over sea to find a force at 450 miles was a demanding proposition. The IJN search plan on 10 December

however, have persuaded Phillips to ask for air cover when he was first detected on the morning of 10 December which just might in turn have saved his force.^{146 147} As regards the surface threat, *Force Z* sailed with a reasonably accurate picture of the IJN forces. This derived from the visual sightings of the troop convoys and their escorts on 6 December, some additions and clarifications through traffic analysis by FECB, and further RAF reconnaissance on 9 December.¹⁴⁸ The RN force was heavily outnumbered but Phillips no doubt judged that speed, radar and superior firepower offered a good chance of inflicting more damage than he would receive in any engagement between warships. Given the available intelligence, such a judgement still seems fair with the benefit of hindsight. There were nevertheless two important things British intelligence and therefore Phillips did not know: the presence of a second *Kongo* battle-cruiser; and the existence of the Long Lance torpedo capability. If he had been able to weigh these factors too alongside the more accurate picture of the air threat, then the whole risk/benefit equation would have looked unfavourable turning him against the operation.

Marder presents a fair summary of the arguments for and against the *Force Z* sortie, in the immediate circumstances prevailing on 8 December. In essence, he balances the possibility of doing significant damage to the Japanese landing operation against an air threat that was recognised but believed to be manageable. He sets out the likely rationale for each of Phillips's tactical decisions and how they can be defended but stops short of a

was well planned and professionally executed but they did not find *Force Z* easily so professionalism was mixed here with a significant doze of luck. See Marder, Vol 1, p 462-463.

¹⁴⁶ Historians take different views on what would have happened if fighters from Singapore had arrived before the first critical torpedo attack on *Prince of Wales*. Marder (p 480 – 481, Vol I) argues the fighters would have made little difference to the final outcome. Middlebrook and Mahoney believe they would possibly have been effective in limiting the damage. The most positive view of the impact of fighter intervention is in Nicholson, p 150 - 151. He notes the parallel with a USN action on 20 February 1942 when 15 of 17 IJN Betty bombers were shot down by a force of Wildcats broadly equivalent to the RAF Buffalo force off Kuantan.

 $^{^{147}}$ One other point deserves mention here. The IJN was very short of torpedoes and only had sufficient in Indo-China to allocate one weapon per aircraft. They were thus operating to a very fine margin and were effectively committed to a one shot attack. If the IJN attack squadrons had failed to inflict significant torpedo damage on *Force Z* as a consequence of fighter interference, adequate AA fire, and manoeuvre, there would have been no second chance. See: Masatake Okumiya and Jiro Horikoshi, *Zero*, (USA: Ballantine, 1957), p 79; and Middlebrook and Mahoney, p 143.

¹⁴⁸ There is a summary in the Appendix to the First Sea Lord's report on the loss of Force Z, ADM 199/1149. The most important FECB addition to the convoy sightings was the battle-cruiser *Kongo*. FECB did not, however, spot the presence of her sister ship, *Haruna*. See Hillgarth and Barrett memorandum, ADM 223/494, ibid.

firm overall judgement on his risk assessment. Many other historians have been less cautious. Roskill, Barnett, and especially Middlebrook and Mahoney, while sympathising with his predicament and recognising the pressures to intervene, all argued in different ways that Phillips' actions reflected his persistent tendency to downplay the air threat at sea and ignore lessons from the war to date.¹⁴⁹ The implication here is that other Admirals would have weighed the risks differently. There are two points to be made in response. First, the case that Phillips had a general disregard for the air threat after two years of war from the vantage point of VCNS and that he did not regard it as a critical factor in conducting naval operations is not convincing. The evidence produced in support of this claim invariably attributes views to Phillips that were either expressed long before 1941 or have been lifted out of context.¹⁵⁰ Phillips had regularly pressed for Hurricanes to be deployed to Singapore during 1941 against PM and RAF resistance. And he showed keen awareness of the air threat in considering the viability of Manila as a base during his discussions with Hart on 6 December.¹⁵¹ Second, if an attempt at intervention was virtually obligatory in the circumstances of 8 December as the Admiralty report agrees, then the only criticism of Phillips that holds up, and it is one Pound acknowledged¹⁵², is his failure to seek air support off Kuantan on 10 December once he knew he had been located at 1015 that morning. Here Phillips seems to have held an excessive belief in the value of continued radio silence against what he judged was a very low risk of air attack given his range from Indo-China. Other Admirals might well have called this differently.153

¹⁴⁹ See: Roskill, *Churchill and the Admirals*, p 198 -201, and *The Navy at War 1939 -1945*. However, Roskill was not always consistent in his view of Phillips. Writing to Phillips' son in 1962, he stood by the claim that had played down the dangers of air attack during the Norwegian campaign but accepted that "by the time he got to Singapore, he was fully alive to the realities of the air threat". ROSK 4/79, CCA. Also: Middlebrook and Mahoney, p 304 - 305; and, Barnett, p 411 - 412.

¹⁵⁰ Marder gives a detailed and balanced picture of the evolution of Phillips' views on the air threat at sea at p 386-388 of Vol 1. He draws on key witnesses such as Goodenough and Willis to demonstrate that, by 1941, he held no illusions about the serious risk posed by air attack. Martin Stephen in *Scapegoat*, chapter 3, also insists Phillips was realistic about the air threat. Although he is a distinctly partisan supporter of Phillips, his summary of the evidence here is fair although he does not add significantly to Marder. ¹⁵¹ Bartsch, p 193.

¹⁵² ADM 199/1149, ibid., and Marder Vol 1, p 503.

¹⁵³ Middlebrook and Mahoney, p 306, argue that, if Phillips had called for air support immediately after the 1015 sighting, fighters would have arrived before the first fatal torpedo attack on *Prince of Wales*.

The real charge against Phillips is not what he did between 8 and 10 December but his major role first as VCNS, and then CinCEF designate, in placing an inadequate force in Singapore in the first place. There were two related failings here both shared by Pound who must carry ultimate responsibility. The first was the Admiralty decision, taken in early October, and strongly promoted by Phillips, to deploy a battle-fleet forward at Singapore rather than Ceylon to contest control of the South China Sea in the same way that the Mediterranean Fleet had guaranteed the Eastern Mediterranean during 1940 -1941. As argued in the previous chapter, this decision might have been defensible, if not wise, had it been part of a carefully concerted series of joint moves involving additional British air reinforcements and coordination with the US build-up in the Philippines. This collaboration did not take place. The Admiralty decision was taken in isolation and preempted the other reinforcements required to make the proposed Eastern Fleet either an effective deterrent or an effective operational capability. The second failing which compounded the first was the inappropriate composition of the planned Eastern Fleet. It was built around the *R*-class which the Admiralty had previously judged quite unsuited to face the Japanese and the plans included no firm commitment to the modern carrier element that would have been seen as essential in the Mediterranean and was even more necessary in the East given what was known of the IJN. These failings reflected a mindset on the part of Phillips and Pound, borne out in the discussions with Hart, which led directly to the exposed position of *Force Z* when the Japanese attacked. Taken together, they represented a classic failure of risk management. The risks in pre-emptive forward deployment had no credible benefit to offset them. Such deployment made no practical difference to US support in the area, the composition of the force was not likely to deter Japan, and it was not capable of engaging the scale of force she would send south. There was sufficient intelligence in London and Singapore throughout the autumn to demonstrate the level of risk in pre-emption and the superiority of force the Japanese could bring to bear.

The Admiralty response to the loss of *Force Z*

The fundamental flaws in the autumn strategy are brought into sharp relief when viewed against the Admiralty's response to the loss of Force Z and the wider Japanese successes in the first days of the war. Following the sinkings, Britain's immediate naval position in the Far East looked dire. Naval forces east of Cape Town comprised the un-modernised *Revenge*, the rest of the *R*-class slowly heading for the Indian Ocean as they came available, the old light carrier *Hermes* of little military value, a significant force of cruisers, albeit widely dispersed across the theatre, a mere handful of destroyers, many old and in a poor state of efficiency, and negligible land-based air support.¹⁵⁴ The RN could exert minimal influence over the Japanese advance in South East Asia and do little in the short term to stop forays into the Indian Ocean if the IJN chose to make them.¹⁵⁵ In the face of this grim outlook, the Admiralty re-focused its Far East strategy remarkably quickly. The VCNS, Vice Admiral Sir Henry Moore, completed a paper on Future Naval Strategy for the COS just six days after the outbreak of war.¹⁵⁶ This emphasised that control of sea communications in the Indian Ocean was essential to enable Britain to supply its forces in the Middle East, support Russia through Persia, reinforce Singapore, and protect Australasia. Only the Atlantic lifeline to North America was more important. Although the US had a vital stake in the security of the Indian Ocean, it could not contribute to its defence given its over-riding need to protect Hawaii and its western coast. No single base could support a combined fleet able to meet the interests of both Britain and the US. The Indian Ocean and Pacific must therefore be considered separately with the RN responsible for the former.

¹⁵⁴ See AT Admiralty to BAD Washington of 16 December, CAB 122/164, TNA, for status of all British Empire naval forces at Singapore and east of the Malay barrier on that date. They comprised: battleships, *Revenge* and *Royal Sovereign*, five heavy cruisers, six modern 6 inch cruisers, nine older cruisers suitable only for trade protection, and nine destroyers. Roskill gives a useful summary of ships available in December, *War at Sea*, Vol 1., p 562.

¹⁵⁵ Layton, now Acting CinC EF, informed the Admiralty as early as 13 December that Singapore was likely to prove untenable as a naval base and that residual RN assets should operate from Colombo. He followed up on 15 December with the recommendation that naval effort must now focus on holding critical communications in the Indian Ocean and Pacific. CAB 105/20, TNA.

¹⁵⁶ 'Future British Naval Strategy', COS (41) 277 (O) of 14 December 1941, CAB 80/60, TNA.

The paper continued that the best way to protect the Indian Ocean remained a balanced fleet at Singapore able to dispute command of the South China Sea with Japan and this remained the Admiralty's goal. However, it would be impossible to provide an adequate fleet to meet Japanese southern forces comprising perhaps five capital ships and five aircraft carriers in the foreseeable future. Singapore must depend on land, air and submarine power while a new Eastern Fleet concentrated in the Indian Ocean. After calculating the minimum forces required in the Atlantic, taking account of US support there, and withdrawing the Eastern Mediterranean battle-fleet, the paper anticipated up to nine battleships and three fleet carriers would be available for an Eastern Fleet although, apart from the four *R*-class, most of these could not be deployed until February or later. The fleet would initially base at Trincomalee and Port T (Addu Atoll) and both these would need improved support facilities and air defence. The paper concluded that, under these proposals, three quarters of RN strength would be in the Indian Ocean which might be considered disproportionate.¹⁵⁷ However, the RN faced greater enemy forces in the East and the consequences of a Japanese attack on Australasia were incalculable. A drastic change in policy was therefore justifiable.

This was in several respects a remarkable paper which rapidly received endorsement from the COS and PM.¹⁵⁸ It admirably defined Britain's vital interests in the Eastern theatre, the forces the IJN could send south, including into the Indian Ocean, the limitations to US support, and the scale of RN commitment required to protect the Indian Ocean and how it could be found. It showed that the RN had no intention of sacrificing the Eastern theatre or abandoning it to the USA as some historians have implied was now inevitable. On the contrary, it demonstrated that, despite its numerous commitments, the RN still retained sufficient flexibility and resilience to redeploy adequate resources to protect what mattered most in that theatre. It also demonstrated that, for the RN, meeting a pressing naval threat

¹⁵⁷ RN "strength" here clearly referred to capital units i.e. battleships and fleet carriers.

¹⁵⁸ The main points were also conveyed in summary form to Layton on 17 December in response to his signals of 13 and 15 December. The Admiralty agreed that defence of Indian Ocean communications had over-riding priority and set out the likely timetable for concentrating a new Eastern Fleet to be based initially at Ceylon. They also emphasised the importance of Abadan which was essential to successful prosecution of the war. CAB 105/20, TNA.

from Japan in the East would indeed take priority over the Eastern Mediterranean as it had always claimed.¹⁵⁹

The recommendations in this paper required time and, as the next chapter will show, not all of them could in the event be executed but it still raises important issues for the historian. It underlines why much of the historiography relating to the supposed failings of the "Singapore Strategy", especially that which makes a direct connection to the deployment and loss of *Force Z*, is oversimplified. The paper demonstrated that deploying a substantial fleet to secure the core Eastern Empire remained an inescapable commitment to safeguard Britain's overall war effort. The real issue, which the Japanese onslaught had brought to the fore, was clarity on what really mattered in the East. Here the paper had pointed to three critical strategic factors which would become ever more explicit within the British war leadership in the coming months. First, the human and material resources and access points of the core Eastern Empire comprising India and Australasia were a significant element in enabling Britain to sustain a global war effort. Second, realising that potential depended on the continued availability of Abadan oil. Third, Persia was a key route for delivering aid to Russia. The next chapter will show that in late 1942 and through 1943 it provided the majority of military supplies to Russia and may have been critical to keeping her in the war. It followed therefore that, if Britain was to hold its core Empire and maintain an effective contribution to the global war now underway, keeping control of the Persian Gulf and key Indian Ocean communications was indeed an essential minimum objective after defence of the UK base and Atlantic lifeline.

Essentially, the paper advocated a defensive holding strategy focused on securing these vital interests. It was implicit in the paper that the Indian Ocean could be adequately protected from Ceylon and Australia. Singapore, while still the preferred base from which to conduct an aggressive forward defence if resources had permitted, was not ultimately necessary to what mattered most in the Eastern theatre as the US had argued through

¹⁵⁹ Moore's paper anticipated that the remaining Mediterranean Fleet battleships, *Queen Elizabeth* and *Valiant*, would go to the Indian Ocean. An Annex to the paper explained how air power, notably Beaufort torpedo bombers, would be deployed to compensate for the move of the battle-fleet. In the event, both battleships were severely damaged by Italian frogmen in Alexandria Harbour on the morning of 19 December rendering the move impossible.

ABC-1. In effect therefore the paper began to draw out a distinction between British territories and interests in Southeast and East Asia which were not ultimately critical to the Empire and Allied war effort and the Indian Ocean and Australasia which were.¹⁶⁰ This thesis has argued that this was broadly a distinction accepted by both Pound and the PM through the middle six months of 1941 even if they never confronted its full implications.

Roskill devotes little space to the issues raised by Moore's December paper in his *War at Sea.* However, the summary way in which he interprets RN Eastern strategy between the loss of *Force Z* and the creation of a new Eastern Fleet in the Indian Ocean is worth quoting in full because his picture has proved so influential and long lasting. He concludes his first volume by saying that "under the impact of disaster (the loss of *Force Z*), we reverted to the policy which the Admiralty originally wished to adopt (i.e. Pound's 28 August minute to the PM)".¹⁶¹ Early in his second volume, he then reminds his reader that "the Admiralty's (August 1941) strategy to counter the increasingly aggressive attitude of Japan had been to build up a substantial fleet in Ceylon, whence the vital routes across the Indian Ocean could be guarded. It had originally been hoped to complete this plan by March 1942, so that the fleet would be able to move to Singapore as and when the situation further east demanded it. The suddenness of Japan's onslaught, and the ruthless efficiency with which her carefully laid plans were implemented, rendered any such gradual development of British strategy impossible; and the first reinforcements sent east met with immediate disaster."¹⁶²

As this thesis has shown, Roskill's portrayal of a wise Admiralty reverting to the sensible strategy it had always favoured in the face of a Prime Minister chastened by the loss of *Force Z* is a gross distortion of how Eastern naval strategy really evolved between mid-August and mid-December. It is certainly fair to see parallels between the core arguments

¹⁶¹ Roskill, War at Sea, Vol 1, p 569.

¹⁶⁰ This distinction was apparent in a signal from the US Special Naval Adviser in London to CNO Stark on 18 December, SPENAVO to OPNAV of 18 December, CAB 122/164, TNA. The signal quoted ACNS (F), presumably Harwood, stating that Britain had two commitments in the Far East: the security of communications round the Cape to the Middle East and Persian oilfields; and the defence of Australia and New Zealand. If forced to choose where to place resources, Britain would focus on Australia. The signal also reported the British stating that, if the NEI oilfields were lost, then the oil requirements of Australasia would have to be met from Persia which would require 50 extra tankers.

¹⁶² Roskill, *War at Sea*, Vol 2, p 21 – 22.

and dispositions in Moore's December paper and those of Pound in August. But those parallels only serve to highlight the lack of realism, and indeed recklessness, evident in the offensive planning during the autumn. Making due allowance for the impact of US losses at Pearl Harbour and the Philippines, Moore's calculation that the RN might face a potential IJN fleet of five battleships and five carriers in the South China Sea applied just as much in October, when the new offensive strategy was approved by Pound and the First Lord, as it did in December. Successive JIC reports through 1941 were clear on this. The British War Cabinet decision to prioritise air resources on the Middle East through 1941, and the US Navy decision to adopt a defensive strategy in the Pacific, meant it was never feasible for the RN to confront such an IJN force with the resources available to it in late 1941.

The offensive planning of late autumn may have been reckless but it continued to cast a long shadow. For all its realism and focus on the critical Indian Ocean interests, it is striking that Moore's paper still insisted that "the best means of defending the Indian Ocean was a fleet at Singapore able to contest the South China Sea with Japan". In accepting a defensive strategy based on Ceylon, The Admiralty therefore suggested it was bowing to a resource imbalance it hoped was temporary rather than admitting that forward deployment was a flawed strategy. This again raises the point made at the end of the last chapter. If the Associated Powers did have the basis of a credible deterrence strategy in late 1941 and its failure lay in timing and execution rather than the concept itself, was the problem with the Admiralty's forward deployment strategy essentially one of timing? In seeking an answer, it is necessary to distinguish between deterrence and war fighting. An Eastern Fleet of the type planned by Pound and Phillips and established in Singapore by March 1942, with Marshall's proposed air reinforcements in the Philippines, and some RAF reinforcement in Malaya, would certainly have looked a much more daunting prospect for Japan and that might well have been enough to dissuade. But it would still have been extremely ill suited to actual combat with the IJN in the South China Sea. The *R-class* would have been useless, lacking mobility and gun range, and highly vulnerable to either submarine or air attack. The remaining fleet would at best be in the position of the Mediterranean Fleet trying to contest the central Mediterranean in 1941 and 1942 but

facing rather stronger and more effective air and surface forces. The prospects of achieving much useful military effect would be low and of serious losses high.

Many historians have used apocalyptic language when describing the consequences of the loss of Force Z. Haggie describes it as a "catastrophe" "which revealed in a most signal way the decline, hitherto to a great extent concealed, of Great Britain as a maritime and colonial power".¹⁶³ Marder described it as "a disaster for the Royal Navy, one of the greatest it had ever suffered, and its prestige in consequence tumbled".¹⁶⁴ Barnett sees "all the debates about Far Eastern strategy" ending "with sailors swimming for their lives in a tepid sea 8000 miles from home".¹⁶⁵ Such language calls for some perspective. 840 lives were lost, slightly fewer than in the battleship Barham in the Mediterranean two weeks previously.¹⁶⁶ In terms of military capability, *Repulse* was un-modernised and of limited value for modern naval warfare. Prince of Wales, as a new ship, was a much more serious loss but, in terms of immediate naval balances, it arguably mattered less than the loss of the battleships *Queen Elizabeth* and *Valiant* in Alexandria harbour later in the month which barely receives a footnote in history.¹⁶⁷ Her loss would also be compensated by the completion of two sister ships in mid-1942. In strategic terms, few historians would argue that the loss of *Force Z* made any difference to the fate of Malaya or indeed the NEI given the comparative scale and quality of Japanese forces immediately available in the Far East theatre. Its foregone value in the defence of the Indian Ocean, where Churchill always wanted to deploy the force, was rather greater. There was certainly reputational damage to the prestige and standing of the RN, and by extension to Britain as a whole, but this too can be overstated when set against the RN's overall war record. It is reasonable to argue therefore that the symbolism surrounding the loss owes more to historians keen to expose a flawed "Singapore strategy" or the inevitability of British imperial decline than to any genuine calculation of long term political, strategic and military impact.

¹⁶³ Haggie, p 208.

¹⁶⁴ Marder, Vol 1, p 520.

¹⁶⁵ Barnett, Engage the Enemy More Closely, p 421.

¹⁶⁶ Barham was torpedoed by U-331 on the afternoon of 25 November. She capsized and then blew up within minutes. See: John Winton, *Cunningham*, p 239 - 240 for an account.

¹⁶⁷ *Queen Elizabeth* and *Valiant* were both crippled by Italian human torpedo attack on the morning of 19 December. These were modernised battleships and therefore valuable units. Following the earlier loss of *Barham*, the attack eliminated the entire RN capital ship force in the Eastern Mediterranean.

To put the loss in further perspective, it is useful to consider developments if Phillips had returned to Singapore on 10 December unscathed. Kirby argues the ships could have played no further role in the defence of Malaya but could have formed the nucleus of a strong Allied striking force in the South-west Pacific (presumably based at Darwin) which could have disrupted Japanese invasion convoys to the NEI before they had airbases in Borneo and the Celebes.¹⁶⁸ He suggests this might have bought enough time to make defence of the NEI viable. That looks unlikely given the wide options open to the Japanese and the ability of the IJN to deploy overwhelming carrier power to hunt down any RN force they judged a serious enough threat.¹⁶⁹ Pending serious modern reinforcement, above all carriers, the only sensible employment for *Force Z* was to act as an initial "fleet in being" in the Indian Ocean in accord with the Admiralty's original August defensive strategy.

Conclusion

Overall, therefore, the judgement of this chapter is that the decision to deploy *Force Z* did not make its destruction inevitable. Churchill can certainly be blamed for misjudging Japanese intentions, for unrealistic expectations of the deterrent value of modern capital ships, and, above all, for his major role in the neglect of Far East air strength. But the evidence does not support the popular picture of a PM insistent on rushing *Force Z* onward to Singapore without regard to professional advice. Pound could not easily have resisted the PM's desire for a deterrent symbol but he and Phillips had considerable professional influence and discretion over how that deterrent was applied. The British leadership also knew that the deterrence objective had been substantially met by the time the force met up at Ceylon. By then, there was compelling evidence pointing to a high risk of early hostilities. There was sufficient reason therefore to hold the force at Ceylon if the Admiralty wished and opposition from the PM was unlikely. The Admiralty did not

¹⁶⁸ Kirby, *The War Against Japan*, Vol 1., chapter XXVII, Retrospect.

¹⁶⁹ This is Marder's view, Vol 1., p 506. It is important to keep in mind that the IJN carrier force raided Darwin on 19 February almost contemporaneously with the Java Sea action. Had *Force Z* been available to intervene in the Java Sea, the IJN would merely have redeployed some or all of its carriers to eliminate the threat.

do so because it was now firmly committed to an offensive strategy based on a battle-fleet at Singapore. The momentum this created drove the thinking of senior naval commanders and meant the potential vulnerability of *Force Z* at Singapore was never seriously addressed. That vulnerability was compounded by the initial Japanese successes which in turn made it almost impossible to withdraw the force.

This chapter also concludes that the loss of *Force Z* should not be conflated with the argument that Britain lacked the naval resources to defend its vital maritime interests in the East. As became increasingly clear to the COS in early 1942, the vital area the RN had to control, with RAF support, was Indian Ocean communications and Ceylon, not the approaches to Singapore and the Malay Barrier. The RN and RAF had the potential resources to defend the Indian Ocean from late 1941 onward but even with maximum US support in the Atlantic, and a less defensive US stance in the Pacific, they never had the power to hold the Barrier at this time, let alone reach beyond it, without a far greater commitment of air resources than the British war leadership was willing to make. The Admiralty's major mistake in late 1941 was to think that it could reach forward into the South China Sea without this. It was this more than anything else which doomed *Force Z*.

The Admiralty offensive strategy in the autumn of 1941 is the direct opposite of that claimed by Roskill and most subsequent historians.¹⁷⁰ It was reckless because it proposed to place an inappropriate capital ship force in an exposed position where the enemy could bring concentrated force to bear as Moore's December paper underlined. It represented therefore a classic failure of risk management. It can be argued that the impact of the loss of *Force Z* was primarily reputational and had little lasting military effect, in that Singapore would have fallen anyway, and the addition of two capital ships to the Eastern Fleet off Ceylon in April 1942 would have been marginal. That almost certainly

¹⁷⁰ Roskill ends volume 1 of *The War at Sea*, p 569, as follows: "On the 13th (December 1941) Admiral Layton, foreseeing that Singapore would soon be a beleaguered fortress and the naval base unusable, proposed to send everything he could, except his submarines, to Colombo, which plainly, was the strategic centre round which our strength must be rebuilt. Next day the Admiralty approved his proposal and thus, under the impact of disaster, we reverted to the policy which the Admiralty had originally wished to adopt". As already stated, a case can be made that this was *de facto* Admiralty policy to the end of August. However, Chapter Six has demonstrated that it was certainly not the policy the Admiralty "wished to adopt" after mid-September.

understates their value. An intact *Force Z*, operating in the Indian Ocean and joined shortly by the carrier *Indomitable*, would have created a strong modern nucleus of an Eastern Fleet earlier, complicated IJN planning, and spurred operational efficiency, making the RN force ultimately available off Ceylon in April more effective. ¹⁷¹

¹⁷¹ Ironically, this sentence broadly reflects the view taken by Roskill in his single volume follow up to *The War at Sea, The Navy at War 1939-1945*, (London: Collins, 1960), at p 189. Here he states that, had the Naval Staff view on strategy prevailed, and naval forces been concentrated on Ceylon, then *Force Z* would probably have been available to help defend the Indian Ocean. "That could not, of course, have saved Malaya or the Dutch East Indies; but it might well have discouraged the Japanese from sending Nagumo and Ozawa into those waters, it might have saved Rangoon, and it would surely have reduced the time needed for us to regain the initiative at sea." Unfortunately, as this chapter demonstrates, this Roskill argument rested on a false premise. Leaving aside the issues raised by the Admiralty's switch to an offensive strategy, Roskill also ignores here their determined resistance to deployment of *Prince of Wales*.

Chapter Eight

Defending the Indian Ocean in 1942

This chapter investigates how the RN managed the defence of the Indian Ocean from the outbreak of war, Pearl Harbour, and the loss of Force Z, to the end of September 1942. It examines why the Admiralty, with the support of the War Cabinet and COS, judged it necessary, following the Japanese attack, to deploy three quarters of the RN battleship and carrier strength to the Indian Ocean, how far this planning was implemented, and how and why the new Eastern Fleet was then put at potentially catastrophic risk off Ceylon in April 1942. The chapter considers how well British (and Allied) strategic exposure in the Indian Ocean was understood at the time and why the scale of exposure was not matched by the deployment of adequate RAF resources to support the RN and reduce its dangerous vulnerability. In assessing RN performance, and drawing out its strengths and weaknesses, the chapter considers the parallels between the IJN attack on Ceylon in April and its subsequent attack on Midway with a similar force in June. Could the RN, given luck and circumstance, have inflicted a Midway style defeat or did the RN lack the doctrine and capability to make this possible? Finally, the chapter looks at the capacity of the RN to hold the Indian Ocean during the second half of the year and why in the event the size of the Eastern Fleet was steadily reduced.

The strategic importance of the Indian Ocean

The Admiralty paper, "Future British Naval Strategy", dated 14 December and described in the previous chapter, was incorporated in a wider JPS review of Far East policy approved by the COS on 19 December.¹ This paper summarised Britain's intended strategic response to the Japanese attack and initial defeats suffered by the Allies. It inevitably reflected core elements of the 1940 FEA and July 1941 paper on Far East

¹ JP (41) 1072, 'Far East Policy', attached to COS (41) 428th of 19 December, CAB 79/16, TNA.

Defence Arrangements², notably the need to prevent Japan damaging vital interests and capturing key points such as Singapore judged essential to future recovery, and the continued desirability therefore of holding the Lashio – Tonga line. However, it also established three principles which would underpin British strategy for the next six months and beyond. The first was the critical importance of the Indian Ocean to the overall British war effort and the specific priority of securing Ceylon which was currently virtually undefended.³ The second was recognition that defence of the Indian Ocean was pre-eminently a naval problem that could only be addressed by deploying a substantial RN fleet since US help to Britain would be confined to the Atlantic. The third was the interdependence of Far East and Middle East. Britain could not relax its grip on either save in the last resort of invasion of UK or Australasia when the implication was that the Middle East would be sacrificed.

The decision to deploy three quarters of the RN's heavy units to the East was a remarkable change from the 1940 FEA and the assumption until well into the autumn of 1941 that the maximum guaranteed reinforcement for the Indian Ocean was *Force H* plus. It was rendered necessary because the COS recognised the Malaya forces were seriously under strength and that, with the US Pacific Fleet now incapable of intervening, Japan's way south and west was now wide open. It was rendered possible, at least in theory, despite the loss of *Force Z*, by three factors. First, the US reinforcement of the Atlantic now underway, which even with Pearl Harbour losses, it intended to sustain. Second, transfer of the battle-fleet from the Eastern Mediterranean. And, finally, because the new build units from the 1937-39 programmes, discussed in Chapter One, were now becoming available in significant numbers.

Translating the theory of this commitment to a large Indian Ocean fleet into practice proved more difficult. On the same day the COS approved the JPS paper, a brilliant asymmetric attack by Italian frogmen severely damaged the modernised battleships, *Queen Elizabeth* and *Valiant*, the core capital ships of the planned new fleet, in Alexandria

² 'Far East Defence Arrangements', COS (41) 152 (O) of 28 July, ibid.

³ 'Far East Policy', COS (41) 280 (O) of 20 December, CAB 80/60, TNA.

Harbour.⁴ Valiant was out of action until August 1942 and Queen Elizabeth until mid-1943. Following the losses of the battleship *Barham* and carrier *Ark Royal* to submarine attack the previous month, the RN Mediterranean Fleet had now effectively ceased to exist. The COS had agonised over the risks in withdrawing the Mediterranean Fleet battleships. By disabling them, the Italians had gained a victory for the Axis with strategic consequences, actual and potential, still under-recognised by historians.⁵ The three fleet carriers earmarked for the fleet, Indomitable, Formidable, and Illustrious, were first class modern armoured units fully comparable to the latest IJN and USN ships.⁶ However, only the brand new *Indomitable*, following completion of her delayed work-up at the end of November, was immediately available, while the other two, which had been under repair in the USA for most of 1941, could not reach the Indian Ocean until March. All three carriers suffered the limitations in aircraft numbers and quality discussed in Chapter Five. A further handicap was that, coming fresh from build or refit, none was fully worked up and operationally efficient. Modern cruisers and, above all, quality modern destroyers, to accompany the capital units remained in desperately short supply and only the bare minimum was available before mid-1942. A further limitation that would hamper the efficiency of the new Eastern Fleet throughout 1942 was the lack of suitable bases and support facilities. Neither Trincomalee nor Colombo, at the start of 1942, had repair facilities or docks able to support major fleet units. They offered anchorages and refuelling but little more.⁷ Port T had first been surveyed as an operational fleet base only in autumn 1941. By early 1942, it provided a sheltered anchorage offering fuel and water and had rudimentary underwater defences but still no airfield.⁸

Providing air reinforcements was equally difficult. The COS fully recognised the importance of airpower in containing the Japanese and especially maintaining control of

⁵ James Sadkovich argues that the Italian achievement at Alexandria ranks alongside that of the RN at Taranto. That is probably true whether measured by capital ship damage or overall strategic effect.

⁴ Barnett, Engage the Enemy More Closely, p 376-377.

[&]quot;Understanding Defeat: Reappraising Italy's Role in World War II", p 49.

 $^{^{6}}$ As stated in earlier chapters, they were comparable in displacement, speed and AA protection but designed to a different concept. The armoured deck gave the RN carriers much greater protection against high level and dive-bombing attack but this came at the expense of aircraft capacity – at this time still at best two thirds of US and IJN capacity.

⁷ Marder, Old Friends, New Enemies, Vol 2., p 141.

⁸ Peter Doling, *From Port T to RAF Gan*, chapters III and IV.

the Indian Ocean. However, for the first four months of the Far East war, they faced complex and painful trade-offs between three demands: reinforcement of the immediate Far East frontline in Burma, Malaya and the NEI; the need to secure Ceylon, India and other vital points in the Indian Ocean; and sustaining Britain's position in the Middle East. There were complex dependencies here, rarely explored by historians, which dominate JPS papers in this period. The transfer of the huge number of aircraft of all types to achieve and sustain desired force levels in the Middle East and Far East depended on two air bridges, the trans-Mediterranean route through Malta, and the Trans-Africa route from Takoradi in the Gold Coast. Malta had to be supplied by sea which depended in part on adequate control of the Eastern Mediterranean. To compensate for the loss of the battlefleet at Alexandria, the COS had to deploy most of the small Beaufort torpedo force from UK discussed in Chapter Five to Egypt which meant there was no possibility of deploying Beauforts to the Indian Ocean in the first half of the year.⁹ While aircraft could be transferred along the often fragile air bridges, they were ultimately useless without the ground staff and spares to support them which could only be deployed by sea. With the Mediterranean closed, the length of the shipping routes and need for convoy protection made this a painfully slow process. Nevertheless, by March, the RAF was planning to ship 750 aircraft to India and Ceylon over the next four months to create and sustain a total force of 37 squadrons, with about half modern fighters. This build-up was comparable to that achieved in the Middle East the previous summer and came on top of the much increased demands of that theatre in 1942.¹⁰

COS records of January and February 1942 show few illusions about Japanese potential in the short term or the prospects of holding them at the Malay Barrier although they undoubtedly expected the Malaya forces to perform better than they did. The JIC was generally excellent at assessing both Japanese intent and scale of attack. In an important update on Far East Policy on 16 February, immediately after the fall of Singapore, the JPS provided an accurate forecast of likely Japanese moves over the next three months and the

⁹ Although the COS agreed this transfer in December, only 20 Beauforts were available in the Middle East on 12 March, COS (42) 81st of 12 March, CAB 79/19, TNA.

¹⁰ 'Reinforcements for India and Ceylon', COS (42) 66 (O) of 18 March, CAB 80/61, TNA.

critical risks they posed in the Indian Ocean.^{11 12} The paper recommended that British effort must now concentrate on holding the "outer ring" of India, Ceylon, Australia and Fiji. Existing strengths here were inadequate and reinforcement would be very difficult due to the logistic challenges and trade-offs. Any reinforcements now sent forward of this line were likely to be wasted since, once committed, they could not be withdrawn. The paper stressed that the immediate priority was Ceylon the loss of which "will imperil the whole British war effort". This reflected both its importance in sustaining the Eastern Fleet and the opportunities it would offer the IJN, if captured, to dominate the western Indian Ocean. The COS accordingly agreed that air defence of Ceylon must take precedence over reinforcement of Java and that Hurricanes being ferried by Indomitable should be offloaded there.¹³ The record shows that Ceylon was indeed the dominant preoccupation of the COS in the theatre for the next two months and they monitored defence measures there almost daily. On 13 March, they advised Eastern theatre commanders that, in the last resort, "the security of the Indian Empire rests on our ability to control sea communications in the Indian Ocean" which in turn depended on holding the naval bases in Ceylon.¹⁴

As the Japanese consolidated their hold on the NEI during March and moved into Burma to threaten North East India, British planners recognised that they were effectively now defending a single front from Cyrenaica in the west, through Persia and India, to Australia in the east. As they had realised in December, the Middle East and Far East were indeed inter-dependent. The three Axis enemies, operating on more interior lines, could apply

¹¹ 'Far East Policy', JP (42) 147 of 16 February, CAB 79/18, TNA.

¹² There is a useful and authoritative summary of Japanese thinking at this time in: Dr Stephen Bullard, *Japanese Army Operations in the South Pacific Area: New Britain and Papua Campaigns 1942 – 1943.* His chapter 3 begins by summarising the debates within Imperial General Headquarters between December 1941 and April 1942 on the goals of Phase 2 operations following the Phase 1 capture and securing of the "southern resource area". Initial IJN thinking for Phase 2 can be summarised as: Disrupt Allied supply routes; Attack and destroy forward bases using mobile air units and the carrier fleet; Seek opportunities to ambush and destroy the US Main Fleet or a significant British naval formation. The IJN consistently advocated cutting reinforcement routes to Australia from both east and west. It also advocated "breaking trade" in the Indian Ocean, justifying therefore the fears of Churchill and Pound through 1941.
¹³ COS (42) 56th of 19 February and 63rd of 25th February, CAB 79/18, TNA. AT 1228A of 6 March to

CinCEF relays the subsequent instructions to CinC India and CinC Ceylon that all Hurricanes are to be offloaded. ADM 223/867, TNA. Marder claimed that Vice Admiral Sir Geoffrey Layton, now CinC Ceylon, unloaded the Hurricanes on his own initiative but this is not correct, Vol 2, p 126.

¹⁴ AT 1749A of 13 March 1942 to CinCEF repeating guidance to CinC India and CinC Ceylon. ADM 223/867, TNA.

more concentrated force at multiple points on this front than Britain with its immensely long logistic supply routes could easily defend. This is a more complex version of the strategic overstretch arguments traditionally favoured by historians. Britain's problem was only in part overall resources and just as much one of short term logistics.¹⁵ This was vividly brought out in a JPS paper in early April covering the relationship between the Middle East and India.¹⁶ Both depended on sea communications in the Indian Ocean and air resources through Malta, both covered the southern supply route to Russia, and both protected, and were, in the last resort, dependent on Abadan oil. Without this oil, the war effort in the Middle East, India and Australia would fail because there were no tankers to provide alternative supplies. Britain currently had insufficient resources to launch a Libyan offensive, secure Ceylon and defend Calcutta. Without a Libyan offensive, Malta and its air route could fall. The loss of Ceylon risked the loss of India but also ultimately Persian oil and the Middle East. Losing Calcutta meant risking India but probably not Ceylon. The JPS judged that first priority must therefore be Ceylon and the security of the Indian Ocean, then Libya, while risk must be carried in North East India.

Reduced to essentials, this paper, along with other contemporary planning papers and assessments¹⁷, emphasised three critical strategic factors. First, the human and material resources and access points of the Eastern Empire were a significant element in enabling Britain to sustain a global war effort. Second, realising that potential depended on the continued availability of Abadan oil. Third, maintaining control of the Persian Gulf and key Indian Ocean communications was therefore an essential minimum objective after defence of the UK base and Atlantic lifeline. This depended primarily on an adequate Eastern Fleet but also on air reinforcement of key points especially Ceylon. These factors

¹⁵ This is almost exactly how the German Naval War Staff saw matters too. The paper they submitted to Hitler the previous month essentially mirrors the JPC analysis and included a map demonstrating the logistic challenge Britain faced in addressing an Axis pincer directed at the Middle East. See *Germany and the Second World War*, Vol 6, p 121-2.

¹⁶ JP (42) 376 of 8 April, 'Relation of Strategy in the Middle East and India', CAB 79/20, TNA.

¹⁷ See e.g. JP (42) 413 of 18 April, 'Indian Ocean: Strategy in Certain Eventualities', CAB 79/20, and JIC (42) 141 of 18 April, 'Japan's Intentions', CAB 79/20, both in TNA.

were a major, if not dominant preoccupation for the British war leadership in the first nine months of 1942 yet they hardly feature in most historical studies of the period.¹⁸

The importance of Abadan oil to the British war effort is a constant theme in COS papers through 1941 but especially in the first half of 1942 when the risks to this supply, from all directions, were at their height. Yet the issue has received little attention from historians and many even dismiss Middle East oil as of little importance since Britain itself received almost all its supplies from the western hemisphere.¹⁹ The true significance of Abadan is brought out in a memo for the COS prepared by the Petroleum Board at the end of May. This responded to concerns raised by the COS the previous month as they reviewed the risks to the Indian Ocean.²⁰ The memo stated that for the nine months April – December 1942, the total British Empire oil requirement was 24.5M tons.²¹ Current plans anticipated that 59% of this could be met from the western hemisphere with the remainder coming from the Middle East. 7.5M tons, representing 75% of Middle East supply, and 66% of Eastern Empire oil needs (including Australasia and South Africa), came from Abadan. If Abadan was lost, an extra 1.5M tons of deadweight tanker tonnage would be required to replace it from other sources. The only possible source here was the US but other commitments, including the need to rebuild stocks in UK, meant it was impossible for the US to meet such a demand in the foreseeable future. Drastic economies would therefore be needed to reduce Empire oil use, including in the UK itself, with serious consequences for the overall war effort.²²

¹⁸ It is also important to note that, during March, the President and PM had endorsed a broad division of global responsibility between the US and UK. The US COS took responsibility for Pacific strategy and operations while the UK COS took responsibility for the Middle East and Indian Ocean. The Atlantic and Western Europe would be dealt with on a joint basis. For the background, see: Letter from Commander Coleridge, JSM Washington, to JPS dated 9 September 1942, CAB 122/218, TNA.

¹⁹ It is striking how little attention three recent and high profile one volume histories of World War II give to Middle East oil. These are: Andrew Roberts, *Storm of War*; Max Hastings, *All Hell Let Loose*; and Anthony Beevor, *The Second World War*. They all mention it in passing and Roberts admits it was "critical" but none of them explains precisely why it was important, why it was such a preoccupation for the British COS, and whether COS concerns were valid.

²⁰ COS (42) 105th meeting, item 10, CAB 79/20, TNA.

²¹ "British Empire" here included not only the formal Empire territories but also the Allies and neutrals for which Britain took responsibility.

²² COS (42) 281 of 28 May 1942, CAB 80/36, TNA.

Two months later, the Oil Control Board provided an updated and more detailed assessment of the importance of Abadan. The Middle East was now expected to contribute 14.5M tons of oil in the year beginning 1 July 1942 with 11.5 tons coming from the Persian Gulf. If Abadan was lost, and the threat from German attack in the west or north had now risen significantly, supplies could theoretically be made good from the western hemisphere but only by deploying 270 additional tankers which were not available. The consequence would therefore be a reduction in supply of 20% in the West as well as the East. It concluded that the loss of the Persian fields would therefore be "calamitous" as it would force a drastic reduction in total war capacity and probably the abandonment of some fields of activity.²³ The War Cabinet considered this report on 5 August. The Chief of Air Staff, speaking for the COS, advised that in the absence of the additional tanker capacity, the loss of the Persian Gulf facilities might reduce the overall war effort by 25%. Every effort must therefore be made to hold Abadan even at the risk of losing Egypt and the Nile Delta. Speaking almost simultaneously at the Cairo Conference on 4 August, the CIGS, General Sir Alan Brooke, put the position even more starkly. The COS saw it as essential to hold Abadan without which it would be hard to carry on the war.²⁴

In underlining the strategic importance of the Indian Ocean, the JPS had emphasised its role in protecting the southern supply route to Russia. The significance of this route in 1942 has also received inadequate recognition from historians. 23.8% of lend-lease aid to Russia during the whole period 1941 to 1945 used the Persian Gulf route, slightly more than the 22.7% on the North Russia (Arctic Convoy) route but only half the deliveries on the Far East route across the Pacific round northern Japan. However, the overall statistics do not convey the importance of the Persian route in the first half of the war.²⁵ There are two critical points here. First, the Far East route depended on Japanese acquiescence

 $^{^{23}}$ COS (42) 352 of 21 July 1942, circulated to the War Cabinet as WP (42) 338 of 4 August, CAB 66/27/8, TNA.

²⁴ WP (42) 372 of 23 August, PREM 3/76A/12, TNA.

²⁵ The information and statistics in this paragraph are drawn from the *US Official History of the US Army in World War II, The Middle East Theater, The Persian Corridor and Aid to Russia*, by T H Vail Motter, (US Army Center of Military History, Library of Congress, 1952). Most of the statistics are drawn from Appendix A. The figures for deliveries through Persia in 1942 are those from the US. However, the total tonnage of US aid via this route for that year (all categories) was 705,259 tons while the UK and Canada contributed just 19,759 tons i.e. about 2.8%. It is not clear how much of this tonnage was weapons.

which relied on the tacit understanding that supplies delivered here were non-military. Second, German countermeasures severely curtailed the deliveries possible on the North Russia route between mid-1942 and the end of 1943.²⁶ As a result although the Persian route was the longest in mileage and, above all, ship-time, it was relatively safe, was open all year round, could be used for all categories of shipment, and provided relatively easy access to vital military fronts. The raw statistics bring out the rapid transition in the value of the Persian route across the year 1942 and the vital role it played in the second half. In 1941, the Persian route supplied only 3.7% of total shipments to Russia and they barely increased over the first four months of 1942, averaging 4.7%.²⁷ However, in May shipments were 44.7% and averaged 40.8% for the whole eight months May to December, about three times deliveries through the Arctic convoys in this period.^{28 29} The proportion of weapons shipments actually reaching Russia through the Persian Gulf route at 9.2% was low in 1942 but it rose to 49.7% in 1943.^{30 31} US Army statistics nevertheless suggest that US shipments despatched to Persia during 1942 included: 1500 aircraft; 600 tanks; 1750 guns with ammunition; and 55,000 trucks.^{32 33} The Russian records show the

²⁶ Joan Beaumont underlines the failure of the Arctic route in this period. Under the "Second Protocol" which agreed US/UK supplies to Russia over the period July 1942 to June 1943, the Arctic route was meant to deliver 3.3 million short tons. In practice, the northern convoys managed little more than one tenth of this. *Comrades in Arms: British Aid to Russia, 1941 – 1945, (London: Davis-Poynter, 1980),* p 140.
²⁷ The first US shipment on the Persian route arrived in November 1941. US Army History, *Persian Corridor*, p 5.

²⁸The logistic challenges in achieving this build-up on the Persia route in 1942, which still fell well short of the desired deliveries to Russia, were formidable. They are described in detail in the companion volume of the US Army History – *Global Logistics and Strategy 1940 – 1943*, by Richard M Leighton and Robert W Coakley, at p 566 – 587.

²⁹ Roskill's figures show that 128 ships arrived in Russia via the Arctic route from sailings in the first six months of 1942. However, following the PQ17 disaster in July, there was only a single convoy PQ18 over the next five months which delivered 27 ships in September after losing 13 from the 40 sailed. Two convoys in December then delivered a further 30 ships without loss. Traffic therefore virtually halted for a critical period. *War at Sea*, Vol III, Part II, Appendix R, Statistics of the Arctic Convoys 1941 – 1945, Table A, "Eastbound".

 $^{^{30}}$ Alexander Hill, *The Great Patriotic War of the Soviet Union*, 1941 - 45, (London: Routledge, 2009), Chapter 8, Table 8.5, quoting figures from the Russian State Archives. Weapons shipments through Persia were approximately twice those by the Arctic route in 1943. This reflected the fact that Arctic convoys virtually ceased through the summer months that year as well.

³¹ It is worth noting that, over the 14 months from 1 November 1942 to 31 December 1943, Russia had a deficit between domestic production of military aircraft and losses of 3794, and a deficit for tanks and self propelled guns of 2499. Allied aid over this period contributed 9206 aircraft and 3798 tanks and self propelled guns, more than compensating therefore for the deficits, and enabling frontline strength to keep growing, albeit still slowly. Figures from: I C B Dear and M R D Foot, *The Oxford Companion to World War II*, p 951, USSR, Table 2.

³² These figures are interpolated from the shipment data at p 484 of the US Army History, Persian Corridor. They have the been crosschecked with the figures provided by Hubert Van Tuyll, in *Feeding the Bear:*

combat weapon shipments were neither large enough nor fast enough to have any impact on the critical Southern Front operations that autumn. However, the main bulk of Persian shipments in the second half of 1942, which comprised strategic materials including oil³⁴, food and the trucks, would still have made a significant contribution both to bolstering Russian resistance that winter and providing the mobility and logistic support to ensure the success of the Stalingrad counter-offensive.³⁵ One historian argues that overall lendlease support in 1942 may well have tipped the balance in enabling Russia to survive. If this is correct, it underlines the significance of the Persian corridor in the second half of the year.^{36 37}

American Aid to the Soviet Union, 1941 – 1945, (Connecticut, USA: Greenwood Press, 1989), Table 30, p 171 and p 52 - 56. The figures relate to supplies despatched and a significant proportion would not have reached the Russians for actual deployment until well into 1943.

³³ The US Army History figures mention British and Canadian shipments via Persia but give no details. A post war Admiralty note states that Britain delivered 160,000 tons of ammunition and stores to Russia via the Persian route across the whole war. The deliveries included: 823 aircraft, 564 tanks, 53 guns and 3941 assorted vehicles. Admiralty Notes on the Mediterranean Effort 1939 – 1945, CAB 106/615, TNA. The US Army statistics suggest most of this was delivered between autumn 1941 and end 1943.

³⁴ As a result of new investment in the Abadan plant, it became a vital source of 100-octane aviation spirit for Russia from mid-1943. By the end of that year, Britain was supplying 25,000 tons per month of aviation spirit, a significant proportion of overall Russian supply of high specification fuel. David Edgerton, *Britain's War Machine: Weapons, Resources and Experts in the Second World War*, (London: Allen Lane, 2011), chapter 6; and Beaumont, *Comrades in Arms*, p 153.

³⁵ This is essentially Van Tuyll's judgement in *Feeding the Bear*, p 56. He argues that lend-lease support did not enable the launch of the Stalingrad offensive nor would its absence have prevented the attack. But he also argues that it may have provided the critical margin both to ensure the offensive's success and to build up Russian offensive power through 1943. The US Army History figures show that some 350,000 tons of strategic materials and 84,000 tons of food were shipped to Persia in 1942.

³⁶ Recent work by Mark Harrison and Chris Bellamy demonstrates that, by all the normal rules, the Soviet economy, and with it their capacity to resist, should have collapsed in 1942. Bellamy argues that, although lend-lease only added about 5% to Soviet resources in 1942 and perhaps 10% in 1943, it may still have been crucial in enabling Russia to hold on. In fact, Harrison's figures for Soviet production suggest the contribution of lend-lease to the specific military sector in 1942 was much higher than 5%. Interestingly Bellamy downplays the significance of the Persia route (p 422) suggesting it was much less important than the North Russia route. This paragraph shows that the opposite was the case. See: Mark Harrison, The USSR and Total War: Why didn't the Soviet Economy collapse in 1942?, Warwick Economic Research Papers, No 603, University of Warwick, 2001; and, Chris Bellamy, *Absolute War: Soviet Russia in the Second World War*, (London: Macmillan, 2007), p 420 – 423, and, 468 – 473.

³⁷ A report from the CinC German Navy to the Fuehrer dated 13 April 1942 highlighted the potential significance of the Persian supply route. It pointed out that supplies here would go to the southern front and were likely to make operations in the Caucasus more difficult. Quoted at p 5 of US Army History.

The Japanese threat and the role of the Eastern Fleet

Although the JPS and COS were clear that defence of Indian Ocean sea communications had over-riding priority, they recognised that, at the end of March, the developing Eastern Fleet was significantly inferior to the forces the IJN might deploy, especially in carrier airpower.³⁸ They also recognised that Ceylon remained vulnerable despite significant improvements in its air defence.³⁹ Against this background, the COS argued that the strength of the Eastern Fleet therefore lay in its ability to create uncertainty and act as a "fleet in being" forcing the IJN to deploy major forces to cover any movement.⁴⁰ The JPS thought the IJN might be cautious about reaching too far into the Indian Ocean with a major force if this left them exposed to the USN in the Pacific. However, they presented an alternative Japanese view that proved prescient. The IJN might argue that they could deploy a fleet superior to the RN in speed, gun range, training and morale, and that the USN would not be able to intervene in a useful timescale. If they could find and destroy an RN fleet, India, Ceylon and points west would then be wide open to subsequent attacks. If the RN evaded, the IJN could raid its bases and degrade its ability to operate.⁴¹ Post war evidence has demonstrated that this was an accurate assessment of IJN thinking as it had evolved by mid-March although earlier proposals had been much more ambitious. They had envisaged an all-out offensive in the Indian Ocean to take Ceylon, destroy remaining British power in the theatre, and ultimately join up with Germany in the Middle East.⁴² Contrary to the claim of the CIGS, Field Marshall Sir Alan Brooke, in his diary,

³⁸ 'Defence of Australia', JP (42) 338 of 30 March, CAB 79/20, TNA.

³⁹ On 26 March, the Chief of Air Staff believed there were 68 fighters available in Ceylon, mainly Hurricanes but some FAA Fulmars, COS (42) 96th of 26 March, CAB 79/19, TNA.

 $^{^{40}}$ COS tel to CinC India and SO Force V of 18 March, COS (42) 66 (O) of 18 March, CAB 80/61, TNA. 41 JP (42) 338, ibid.

⁴² For a summary of the debates within the Japanese military leadership over possible "second phase" operations (i.e. follow up to the successful occupation of the NEI), including specific options for the Indian Ocean and Ceylon, see: Marder, Vol 2, p 86-87; H P Willmott, *The Barrier and the Javelin*, p 46-53; Captain Toshikazu Ohmae, 'Japanese Operations in the Indian Ocean', (in David C Evans, *The Japanese Navy in World War II*, (Annapolis: Naval Institute Press, 1986), p 109; Hiroyuki Agawa, *The Reluctant Admiral: Yamamoto and the Imperial Japanese Navy*, (Kodansha International Ltd, 2000); and Gordon Prange, *Miracle at Midway*, (McGraw Hill, 1982), p 14 – 16. Willmott provides by far the most detailed account and analysis although he offers limited information on his sources. He argues that an all-out offensive in the Indian Ocean to collapse Britain's position in India and the Middle East, and perhaps even drive her out of the war, was at least credible at this point and probably Japan's best option. All five

Pound rapidly shared this end March JPS assessment of aggressive IJN raiding action with his American opposite number Admiral King in the hope the USN could undertake a diversion operation in the Pacific.⁴³

This was the background against which Admiral Sir James Somerville, formerly commander of *Force H*, arrived in Ceylon to take command of the newly constituted Eastern Fleet at the end of March. The fleet which had collected in the central Indian Ocean, divided between Ceylon and Port T, was a reduced version of that envisaged by the Admiralty in December. It comprised only one modernised battleship, *Warspite*, freshly arrived from work-up in the USA, the four *R-class*, two of the planned carriers,

historians agree, however, that IJN initial ambitions for such an all-out effort in the Indian Ocean were quickly curtailed by IJA refusal to provide forces for the capture of Ceylon although Willmott argues convincingly that these were readily available. However, the need to retain adequate naval forces to counter the US in the Pacific and the logistic challenges in operating west of Ceylon were also factors. Toshikazu Ohmae states that the Combined Fleet had already decided on 14 February to settle for a more limited fleet operation in the Indian Ocean centred on a mass carrier strike on Ceylon and this is also Marder's view. They state that this operation was subsequently war-gamed between 20 - 22 February and the executive order to proceed given on 9 March. Willmott and Prange, the latter drawing on 1964 interviews with two of the key IJN planners involved, Captain Kameto Kurishima and Captain Yasuji Watanabe, state that the late February wargames, which included senior IJA representatives, were still focused on the more ambitious scheme, including a landing on Ceylon. Their view is corroborated by the diary of Yamamoto's Chief of Staff, Rear Admiral Matome Ugaki who states that while a "landing" on Ceylon was achieved the wider conclusions from the exercise were "not good". See: Fading Victory: The Diary of Admiral Matome Ugaki, edited by Donald M Goldstein and Katherine V Dillon, (Annapolis USA: Naval Institute Press, 1991), entries for 20 - 22 February 1942. Whatever military doubts were raised by the exercise, Prange, p 16, states that the final ruling against a major Indian Ocean offensive at this time came from Premier Hideki Tojo himself in early March. Japanese Monograph 113, "Task Force Operations", produced by the US Office of Military History immediately after the war, drawing on captured Japanese records and interviews with Japanese personnel (including Toshikazu Ohmae), includes a detailed summary of the more limited Indian Ocean Operation raiding operation, known as Operation C, which the Japanese would now execute in early April. It demonstrates that the primary objectives of Operation C were to find and destroy the RN Eastern Fleet and to disrupt British trade and communications in the Bay of Bengal in support of operations against Burma and potentially NE India. This is consistent with the IJN vision for "Phase 2" operations described in Chapter 3 of Dr Stephen Bullard's Senshi Sosho translation, Japanese Army Operations in the South Pacific Area: New Britain and Papua Campaigns 1942 – 1943, referenced earlier. Admiral Kondo, who had overall charge of Indian Ocean operations, as Commander Second Fleet, stated in a 1948 interview with Gordon Prange, that, following completion of the "Phase 1" operations, he had initially supported an Indian Ocean offensive to drive Britain out of the war subject to two conditions. One was that Germany should penetrate Iraq and Iran, cutting Britain's oil supplies and threatening India from the rear. The other was that, in order to destroy a powerful enemy encounter, sufficient forces must be deployed. He recognised that the latter meant withdrawing forces from the primary Pacific theatre which was a major disadvantage. "Some Opinions Concerning the War", in Goldstein and Dillon, The Pacific War Papers, ibid.

⁴³ Personal signal FSL to King of 3 April, PREM 3/163/8, TNA. Brooke's diary claim is the entry for 6 April in: Alanbrooke, Field Marshall Lord, edited by Alex Danchev and Daniel Todman, *War Diaries 1939-1945*, (London: Wiedenfeld and Nicolson, 2001). King replied to Pound through Ghormley, Special Naval Adviser in London, that diversion action was underway on 8 April. Although King did not elaborate, this no doubt referred to the forthcoming Doolittle raid which took place on 17 April. ADM 223/259, TNA. *Indomitable* and *Formidable*, eleven assorted cruisers, few the most modern, and fourteen destroyers. Somerville was promised a third carrier *Illustrious* in April and the modernised battleship *Valiant*, repaired after Alexandria in June.⁴⁴ As many historians have stressed, this fleet was more impressive on paper than in reality.⁴⁵ The individual units had never operated together and many lacked training.⁴⁶ The embarked air group mustered only 57 strike aircraft and 37 fighters⁴⁷, about a third of that in the IJN carrier force it would shortly face and the crews lacked experience.⁴⁸ The *R-class* battleships, despite recent refits, were in a poor material state, amply demonstrating how unsuited they were to face the IJN.⁴⁹ Against this, Somerville did have some advantages. Port T provided an alternative base beyond the reach of likely IJN reconnaissance, FECB now relocated from Singapore to Colombo provided a distinct intelligence advantage, his aircraft could operate at night, and there was now a respectable fighter force in Ceylon.⁵⁰

Marder provides a comprehensive, often vivid, account of Somerville's qualities, his reaction to the appointment, the limitations of his fleet and thoughts about how he should operate. He also provides what is still the most authoritative account of the IJN attack on Ceylon in April and its consequences, significantly extending the more summary version of Roskill. Marder drew here on extensive first- hand accounts and diaries from key members of Somerville's staff, his second in command, Vice Admiral Sir Algernon Willis, his Chief of Staff, Commodore Ralph Edwards, and Staff Officer Plans, later Vice

⁴⁴ A full list of the fleet at this date is given in COS (42) 66 (O) of 18 March, CAB 80/61, TNA. *Valiant* was not in reality ready until August.

⁴⁵ For example: Roskill, Marder, Barnett, Murfett and Willmott.

 ⁴⁶ Vice Admiral Sir Kaye Edden, in his paper written for Marder in 1977, describes the Eastern Fleet as little more than a "rabble" when Somerville took over. Edden, paragraph 51, SMVL 8, CCA, Cambridge.
 ⁴⁷ Marder, Vol 2., p 113. The 57 strike aircraft include 11 Swordfish in *Hermes*. The remainder were Albacores.

⁴⁸ The lack of experience of the aircrews and low operational efficiency of the carriers is explained in an Admiralty minute to the PM of mid-April, PREM 3/163/8, TNA.

⁴⁹ Marder, Vol 2., p 113. Marder drew here on the testimony of Vice Admiral Sir Algernon Willis who commanded the battle-fleet for Somerville.

⁵⁰ 'Reinforcements for India and Ceylon', COS (42) 66 (O) of 18 March has an overall fighter strength of 68 Hurricanes and 17 FAA Fulmars, and a strike/recce force of 24 Blenheims, 24 Swordfish/Albacore, and 9 Catalinas. The website Combinedfleet.com (See: posting "Operation C" started by Rob Stuart on 1 December 2008, under forum "Battles") has slightly different figures for the end of March sourced from RN and RAF station and squadron records. It summarises the land-based forces as comprising: 47 Hurricane IIs, 40 Fulmar II, 2 Martlets, 14 Blenheims, 16 Swordfish, and 12 Catalinas. Not all these were serviceable. The Catalinas were a mix of RAF, RCAF and Dutch. The overall fighter strength here is about the same, at least 85 aircraft, but the strike component is smaller than in the COS memo.

Admiral Sir Kaye Edden. Despite the quality of his narrative and scrupulous reading of these sources, there are important issues which Marder does not address which are critical to a proper understanding of the Eastern Fleet's engagement with the IJN attack force and the huge risks this posed.

The first question is whether there was an adequate understanding between the Admiralty and Somerville on the role of the Eastern Fleet and his remit as commander. Marder, who is sympathetic to Somerville, implies a lack of clear Admiralty direction. He suggests the concept of the Eastern Fleet operating as "a fleet in being" avoiding the risk of engagement with a superior IJN force was one developed by Somerville and Willis. Somerville did indeed hold this view and expressed it to Pound in a private letter on 11 March.⁵¹ He specifically stated that, if Ceylon was lost, it would be difficult but not impossible to retain communications to the Middle East. However, if the Japanese also destroyed the greater part of the Eastern Fleet, the situation would indeed be desperate. Pound not only accepted this view but reflected it in a concise Directive for CinC Eastern Fleet despatched on 19 March with the full authority of the COS. This set the overall goal of protecting Indian Ocean communications but stressed the need to act as a fleet in being and to avoid unnecessary risks, crippling losses, or attrition. It also highlighted the most likely IJN moves as coastal attacks in the Bay of Bengal and against Burma and a "Pearl Harbour" type raid on Ceylon.⁵² The Admiralty instruction was therefore clear and correctly anticipated Japanese moves.⁵³

The next issue is the quality of intelligence available to Somerville, what he knew about IJN intentions and capabilities generally, what he knew of a specific attack on Ceylon, and what conclusions he could reasonably draw. Here he could exploit a high quality staff, the capabilities of FECB relocated from Singapore, and, not least, the experience of Vice

⁵¹ Somerville letter to FSL of 11 March, SMVL/8, CCA, Cambridge.

⁵² Admiralty tel to CinC Ceylon and SO Force V of 19 March, REDW 2/8, CCA, Cambridge. SO Force V was Somerville while en route to the Indian Ocean in the carrier *Formidable*.

⁵³ The Captain of *Dorsetshire*, Augustus Agar VC, describes Somerville showing him "a personal cypher message" from the First Sea Lord in which the latter most strongly advised that Somerville was not to allow his fleet to become engaged with anything except inferior forces until the Eastern Fleet could be reinforced. From Agar's autobiography quoted in Michael Tomlinson, *The Most Dangerous Moment*, (London: William Kimber, 1976), p 81 - 82.

Admiral Sir Geoffrey Layton, now CinC Ceylon. Marder and Roskill suggest British forewarning of an attack on Ceylon came from a specific intelligence report, assumed to be communications intercept, on 28 March. The story is more complicated. Both FECB and the US Station Cast based at Corregidor in the Philippines continued to make progress on JN 25B in the first part of 1942.⁵⁴ About 20 March, FECB intercepted JN25B messages referring to a forthcoming operation by an IJN carrier force, accompanied by another force thought to comprise heavy cruisers, in the "D" area (assessed from other indications to be Ceylon) including an air raid against "DG" (probably Colombo) on 2 April.⁵⁵ FECB also believed the IJN force had concentrated at Staring Bay in the Celebes and had left there on 21 March.⁵⁶ Somerville called a conference on 29 March between his staff and the Head of the FECB sigint unit, Paymaster Lieutenant Commander Harry

⁵⁴ See: History of HMS Anderson, Chapter IV, p 5, HW 4/25, TNA. HMS Anderson was the name given to the relocated FECB operation outside Colombo. The Anderson history states that the first British decrypts of JN25B messages were achieved by FECB on 4 January 1942 before departure from Singapore. Once reestablished at Colombo, good progress continued to be made with JN25B recoveries, working in close concert with the US Station Cast team at Corregidor, until the latter began to run down as key personnel were evacuated to Melbourne in Australia. The official GC&CS post war history, "Organisation and Evolution of Japanese Naval Sigint Part VI, Production and Use of Sigint in the Early Part of the War, December 1941 – 1942", p 6, which is in HW 50/59, TNA, confirms that FECB achieved at least some decryption of JN25B during the six months it was in use from December 1941 to May 1942. John Prados, Combined Fleet Decoded, p 215, states that the US Station Cast team in Corregidor, Philippines, achieved their first decrypt of a JN25B message on 8 December 1941. This may be correct but p 20 of the more authoritative work by Frederick Parker, A Priceless Advantage: US Navy Communications and the Battles of Coral Sea, Midway and the Aleutians, (Center for Cryptologic History, US National Security Agency, 1993), which draws on NSA records, states that the main US breakthrough into JN 25B came in early February. Prados states that the USN was able to decrypt about 10% of JN25B messages by the beginning of May 1942 (p 305). Parker does not give a figure but suggests that, by April, it was much higher than this with decrypted messages often being circulated within six hours of receipt. The Anderson history acknowledges that the US achieved a higher volume of decrypts than the British. The GC&CS history, Parker and Prados all agree that all JN 25 coverage was lost when the Japanese switched to JN25C on 25 May.

⁵⁵The GC&CS official history "Organisation and Evolution of Japanese Naval Sigint Part VI, HW 50/59, TNA, summarises the relevant sigint available in Colombo. There is an unresolved mystery over the origin of the 2 April date for the attack. Japanese records summarised in JM 113 at p 64 and 68 show that the Japanese command had agreed that the attack day "C Day" would be 5 April as early as 16 March. ⁵⁶ Equal mystery surrounds the origin of the 21 March departure date from Staring Bay. JM 113 shows that a departure date of 26 March had also been agreed by the Japanese command by 16 March. John Prados, p 274, refers to a much wider range of intercepts than does HW 50/59. It can be assumed therefore that the picture presented to Somerville on 28 March drew on several decrypts relating to forthcoming Indian Ocean operations which had been achieved by both FECB and the USN sigint teams at Station Hypo in Pearl Harbour and the new Cast organisation in Melbourne. By this time Anderson, Hypo and Melbourne were linked by a dedicated communications network for sharing intercept material and decryption techniques. Parker, *A Priceless Advantage*, p 12.

Shaw, to evaluate the reliability of the various intercepts which he accepted as accurate.⁵⁷ Somerville summarised the intelligence picture drawn from this meeting for the Admiralty later that day. The intercepts suggested an IJN force, probably comprising two carriers, four cruisers, and 12 destroyers, would leave Staring Bay on 21 March for an attack on Ceylon about 1 April.⁵⁸ Somerville confirmed in his post action report to the Admiralty after the raids were over that he believed he faced two carriers with accompanying cruisers and destroyers though with the possibility of a battleship covering force in support.⁵⁹ He therefore anticipated a "hit and run" raid which he evidently judged his fleet could manage. This report also suggests Somerville misjudged both the numbers and capability of the IJNAF aircraft he would face. The first was excusable because, as demonstrated in Chapter Five, NID had consistently underestimated IJN carrier air complements by about a quarter. However, the report shows that he expected the IJN carriers to deploy strike aircraft similar to Albacores and expresses surprise that they had deployed "fighter bombers" in their air strikes against the cruisers Dorsetshire and *Cornwall.*⁶⁰ In fact, the IJN had here deployed their standard Type 99 Val dive-bomber on which, as Chapter Five showed, good intelligence was now available. Somerville's staff should have been well briefed on this.⁶¹

⁵⁷ Organisation and Evolution of Japanese Naval Sigint, p 5. Somerville Pocket Diary entry for 29 March, item 229, The Somerville Papers, Navy Records Society, 1995.

⁵⁸ CinCEF Zymotic signal 0626Z (probably 1226 Ceylon time) to Admiralty of 29 March 1941, ADM 223/867, TNA. This signal ascribed the intelligence to "Combined Fleet telegram orders" but it is clear from the drafting that it included an element of deduction especially regarding force composition. In the event, FECB not only seriously underestimated the size of the IJN carrier group (five rather than two) but expected it to include *Kaga*, the one fleet carrier which would not be present. "Zymotic" was a security classification indicating the message referred to sensitive sigint material.

⁵⁹ The presence of the "battleship covering force" proved correct but, interestingly, is not mentioned in the 29 March Zymotic signal.

⁶⁰ CinCEF to Admiralty of 11 April, REDW 2/8, CCA, Cambridge. See also: Battle Summary No 15, ADM 234/331; CinC Eastern Fleet Report of Proceedings dated 13 April, ADM 199/429; both in TNA, and Marder, Vol 2., p 117-118.

⁶¹ Chapter 5 footnotes 23 and 25 show that accurate performance data for the three primary IJN carrier aircraft, and their armament, had been made available to NID by December 1941. Somerville and his staff had ample time to absorb this material before *Formidable* sailed from UK in mid-February and copies of relevant intelligence publications would have been held on board. Details of the IJN carrier aircraft were certainly available to the RAF squadrons defending Ceylon. The log book of Flying Officer Robert Mayes, a pilot with 261 Hurricane squadron, based at China Bay, states that Trincomalee was raided on 9 April by "50+ Navy 97s" and 50+ Navy O's". Japanese records (JM 113, p 77) confirm that these aircraft identifications were correct although the actual numbers deployed were 91 Type 97s and 38 Zero fighters. Copy of Mayes' log book kindly provided by his daughter, Mrs Felicity Stribley.

The intercepts described above were not the only intelligence available. Traffic analysis and D/F had continued to perform impressively since the start of the war. An NID report on 1 March gave a detailed and broadly accurate breakdown of IJN southern forces⁶² while successive Weekly Intelligence Reports in mid-March referred specifically to IJN forces likely to be deployed in the Indian Ocean, anticipating at least three fleet carriers, three *Kongo* class battle-cruisers, and a substantial cruiser force.⁶³ There were also recent JIC assessments⁶⁴ and the precedents of Pearl Harbour and the attack on Darwin in February.⁶⁵ The WIR proved an accurate guide to the IJN force actually deployed against Ceylon. Under the command of Vice Admiral Chuichi Nagumo, this comprised five carriers⁶⁶ with about 300 aircraft⁶⁷, four *Kongos*,⁶⁸ and two heavy cruisers⁶⁹ and left Staring Bay on 26 March.⁷⁰ Overall, there was ample background intelligence here to suggest that, whatever the clues to force composition in the current intercepts, the IJN

⁶⁶ Akagi, Hiryu, Soryu, Shokaku and Zuikaku.

⁶⁹ *Tone* and *Chikuma*.

⁶² NID L.C. Report No 136 of 1 March 1942, ADM 205/13, TNA.

⁶³ WIRs No 105 of 13 March and 106 of 20 March, ADM 223/153, TNA. These reports did not get the composition exactly right but their estimate of overall strength was certainly in the right order. WIR 106 also reported (presumably from traffic analysis) that either *Kaga* or *Akagi* was reported on 11 March to be returning to Japan. This was in fact *Kaga* which had engine trouble.

⁶⁴ The most recent relevant JIC assessment was JIC (42) 70 (O) of 3 March, 'Defence of Ceylon', CAB 79/19, TNA. This looked specifically at Pearl Harbour type raids and judged the Japanese could deploy three *Kongo* type battle-cruisers, three to four carriers, and four 8 inch cruisers. This was very close to the force actually deployed in April and, not surprisingly was consistent with the NID assessment. ⁶⁵ Four carriers, *Kaga, Akagi, Hiryu* and *Soryu*, took part in the Darwin raid launching a total of 188 aircraft.

The raid is described in detail in the new Australian book by Tom Lewis and Peter Ingman, *Carrier Attack Darwin 1942*. They note that this appears to be the only time the IJN carriers conducted a "full deck load" strike i.e. a single continuous launch of the maximum strike force as opposed to breaking it into two waves. See also: Dull, *A Battle History of the Imperial Japanese Navy*, p 54.

⁶⁷ Marder, Vol 2., p 94 suggests the IJN carriers had 400 aircraft. That aligns with the maximum aircraft complement figures quoted by Peattie in *Sunburst*, Appendix 4. However, even at Pearl Harbour, with maximum effort, and six carriers, Jonathan Parshall in *Shattered Sword* states that the IJN only achieved 412 aircraft. Alan Zimm has the slightly higher figure of 417 at Pearl Harbour. *The Attack on Pearl Harbor*, Chapter Four. Parshall explains that the combination of attrition in the first six months of the war and low production rates steadily reduced carrier complements so that the four carriers at Midway only carried 225 aircraft compared to 267 at Pearl Harbour. A maximum of 300 for the five carriers in the Indian Ocean is therefore a more realistic estimate. A blog on the website "combinedfleet.com" (see: "Operation C" under "Battles" forum, initiated on 1 December 2008 by Rob Stuart) quoting Japanese Carrier Group records, gives a precise total of 273 aircraft allocated as follows: *Akagi* 54; *Soryu* 54; *Hiryu* 54; *Shokaku* 56; and *Zuikaku* 55. The Admiralty minute to the PM after the Ceylon action stated that the five IJN carriers had 228 aircraft. This minute, rather oddly, quotes a lower displacement for *Zuikaku* of only 16000 tons suggesting NID no longer assessed her to be a sister ship of *Shokaku*. PREM 3/163/8, ibid. ⁶⁸ This was the only occasion all four *Kongos* operated together.

⁷⁰ See JM 113, p 65, for a detailed breakdown of the IJN force. This includes details of the separate "Malay Force" under Vice Admiral Ozawa operating in the Bay of Bengal and centred on the light carrier *Ryujo* and five heavy cruisers. See also, Prados, p 274.

could deploy a far superior force to the Eastern Fleet and all previous precedent suggested they would do so. This wider intelligence picture meant the Admiralty was well placed to question whether Somerville's 29 March assessment of the IJN attack force was safe and they had ample time to urge caution. However, there is no evidence that they did so. This was a major failing although they may have been misled by the NID perception of an apparent lull in Japanese activity and false indications that all IJN carriers were heading back to Japan.⁷¹

The IJN attack on Ceylon

On the basis of the FECB intelligence, Somerville assessed the IJN force would aim for a launch point about 100 miles southeast of Ceylon from where they could conduct simultaneous strikes on Colombo and Trincomalee.⁷² He also expected them to opt for a moonlight launch followed by a dawn recovery.⁷³ He therefore arranged for the RAF to conduct air searches using Catalinas down a wide southeast approach arc out to a range of 420 miles.⁷⁴ He himself sailed on 30 March and deployed his fleet in a patrol area, centred about 100 miles south of Ceylon, and to the southwest of the expected Japanese

⁷¹ This assessment appeared in WIR No 107 of 27 March 1942, ADM 223/153, and was endorsed in the next report No 108 of 3 April which was based on intelligence received up to 29 March, ADM 223/154, both in TNA. It is not clear how NID reached this assessment which appears to conflict with the developing FECB view in Ceylon. The explanation may be that these two WIRs predated the main JN 25B intercepts and there was an absence of radio traffic while the Nagumo force was in Staring Bay and certainly after their departure. Absence of call signs for major units in the Southern theatre was then interpreted as evidence they had left for Japan or the Pacific theatre.

⁷²Somerville's anticipated launch point for the Japanese force can be seen on the map at p 21 of BS 15. JM 113, p 68, shows that this was a very accurate reflection of the original Japanese intention. Their initial plans anticipated that the Task Force would proceed to either a Point C at 6N 84E or Point D at 6-20N 82-40 E. These positions were indeed off the south-east corner of the island and Point D was about 50 miles north of Somerville's estimate with Point C further away to the east. In the event, the actual Japanese launching point on the morning of 5 April was about 140 miles south west of Point D. According to Captain Agar, again quoted in Tomlinson, p 63 – 64, Somerville may have been influenced in his assessment of the likely Japanese launch point by the AOC Ceylon, Air Vice Marshal d'Albiac, who Agar states gave a prescient reading of Japanese intentions at a briefing to Somerville's Captains on 26 March.

⁷³ There was a full moon on 1 April and dawn was about 0600 hours. JM 113 shows the Task Force always planned a dawn launch at 0600.

⁷⁴ It appears only six Catalinas were available from a possible maximum of 12 for this search. See Rob Stuart, "Leonard Birchall and the Japanese Raid on Colombo", *Canadian Military History Journal*, Vol 7, No 4, footnote 12 for sources.

line of approach.⁷⁵ His plan was to remain clear of likely IJN reconnaissance sweeps during daylight hours and then close during darkness in the hope of conducting a night torpedo attack. He followed this plan for two nights and then late on 2 April decided he must retire to Port T, some 600 miles south-west of Ceylon, to refuel.⁷⁶ This decision was dictated primarily by the low endurance of the *R*-*class* but also growing doubts about the reliability of the intelligence and the value therefore of remaining in the area. This meant Somerville had just reached Port T when the Nagumo force was sighted by a Catalina some 360^{77} miles from Ceylon on the afternoon of 4 April, four days later than expected.⁷⁸

The delay was the first of several lucky escapes for Somerville. Nagumo had indeed approached from the southeast but his track was well to the west of what Somerville had expected and would have taken the IJN force on a heading directly through the western section of the Eastern Fleet waiting area.⁷⁹ If Nagumo had arrived four days earlier, he would therefore almost certainly have detected Somerville and could have positioned across the line of retreat to Port T. This is illustrated in Map 1 below.⁸⁰ Trapped by a vastly superior force, with overwhelming airpower and a significant speed advantage, Somerville would then have suffered heavy losses if not annihilation. While both Marder and Roskill highlight Somerville's fortuitous escape, neither comments on the wisdom of his original positioning. Making due allowance for hindsight, this looks foolhardy. It reflected unsafe assumptions about the size of the IJN force and its line of approach and

⁷⁵ The eastern edge of Somerville's patrol area was just to the south west of the likely Japanese approach course if they had selected Point D as their launch point. Point C was of course further away to the east. ⁷⁶ Admiralty Battle Summary No 15, Naval Operations off Ceylon, 20 March – 10 April 1942, p 2 – 4, ADM 234/331, TNA.

⁷⁷ BS No 15, p 4, ibid. The Catalina was able to report the position of the IJN force but was shot down before reporting its composition. There are detailed accounts of the episode not only in Rob Stuart's article but also in Michael Tomlinson, *The Most Dangerous Moment*, p 84 – 88 and 94 -98, and David A Thomas, *Japan's War at Sea*, (London: Andre Deutsch, 1978), p 105.

⁷⁸ Rob Stuart explores reasons for the delay. He suggests one possibility was the desire to hit Colombo on a Sunday when defences might be more relaxed and there was perhaps a higher chance of catching the Eastern Fleet in harbour. Another explanation was delay in concentrating the Nagumo force for the Indian Ocean due to other commitments. However, as already stated above, the evidence from Japanese sources (JM 113) is that the planned attack date was always 5 April and that, for whatever reason, the signit was wrong.

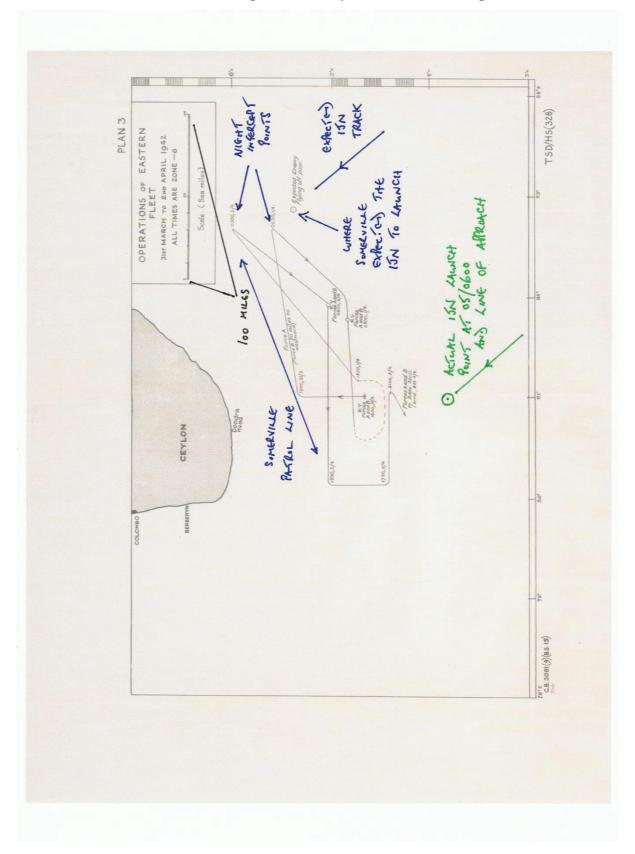
⁷⁹ BS 15, maps p 20 and 22, ibid. The crucial Catalina sighting was indeed at the extreme western edge of the ordered Catalina search arc. It appears Nagumo deliberately held to a westerly course, delaying the turn north to his planned launch point, for as long as possible to reduce his exposure to air search from Ceylon. If this is the case, it very nearly worked and could have had disastrous consequences.

⁸⁰ Map 1 is taken from the map on page 21 of Battle Summary No 15 with the actual Japanese flying off position taken from the coordinates shown in the map at p 92 of Japanese Monograph 113.

carried significant risk of detection from air reconnaissance ahead of the Japanese force the afternoon before their final night approach. If his night attack failed, or was only a limited success, Somerville would also be very vulnerable to an overwhelming counterstrike the following morning.⁸¹ The wiser option would have been to retreat to Port T until he could estimate the size of force he faced from the strength of its attack on Ceylon, or at least to have positioned his waiting area about 150 miles northeast of Port T. The latter option would make it easier to intervene with a night attack if the intelligence was good enough while remaining far enough away from Nagumo's worst case approach route to be relatively safe from discovery. It was an area the Japanese were unlikely to look unless they knew of the existence of Port T.⁸² A further weakness in Somerville's planning, which again has received little scrutiny, is his decision to keep the *R-class* in close proximity to his flagship and fast carriers. The *R-class* brought him little military value, were highly vulnerable, and would complicate planning if he had to move quickly.⁸³

⁸¹ Somerville's Report of Proceedings, and Battle Summary No 15, ADM 234/331, TNA. show that he expected the IJN force to launch their attack on Ceylon in the dark well before dawn and then to recover in daylight. Simple time/distance calculations show that the distance between the two forces in the two hours before sunset the previous evening might be only 150 - 200 miles, well inside possible IJN reconnaissance sweeps. In the event, JM 113 demonstrates that the Japanese Task Force did not sweep ahead on the afternoon of 4 April and a planned recce of Colombo harbour by cruiser floatplanes was cancelled. If the Japanese had followed the same policy on 31 March (for a 1 April attack), Somerville would not therefore have been sighted prior to nightfall but he could not reasonably have assumed that. The absence of prior air recce reflected a Japanese decision to rely primarily on submarine recce of Colombo and Trincomalee (JM 113, p 66). This had limited effectiveness. Avoiding detection before dark would not have ended Somerville's problems. Both the ROP and BS 15 emphasise the unique RN capability to conduct day and night search using airborne radar and Somerville's major units also had a comprehensive up to date radar suite. These assets could clearly facilitate night search and strike and also help evade detection. However, ASV 2 range was only 15 miles for a medium size warship, so perhaps 20 miles for a carrier. Derek Howse, Radar at Sea, Appendix F, p 308. The Force A search crews also had limited experience. Night detection and strike in these circumstances would be a high risk enterprise leaving little margin for successful escape. If Nagumo had made for Point D, and Somerville had failed to find him during the night, then the map at p 21 of BS 15 demonstrates he would have been little more than 100 miles from the Japanese by dawn. Dawn searches by Nagumo must have found him with the whole day then available to hunt Somerville down. ⁸² The Japanese in fact never identified Port T, Roskill, Vol 2., p 25, although Somerville could not assume this at the time. JM 113, p 65, also shows that the Japanese tasked at least one submarine with reconnaissance of the Maldives during the period of Operation C. Given the sheer size of the island chain, submarine surveillance would have been lucky to spot Somerville but it was a further risk to the British force.

⁸³ Somerville did divide his fleet into a fast Force A, comprising *Warspite*, the carriers, and his faster more modern cruisers and destroyers, and a slow Force B focused on the *R*-class but it might have been wiser to leave the latter training at Port T. His argument for keeping the *R*-class close enough to support Force A was clearly the fear that fast IJN capital ships might be able to close and strike his carrier force in bad weather or at night. See para 27 of his Report of Proceedings.



MAP 1: Eastern Fleet Waiting Area off Ceylon 31 March – 3 April 1942

Somerville made two further decisions which placed all or part of his fleet in danger. The decision late on 2 April to refuel at Port T rather than Colombo and keep his fleet together as a concentrated force was sound and indeed probably saved him from destruction. However, he detached the heavy cruisers *Dorsetshire* and *Cornwall* to Colombo and Hermes to Trincomalee to resume previous commitments. This reflected his growing belief that the intelligence of imminent attack was wrong. All three ships were consequently then found by Nagumo in the vicinity of Ceylon and sunk.⁸⁴ Churchill and others were critical of this action but Somerville was vigorously defended by the Admiralty who felt he had made reasonable decisions given what he knew at the time.⁸⁵ The case against Somerville here is that, in judging the intelligence wrong, he was not ruling out one intercept but a cumulative weight of evidence. The risk in detaching elements of his force to Ceylon was therefore less justified than he and the Admiralty implied.

The second decision, for which Somerville was heavily criticised by Willis and members of his staff at the time, was to leave Port T and head back towards the IJN force as soon as he learnt of the sighting south of Ceylon on the afternoon of 4 April. This reflected Somerville's continued conviction he faced a relatively small raiding force which he might catch with a night attack as it retired after striking Colombo.⁸⁶ This, as Willis recognised, was a high risk strategy exposing the Eastern Fleet to an enemy force whose composition and capability was still unknown.⁸⁷ Taking the fleet to sea was certainly correct in case the Japanese were aware of Port T but Somerville would have been wiser to loiter well to the west until the intelligence picture cleared especially given the possibility the Japanese might also move west and conduct a rigorous search for the

⁸⁴ Dorsetshire and Cornwall were sunk to the west of Ceylon on the afternoon of 5 April while on fast transit from Colombo to rejoin Somerville. Hermes was sunk south of Trincomalee on 9 April after Nagumo conducted his raid on that port.

⁸⁵ Churchill's criticism of Somerville is summarised in Marder, Vol 2., p 171-172. The First Lord's reply on behalf of the Admiralty on 10 June is in PREM 3/163/8, TNA.

⁸⁶ The testimony of the Catalina crew which sighted the Japanese at 1600 on 4 April, as recorded by Rob Stuart, Tomlinson and others, demonstrates that they saw enough of the Task Force to have convinced Somerville that he faced a substantial fleet not a raiding force. Had the Catalina been able to get this information out before being shot down, Somerville would no doubt have acted differently. ⁸⁷ War Memoirs of Admiral Sir Algernon Willis, p 33-35, IWM.

Eastern Fleet.⁸⁸ As it was, he continued east even after the attack on Colombo on the morning of 5 April suggested the IJN must have more than two carriers and after observing a large IJN air group on *Warspite's* radar, 84 miles to the north-east at 1344.^{89 90}

The relative movements of the British and Japanese fleets on the afternoon of 5 April have never received detailed scrutiny from historians yet they raise fascinating questions relating to the performance of both combatants.⁹¹ A close study illustrates the almost reckless risk taken by Somerville but also shows that he came remarkably close to being able to launch a successful night strike on Nagumo's force that evening. The best visual presentation of what happened that afternoon is the large scale map on page 22 of Battle Summary No 15. This shows the movements of British forces, the scope of Somerville's various air searches, and British estimates of the position of the Japanese task force based on aircraft sightings and other intelligence over the course of the day.⁹² The picture provided by BS 15 is, however, incomplete because it does not provide a track chart for the Japanese force. This was not available when it was published in 1943.⁹³ It is,

 $^{^{88}}$ JM 113, p 72, shows that the Japanese Task Force undertook dawn searches on 5 April to the south-west (between 240 – 280 degrees to a depth of 200 miles) and north-west (between 310 – 320 degrees to a depth of 170 miles). The first search cone found the *Dorsetshire* force at 1000. One of Somerville's Fulmar search planes launched at 0800 also spotted one of the Japanese searchers about 140 miles almost dead ahead of Force A at 0855. This aircraft would have been at the extreme south-west edge of the Japanese south-west cone. It seems that, apart from shadowing the *Dorsetshire* force, the Japanese conducted no further searches after the morning aircraft returned. Nagumo and his staff presumably judged the morning searches would have picked up any forces leaving Colombo after the alert the previous afternoon and that no intervention from elsewhere was likely.

⁸⁹ The paint on *Warspite's* radar was in fact the strike going in on *Dorsetshire* and *Cornwall* which both sank just before 1400, BS No 15, p 11. Vice Admiral Sir Kaye Edden, then Somerville's SO Operations provided a vivid description of the staff seeing the paint briefly on the large radar screen in Warspite's charthouse. Somerville immediately said – "That's a Jap air strike." Para 74, Edden paper for Marder dated 24 February 1977, SMVL8, CCA, Cambridge.

⁹⁰ Somerville's justification for his movements on 5 April as put to the Admiralty in his post action report of 11 April is unconvincing. Edwards' diary indicates that Eastern Fleet were aware quite soon after the early morning attack on Colombo that 75 IJNAF aircraft had been involved. Both in REDW 2/8, CCA. The actual attack numbers were 128 but even 75 would have suggested more than two carriers.

⁹¹ Marder for example does not really cover these movements on 5 April at all in his otherwise very comprehensive account.

⁹² Successive reports from 0700 – 1100 correctly placed the IJN force about 120 miles south of Ceylon, apparently "marking time", in Somerville's estimation, as they recovered aircraft. These were achieved primarily through Catalina surveillance. BS No 15, p 11 and Michael Tomlinson, p 88 and 122. A further Catalina was shot down early on 5 April in the course of this surveillance. There was also some signit from HMS Anderson at Colombo who were able to monitor Japanese air traffic. History of HMS Anderson, chapter IV, p 6.

⁹³ BS No 15 was published in 1943 before any Japanese information was available.

however, possible to superimpose the Japanese track from post war Japanese records.⁹⁴ The real Japanese track is somewhat different to that shown in the maps provided by Roskill and Marder which are often reproduced.⁹⁵ Their maps show a fairly accurate launch position for the attack on Colombo but then have Nagumo turning on to a course of 200 degrees (just west of south) by mid-morning and maintaining this for about 100 miles before turning southeast to retire. In fact, the evidence shows that, once he had completed recovering his aircraft, by about 1030⁹⁶, Nagumo set a more northerly course of 230.⁹⁷ The true Japanese track coincidentally coincides very closely with the 230 bearing drawn on the BS 15 map which represents an intercept received by Somerville at 1700.98 Nagumo's course was no doubt chosen to close the *Dorsetshire* force which had been sighted by one of his search aircraft at 1000 and was initially reported steering 240 at 24 knots.⁹⁹ Nagumo was therefore turning to parallel the new target with the added advantage his carriers were steering into the wind.¹⁰⁰ The Japanese record shows that the strike force against the cruisers was launched from 1145.¹⁰¹ They were found without difficulty and both were sunk by 1400.¹⁰² A Japanese search plane from the cruiser *Tone*, which had been shadowing the British cruisers, also searched some 50 miles forward of

⁹⁴ Japanese Monograph 113, ibid, includes a map at p 92 setting out the movements of the IJN Operation C Task Force with timings for key events and course changes.

⁹⁵ Roskill's map is in Vol 2, p 25. Marder's map is in Vol 2, p 120.

⁹⁶ Jonathan Parshall, *Shattered Sword*, chapter 7, which draws on Japanese sources and records, states that the first aircraft from the Colombo raid began landing on at 0948.

⁹⁷ A much better map, than those of Roskill and Marder, though it still has some errors is that drawn by Gordon Wallace, an observer who was serving during the Ceylon operation with 831 squadron in *Indomitable*. He correctly presents Nagumo's 230 course, and illustrates how this related to the attack on the Dorsetshire force, but he has him turning south-east at 1400, 90 minutes earlier than he in fact did. Gordon Wallace, *Carrier Observer*, (Shrewsbury UK: Airlife Publishing, 1993), p 82.

⁹⁸ BS 15, p 11. The bearing was "coincidental" with the Japanese track, because, although Colombo reported the Japanese Force steering 230 at 24 knots at 1400, they were not able to link this with any starting position. Somerville's team therefore clearly drew the bearing from a position extrapolated from those reported by Catalina recce during the morning. Although it related to 1400, the information did not get to Somerville until 1700, long after Nagumo had already turned south-east.

⁹⁹ JM 113, p 74, states the *Dorsetshire* force was sighted by a search plane from the cruiser *Tone* at 1000. Parshall and Tully describe this sighting and subsequent developments in *Shattered Sword*, chapter 7. According to BS No 15, p 7, *Cornwall* sighted an unknown aircraft at 1100.

¹⁰⁰ Lieutenant Commander Egusa, commanding the *Dorsetshire* strike force, assessed the wind as 230 degrees 6 metres (i.e. about 12.5 knots) at the start of the attack. Osamu Tagaya, *Aichi 99 Kanbaku "Val" Units 1937 – 42*, (Oxford: Osprey Publishing, 2011), chapter 6.

¹⁰¹JM 113, p 74. Parshall and Tully, chapter 7, provide a detailed account of the delays in rearming the reserve strike force in Carrier Division 5, *Shokaku* and *Zuikaku*, with torpedoes in exchange for the HE bombs which had been prepared for a second strike on Colombo. Nagumo eventually gave up on a torpedo strike and ordered the dive-bombers, which were by now available in *Akagi* and Carrier Division 2 (*Soryu* and *Hiryu*), to be used instead.

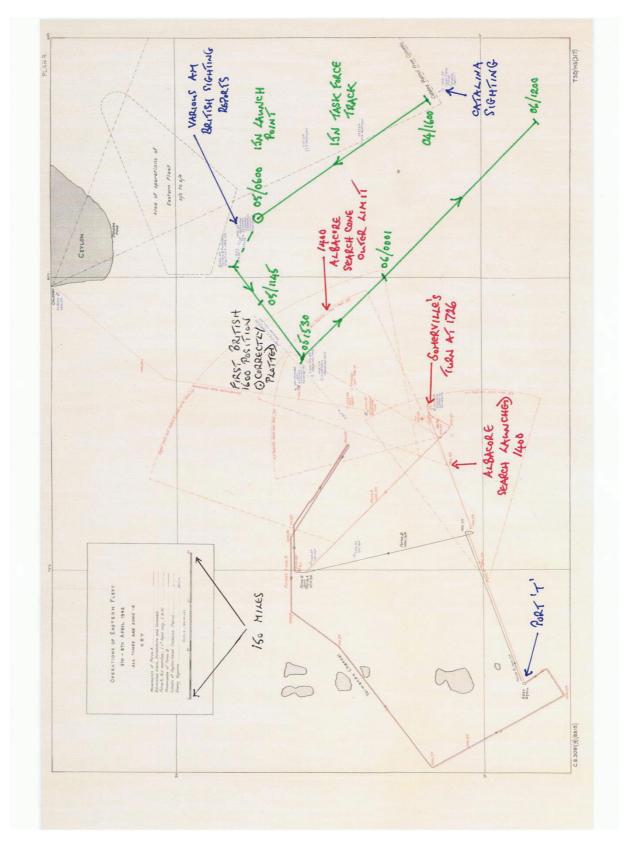
¹⁰² Tagaya, chapter 6, states the cruisers were first sighted at 1255.

their track and reported nothing to be seen.¹⁰³ Once he had recovered his aircraft, Nagumo therefore turned at 1530 to retire southeast.¹⁰⁴ The location of this turn was approximately 3-10N and 78-45E, about 180 miles northeast of Somerville's then position. The Japanese record suggests Nagumo steered about 150 at a mean speed of 15 knots until around midnight when he turned to about 140 and increased speed to about 18 knots until 1200 next day when he turned east. The comparative British and Japanese tracks are shown in Map 2 below.¹⁰⁵

¹⁰³Tagaya, chapter 6. It was fortunate the plane did not continue. Less than ten minutes flying time would have brought the Eastern Fleet Force A into view and Nagumo had a torpedo strike at last ready in Carrier Division 5.

¹⁰⁴Gordon Wallace, p 85, states that Nagumo turned south-east with the bulk of his force (he suggests at about 1400), while the *Dorsetshire* strike force was still in the air and left two carriers with their escort to recover them and follow on. Michael Tomlinson, p 124, appears to agree Nagumo began to retire south-eastward before the strike force had been recovered. It is not clear what evidence Wallace has to support the suggestion that Nagumo split his force here, nor is it clear why he would need to do so. The distance to the *Dorsetshire* force was only about 125 miles when the Japanese strike force took off. They had ample fuel therefore to catch up Nagumo if he chose to hurry on south-east. In any case, Tagaya, chapter 6, claims the strike force had all returned to the carriers by 1445 though the landing operations may have taken a while longer to complete.

¹⁰⁵ Map 2 is a copy of the map on Page 22 of Battle Summary No 15 with the Japanese track then superimposed in green ink. The coordinates and times for Nagumo's movements are taken from the map at p 92 of Japanese Monograph 113. The error in the plotting of the 1600 British reported position of the Japanese force is also shown.



Map 2: Comparative tracks of Eastern Fleet and IJN Task Force 5 – 6 April 1942

When Nagumo turned to the southeast at 1530, Somerville was still heading east on a mean course of about 070 which he held until 1726. He had launched four Albacores at 1400 to search a 40 degree sector on his port bow (025 - 065 degrees) out to a range of 200 miles.¹⁰⁶ Nagumo's 1530 turn placed him approximately at the mid-point of the outer edge of the search arc at 1600 when the Albacores could be expected to reach it. This meant the two Albacores covering the most northerly sectors were potentially well placed to sight him and both did. The aircraft covering the outer of these two sectors sent a sighting report giving an enemy position at 1600 though this did not reach Somerville until 1655.¹⁰⁷ This position was on the edge of the planned search arc but about 40 miles to the north-west of where Japanese records put the centre of their force at that time. The aircraft was subsequently attacked by a single Zero fighter but managed to evade though with some damage. The second aircraft sent no report but according to Japanese records was shot down at 1628.¹⁰⁸ The coordinates of the 1600 position transmitted by the first aircraft placed the Japanese force 175 miles from Somerville at that time. However, this position is wrongly plotted on the BS 15 map which suggests it may also have been wrongly plotted by Somerville's staff when it was received.¹⁰⁹ If it was, the incorrect plot would have put the Japanese force only 125 miles away.¹¹⁰ Almost simultaneously, at

¹⁰⁶These aircraft were launched from *Indomitable* and the search sector is shown on the BS 15 map at p 22. The aircraft would have flown courses 10 degrees apart to 200 miles and then turned to cover 10 degrees of perimeter before reversing course back to the carrier. Gordon Wallace, p 85, suggests it might have been wiser to deploy Fulmars, which had been used for the morning search, since these were less vulnerable to Japanese fighters. However, he recognises there was also a case to conserve all available fighters to protect the carriers.

¹⁰⁷ The report provided a position only without a course or force composition. BS 15, p 11.

¹⁰⁸ JM 113, p 74. The brief Japanese reference to this incident states that both aircraft were attacked at 1628 with one making good its escape. The implication is that both aircraft were in roughly the same area at this time though the search plan should have kept them separated. The BS 15 map shows that if the inner of the two northern Albacores had correctly followed its planned 035 track and then turned right on reaching the 200 mile limit to cover 10 degrees of arc before turning back, then this would have brought it over the Japanese main body at 1630. If the outer aircraft was also here at 1630 i.e. at the centre of the outer search arc, then it was badly out of position. An alternative possibility is that the inner aircraft was much slower reaching the limit of its search.

¹⁰⁹ Both the BS 15 text at p 11 and Somerville's separate Report of Proceedings, para 37, give the position of the 1600 Albacore sighting as 3-38 N and 78-18E. The map, however shows the sighting at 2-38N, 78-18W, which is 60 miles to the south. Somebody therefore, at some stage, misread the latitude and substituted "2" for "3". Given the two separate sources for the 3-38N latitude, it is almost certain it is the map that is wrong and not the coordinates. Since the BS 15 map was almost certainly copied from the original operations plot in Somerville's flagship, it also raises the fascinating possibility that the position was wrongly plotted by Somerville's staff on the afternoon of 5 April.

¹¹⁰ It was 125 miles from Somerville to the position plotted on the BS 15 map but 175 miles to the position the Albacore apparently reported by latitude and longitude.

1700, Somerville now received Colombo's sigint report. The impact of this latter report, putting the Japanese on a southwest course at 1400, coming at this moment, should not be underestimated. It not only suggested Somerville might be getting rather too close to a force he now judged likely to be much superior to his own but raised the prospect that the Japanese were heading for an attack on Port T.¹¹¹ This was bound to weigh heavily on Somerville's decisions over the next two hours or so. His immediate response was to turn southwest at 1726 to open the range or at least keep his distance. In reality, as Somerville started this turn, the Nagumo force was 140 miles away fine on his port bow and tracking southeast at perhaps 15 knots. It was just 40 minutes to sunset and Nagumo was completely oblivious of Somerville's presence. He not only failed to commission any searches following the appearance of the two Albacores, which he recognized as coming from a carrier, but had also taken no look out to the southwest all afternoon.¹¹²

Although he did not know it, Somerville was therefore at this point superbly placed for a night attack. All he needed was one more piece of intelligence to localize the Japanese position and course sufficiently accurately to enable him to mount a night ASV shadowing operation preparatory to launching a full strike. 30 Albacores, perhaps attacking in two waves, and ordered to focus on the Japanese carriers, would have had a good chance of disabling and probably sinking at least two of them by 2200. Somerville would then have had eight hours of darkness to evade and put himself perhaps 300 miles from Nagumo by

¹¹¹ Somerville describes his reaction to this report at para 40 of his Report of Proceedings. He judged that if the Japanese force held this course and speed they would be positioned to launch an air strike on Port T at any time after 0400 next morning. It was therefore vital he should open off their track to the southward. ¹¹² Nagumo's behaviour here is difficult to understand. JM 113, p 74, states that the Japanese recognised the Albacores as carrier aircraft and assumed that, since they were operating 350 miles from Ceylon, it was possible there was a carrier in the vicinity. It further states that the Japanese force consequently maintained an alert that night and planned to search for and attack the carrier at dawn. There are two puzzles here. First, at 1630, there were still nearly two hours of daylight – enough time to find the supposed carrier which would allow the Japanese to make dispositions for the morning even if an immediate attack was not possible. And, second, Nagumo maintained an uninterrupted course south-east which was highly likely to carry him away from the carrier. It appears that hunting down this carrier was not perceived to be a priority. Nor presumably was it regarded as much of a threat. Another possible explanation is offered by Mitsuo Fuchida, commander of the strike group at both Pearl Harbour and Ceylon. Fuchida states that, during the Indian Ocean operation, search planes often lost their way and the carriers had to send out radio signals on which they could home. This risked alerting the enemy to the Task Force's presence and the result was reluctance by Nagumo and his staff to send out search planes if it could possibly be avoided. Quoted in: Mitsuo Fuchida and Masatake Okumiya, The Battle of Midway, at p 139, (in David C Evans, The Japanese Navy in World War II.

dawn.¹¹³ Nagumo could not counter-strike at night or do much before dawn to find an RN force that could have come from almost any direction. Given the strategic importance to Japan of his remaining force and his distance from support, he would almost certainly have retired, however reluctantly, rather than risk pursuit deeper into the Indian Ocean.

At 1745 the Albacore responsible for the 1600 position, damaged after evading the Zero, landed on *Indomitable* and was at last able to amplify its sighting report.¹¹⁴ It was a dramatic moment. As soon as the Albacore had cleared the deck, torpedo strike forces were ranged on both Somerville's carriers with crews standing by in the cockpits while the search crew were debriefed.¹¹⁵ All Somerville needed was a sufficiently accurate report from this Albacore to initiate a follow up search in the right direction. Sadly, he did not get it. The debrief produced two signals from Rear Admiral Aircraft Carriers, Denis Boyd. The first received at 1800 provided a position for the Japanese force at 1710, putting them at 020 and 120 miles away, about 50 miles south of the 1600 sighting as communicated by the aircraft.¹¹⁶ The second signal at 1817 amplified the original 1600

¹¹³ The figure 300 miles assumes Somerville would have retreated west at about 20 knots giving him 160 miles over eight hours. If the attack range was at least 120 miles, then 300 miles by dawn is credible. The standard IJN search range in early 1942 was a single phase radial pattern out to a maximum of 300 - 350 miles but often much less. See: Mark Peattie, *Sunburst*, 153 – 155. However, JM 113 shows that all the searches commissioned during Operation C were 250 miles or less.

¹¹⁴Gordon Wallace, p 86. The pilot of this aircraft was Sub Lieutenant Grant-Sturgis and it was the most westerly of Somerville's four search planes. The aircraft got off a position on sighting the IJN force of 126 miles bearing 026 from the Eastern Fleet but was jumped by a Zero fighter before he could provide any clarifying detail, including force composition, course and speed. He evaded with relatively minor damage but his communicator was wounded. In these circumstances, the difficulty the crew had in giving a precise accurate account of what they had seen when they landed is hardly surprising.

¹¹⁵ Gordon Wallace, p 69 and p 86, states that, at sunset which was at 1809, 831 squadron in *Indomitable* and 820 squadron in *Formidable* were both ranged on deck, armed with torpedoes, and manned by their crews, waiting to attack. Wallace does not provide any detail of squadron strength for these attacks. Marder, Vol 2, p 113 states that *Indomitable* had 24 Albacores and *Formidable* 22. Each carrier had two Albacore squadrons. Most sources suggest these totals are about right but actual operational availability of aircraft would have been much lower. Edden refers to serious serviceability problems, Edden, paragraph 66, CCA. A maximum potential attack force of say 30 perhaps released in two waves therefore looks reasonable. Wallace states that the Albacore squadrons of both carriers "were capable, if inadequately practiced, in the execution of a night torpedo attack", but the only ASV 2 fitted aircraft were in *Formidable* which would have complicated planning. *Carrier Observer*, p 66. Derek Howse claims the ASV 2 fitted aircraft were in *Indomitable* rather than *Formidable. Radar at Sea*, p 308. However, Wallace is adamant all the night ASV searches were flown by *Formidable* and, as a direct witness, it seems inconceivable he could get this wrong.

¹¹⁶ The origin of this 1710 position as described in BS No 15 is a mystery. Somerville's three surviving mid-afternoon search aircraft had all landed by 1745. Simple time/distance, given the Albacore's cruising speed of 125 knots, means none of them could therefore be in a position to observe the Japanese task force at 1710 which was then about 140 miles away. The position could have been an estimate based on the

sighting but without relating it to the 1710 position.¹¹⁷ It had three crucial pieces of information: a revised position for the 1600 sighting about 35 miles to the south of the original reported coordinates; a force composition of two carriers and three unknown vessels; and crucially, a course of northwest. The course of northwest was not consistent with the 1710 position which was about 20 miles southeast of the new 1600 position and would therefore imply a course of southeast. Neither Boyd nor Somerville addressed this discrepancy. Possibly Somerville had now lost faith in the reliability of any of these reports.¹¹⁸ At any rate, he chose to focus on the northwest course in the second signal and brought his force round to parallel it. He still planned a night attack but, quite reasonably, judged he had to have better intelligence.¹¹⁹ He therefore ordered an ASV search out to 200 miles but this initially concentrated on a narrow northern arc with a single aircraft before additional aircraft extended the arc eastwards.¹²⁰ ¹²¹ The extended air search proved too late to catch the Japanese force which was now fast opening on a reciprocal course. By 2200, Nagumo was some 200 miles due east of Somerville, right at the southern edge of the new extended search arc, and beyond effective reach for a night strike given the limited coverage of ASV 2. Nagumo had commenced the wide circle

revised 1600 position which would be transmitted at 1817. But why then choose the rather odd time of 1710 for an estimate rather than 1730 or 1800? And, if it was an estimate, why not make this clear? ¹¹⁷ This second signal is also summarized in BS No 15, p 11. Gordon Wallace has provided additional information from his personal recollection of that afternoon and subsequent researches. He states that the reporting aircraft, flown by Grant-Sturgis of 827 squadron (the other *Indomitable* Albacore squadron to his own), landed on at 1745. He recalls the damage from the Zero attack had burst a tyre and the aircraft almost went overboard. It was also immediately obvious the communicator was badly wounded. Grant-Sturgis did indeed report the force steering north-west but Wallace claims that, after reconstructing events, it seemed more likely the course was south-east and that a corrective signal to Somerville was sent. However, none of the obvious records refer to this. If it is true, Somerville does not seem to have been convinced because he continued to operate on the basis the Japanese were going north. Gordon Wallace, p 86.

¹¹⁸ Wallace, p 68-69 and 85-86, suggests the Grant-Sturgis Albacore was able to make only a fleeting sighting of the Japanese force "in the distance" (so perhaps 20 miles away) before it was attacked after which the crew were no doubt disorientated and would clearly have struggled to give any reliable position. Willis states in his unpublished memoir that one Albacore had sighted the enemy force but both pilot and observer were wounded and unable to give a coherent account of the enemy composition. Willis was no doubt here reflecting his memory of what Somerville and Boyd told him on return to Addu Atoll on 8 April. The inability to give a coherent account sounds all too likely given the circumstances. Willis Memoirs, IWM, p 33-34.

¹¹⁹ Somerville's continued commitment to a night attack is recorded at para 43 of his Report of Proceedings and his letter to his wife date 4 - 6 April 1942, item 232, Somerville Papers.

 $^{^{120}}$ These search arcs are shown in the map, $\,p$ 22 of BS No 15.

¹²¹ There was one other piece of intelligence that might have helped Somerville. FECB broke a JN 25B message late on 5 April giving the planned movement of the IJN carrier force the next day. This was immediately signalled to Somerville but through sheer mischance was received garbled. GC & CS History, Organisation and Evolution of Japanese Naval Sigint Part VI, p 6, HW 50/59, ibid.

south and east of Ceylon that would position him for a strike on Trincomalee, four days later, on 9 April. Somerville's opportunity was over. Nagumo did commission a dawn search on 6 April to look for the suspect RN carrier but the search was hardly comprehensive and he did not interrupt his rapid passage east.¹²² Somerville, for his part, now had enough intelligence from sigint to convince him the Japanese force was well beyond his capabilities and that he must err on the side of caution.^{123 124}

RN and IJN performance compared

The operational picture from 1500 to 1900 on the afternoon of 5 April deserves such close scrutiny because it illustrates important strengths and weaknesses on both sides which merit more attention. To take the British side first. The traditional picture of the Eastern Fleet off Ceylon in April 1942 is of an ineffective force composed of outdated ships and aircraft weakened further by limited training and experience. Consequently, few historians have taken the concept of a night attack by the RN seriously and none of the major studies has suggested Somerville was ever remotely in a position to bring one off. The standard historical consensus also implies that, given the disparity of forces, retribution would have been swift and inevitable and this rendered the whole concept most unwise. Somerville generally gets some credit for doing the best he could with a poor hand but is also judged as somewhere between naive and overoptimistic and lucky to escape. There is much truth in all of this and this chapter has made additional criticisms of Somerville: his failure to make best use of all the available intelligence; and his poor positioning in the period 31 March to 2 April. The decision to rush eastward from Port T on 5 April rather than wait for more intelligence of the Japanese composition also

 $^{^{122}}$ JM 113, p 75. Nagumo searched a wide western sector from 215 - 305 degrees out to 230 miles but at the start of the search Somerville was some 450 miles to the north-west.

¹²³ CinC Ceylon's signal of 0334Z of 6 April estimated the IJN Task Force comprised at least four carriers and three battleships and was still located somewhere between Port T and Ceylon. The force composition was about right but by now Nagumo was south-east of Ceylon rather than between the island and Port T. Somerville ROP, para 52, and ADM 223/259, TNA. Pound relayed the Ceylon report to King in Washington adding that the battleships were now (correctly) believed to be *Kongo* class. He also forwarded an accurate assessment of Ozawa's force in the Bay of Bengal. FSL to CNO of 6 April, ADM 223/259, TNA.

¹²⁴ The need for caution was underlined by the declining serviceability of his fighter strength. On 8 April, he informed the Admiralty that this was down to 6 Martlets, 8 Fulmars and 11 Hurricanes. CinCEF to Admiralty of 1056Z of 8 April, REDW 2/9, CCA.

bordered on the reckless.¹²⁵ However, the afternoon of 5 April demonstrates that this array of negatives is not the whole story. It showed that Somerville's concept of maintaining distance during the day while closing to attack at night, and then retiring without undue risk, was tactically achievable in the right circumstances. Somerville's 1400 search was in exactly the right sector and one accurate sighting report from either of the two northerly Albacores giving Nagumo's position and post 1530 south-east course would have made a subsequent night interception entirely feasible. The Eastern Fleet was not therefore just the helpless bystander usually betrayed. It had the power to do serious damage.

For all their successes on 5 April, and later off Trincomalee, the all-conquering IJN Task Force showed weaknesses too that day. The most important were rigidity and failure of imagination in their command and poor aerial reconnaissance. The main Japanese strategic objective was to find and destroy the RN Eastern Fleet. Their prior planning assumed the Fleet must be in Colombo or Trincomalee. The attack on the morning of 5 April proved it was not in the former so Nagumo concluded it must be in the latter. Rigidity of mind-set meant other options were not seriously considered.¹²⁶ The standard dawn searches had only yielded the *Dorsetshire* force so the ready assumption was there was nothing else to be found. Failure of imagination lay in not asking where the *Dorsetshire* force might be going and in not recognising a link with the appearance of two Albacores just two hours later.^{127 128} Aerial reconnaissance planning and execution throughout the period 4 – 6 April was weak. Sweeping ahead of the force and on the

¹²⁵ Somerville stated afterwards that it was not until 1700 on 5 April that he realised he faced a substantial carrier force much closer than he had expected. Somerville signal 0644Z of 11 April, ADM 223/259, TNA. ¹²⁶ The lack of flexibility in Japanese planning at the operational level is analysed particularly well in Alan Zimm's book *The Attack on Pearl Harbor*, especially in Chapter Four and the concluding Chapter Ten. Zimm contends that Pearl Harbour was not the "brilliantly conceived and meticulously planned" operation presented by the majority of historians but one beset by major flaws in both planning and execution. He emphasises the failure to respond to changing requirements and circumstances and suggests this was a weakness evident in the Japanese approach throughout the war.

¹²⁷ Marder notes this lapse at Vol 2, p 145, and could identify no satisfactory explanation for it. He interviewed one of Nagumo's staff officers, Commander Nakajima Chikataka, who confirmed Nagumo chose to ignore the sighting and stated that he also commissioned very little scouting.

¹²⁸ Rob Stuart makes a valid comparison between the IJN failure here and the initiative taken by the commander of the dive-bomber group from USS *Enterprise* at Midway who faced an analogous situation when he spotted the IJN destroyer *Arashi* and followed her to find Nagumo's carriers. Willmott, *The Barrier and the Javelin*, p 419 -20.

exposed flanks while in potentially hostile waters would have been a sensible precaution but, apart from rather limited set-piece searches on the mornings of 5 and 6 April, this was not done.¹²⁹

In analysing respective RN and IJN performance here, it is instructive to draw comparisons with the Midway operations just two months later. There are some striking parallels between the two battles. Both IJN operations involved a primary objective of a long distance carrier strike on a land target with a secondary objective of engaging an enemy fleet at sea.¹³⁰ There was similar advance intelligence warning of the primary target which enabled both the RN and USN to plan an ambush on the attacking fleet. In both cases, the defences at the primary target were strong enough to achieve some attrition on the attacking force. The IJN errors at Ceylon, brought out above, would be repeated at Midway. Its aerial searches there would also prove inadequate¹³¹ and its command would again display rigidity, a preference to stick to preconceived plans, as well as a general lack of critical thinking.¹³² The Ceylon operations also exposed other potential weaknesses in IJN doctrine and capability which would reappear at Midway. Preparations for the *Dorsetshire* attack had demonstrated that it was difficult to manage a reserve strike force that might have to undertake different roles and therefore be rearmed in less than ideal

¹²⁹Malcom Murfett is especially critical of Nagumo here. He scathingly notes that "he might have discovered Somerville's Eastern Fleet had he devoted a little effort, rather than none at all, to even the most rudimentary of reconnaissance duties". This is an overstatement but not by much. Malcom Murfett in *Naval Warfare 1919-1945: An Operational History of the Volatile War at Sea*, (Abingdon: Routledge, 2009), p 161-3, and 491.

¹³⁰ The rationale for the land strikes was of course different. At Ceylon, the objective was the elimination of the Eastern Fleet but the Japanese judged the best means of achieving this was to catch it in harbour. At Midway, the objective was to take the island.

¹³¹ See Parshall and Tully, *Shattered Sword*, chapter 6 for a detailed discussion of IJN air search doctrine and its weaknesses. They show that the IJN generally preferred to rely on floatplanes launched from the battleships and cruisers accompanying a carrier task force for search duties rather than the carriers themselves. This enabled the maximum number of carrier aircraft to be available for strike operations. The problem was that the number of floatplanes was often insufficient to achieve adequate coverage. In addition some of the older floatplanes still in use in early 1942, such as the Type 95, had inadequate search range barely 200 miles.

¹³² Parshall and Tully explore the IJN weaknesses displayed at Midway and the reasons behind them, in considerable depth in *Shattered Sword*. James Levy has produced an interesting defence of IJN planning for Midway which disputes several key themes in *Shattered Sword*. However, he acknowledges both the reconnaissance weakness and the difficulty IJN carrier doctrine had in catering for more than one objective. 'Was there something unique to the Japanese that lost them the Battle of Midway, (*US Naval War College Review*, Volume 67, No 1, Winter 2014).

conditions.¹³³ The Trincomalee raid on 9 April showed that, without radar, an IJN carrier force was vulnerable to surprise attack which raised questions about the desirability of concentrating the carriers as a single group.¹³⁴ There are also differences. At Ceylon, the IJN force was stronger, with five carriers instead of four, while the RN was much weaker than the USN would be with far fewer aircraft and no prospect of using them in a day attack. At Midway, the intelligence was more precise with advantage for force positioning and timing.¹³⁵ Given these parallels, it is worth asking if there were safer options available to Somerville for inflicting a defeat, or at least significant damage, on the IJN fleet at Ceylon, other than the approach he took on the afternoon of 5 April. He had achieved an excellent position then but had taken reckless risks in placing his force well within the potential search cone of a much superior enemy. He had only survived through Japanese incompetence. Could Somerville, with better exploitation of intelligence and better positioning have delivered a blow of comparable strategic effect to Midway without unacceptable risk or was the disparity of forces too great?

Somerville was clearly correct in assessing his only effective offensive option was a night strike. However, successful execution depended on two things: accurate location of the IJN force and tracking it long enough to get in Albacore range which for successful interception at night meant no more than 150 miles; and avoiding counter-detection during the approach which meant getting no closer than 200 miles before sunset and opening the range again to well over 200 miles by dawn. The events of 4 and 5 April demonstrated how difficult this was against an opponent with a constant fighter umbrella able to despatch any shadowing aircraft in short order, at least in daylight¹³⁶, and the potential

¹³³ When the *Dorsetshire* force was first sighted around 1000 on 5 April, Nagumo ordered a torpedo strike since IJN doctrine decreed torpedoes should be used to guarantee the destruction of capital units or heavy cruisers. This required the reserve strike force on Carrier Division 5, *Shokaku* and *Zuikaku* to be re-armed. This took so long that dive-bombers from Carrier Division 2, *Hiryu* and *Soryu*, had to be used instead. Jonathan Parshall, p131.

¹³⁴ Nine RAF Blenheims caught the IJN carrier force by complete surprise on the morning of 9 April off Trincomalee and came close to hitting *Akagi*. See: Marder, Vol 2., p 134-135, and Parshall, p 145.
¹³⁵ The British appear to have had as good an advance picture of Japanese plans for Midway as the Americans. The quality of this intelligence is shown in NID report 00976 of 2 June, ADM 223/322, TNA.
¹³⁶ As already shown, the Nagumo force destroyed two out of three Catalinas which sighted it and intercepted both Albacores destroying one and damaging the other.

ability to mount its own surveillance over a wide area.¹³⁷ The RN had not faced this challenge before when conducting interceptions in the Atlantic or Mediterranean. However, the events late on 5 April also show how, with careful positioning and some luck, Somerville could have brought off a successful attack. If he had loitered in a position about 150 miles north-east of Port T, he would have been relatively safe from daytime detection during any likely track taken by the Japanese other than a direct attack on Port T itself. Successful interdiction then depended on achieving a sufficiently accurate fix of the Japanese position and course to enable a high speed run in from midafternoon keeping just outside Japanese search cones which would cease before dusk. The afternoon of 5 April illustrated that the desired fix from a combination of Catalina observation, his own searches and perhaps a lucky JN 25B intercept was certainly possible. His capability and readiness then to launch a two wave attack, each comprising 15 Albacores, has been described.

The odds on such a scenario were still long. The Albacores had to localise a fast moving and probably manoeuvring force with ASV that could only detect a large ship at a maximum of 20 miles. Although the crews evidently believed they could do such an attack, they were inexperienced, there were no real precedents and the evidence suggests RN doctrine and planning for multi-carrier operations at night was at this time in its infancy.¹³⁸ If Somerville had possessed two carriers as operationally efficient as *Ark Royal* in *Force H*, with which he was wont to compare his present carriers unfavourably, the odds would clearly have been better.¹³⁹ With his present force it was still possible but would have needed a lot more luck. The judgement reached at the end of the previous chapter that an intact *Force Z* retained in the Indian Ocean from November 1941 would have spurred operational efficiency in the Eastern Fleet is of course relevant here. Somerville had one other potential asset for a night attack not mentioned by historians. The two cruisers *Emerald* and *Enterprise* were old but the fastest in the RN, with the

¹³⁷ Kaye Edden states that combining these different objectives was "daunting". Para 65, Edden memoir, SMVL 8, CCA.

¹³⁸ Staff Paper on Night Flying Operations, probably dated 4 June 1942, REDW 2/9, CCA, Cambridge. Also Somerville letter to FSL of 4 July, SMVL/8, CCA, Cambridge.

¹³⁹ For comparison with *Ark Royal*, see Somerville personal letter to FSL of 11 March, SMVL 8, CCA, Cambridge.

heaviest torpedo armament, and good radar, making them well suited to a sudden hit and run.¹⁴⁰ While this paragraph has placed much emphasis on luck, it is worth remembering that the Americans had a heavy share of luck at Midway and Somerville only needed one more lucky break at around 1800 on 5 April. In both cases, the luck dovetailed neatly with Japanese incompetence.

Against this background, how should Somerville's performance off Ceylon be rated? He was regarded by his peers, and by many historians since, as the outstanding RN Admiral of World War II alongside Cunningham. His overall war record as a naval commander and fighting sailor speaks for itself but Ceylon was not his finest hour. He deserves great credit for pulling together a scratch force very quickly into the semblance of a viable fleet and he showed characteristic coolness and tactical flair in manoeuvring into a potential attacking position on 5 April and then in returning the following day to rescue the Dorsetshire force survivors despite knowing that Nagumo could still be in the area with what Somerville by then knew was a much superior force.¹⁴¹ But the hard fact remains that he underestimated the risks he was running at least up to dusk on 5 April. He drew overoptimistic conclusions from the available intelligence, he grossly underestimated IJN air strength, and hazarded his fleet in direct contravention of COS instructions.¹⁴² Had Nagumo caught him, as he would have done with a competent search plan on 5 April, or if he had arrived earlier on 1 or 2 April and had exploited Somerville's poor positioning south of Ceylon, the consequences for the RN and Allied cause would have been catastrophic, as Willis and Layton certainly recognised.¹⁴³ ¹⁴⁴

¹⁴⁰ H T Lenton, p 45-46. They carried 16 21 inch torpedo tubes whereas most other RN cruisers had 6 or 8. Speed was 33 knots.

¹⁴¹ Marder, Vol 2., p 132.

¹⁴² There is no evidence that Pound criticised Somerville for taking unacceptable risks. However, he was clearly uneasy as demonstrated by the care with which he adjusted a Naval Staff draft on the operation prepared for the PM on 3 May. Pound commented that, "with the knowledge we have now" (of IJN force composition), it was "undesirable to engage". ADM 205/13, TNA.

¹⁴³ Layton famously signalled the Admiralty on 6 April that the Eastern Fleet "faces immediate annihilation", Marder, p 132. Willis found it hard to explain Somerville's actions since they ran counter to the whole "fleet in being" concept they had agreed. He speculated the explanation might lie in the Admiralty accusation in November 1940 that Somerville had been insufficiently aggressive in pursuing a retiring Italian fleet, and that Somerville was determined not to face such a charge again. Marder, Vol 2., p 125. This is possible but the COS instructions of 19 March that he was not to run risks were clear enough. Edden dismisses the Willis view. He states that Somerville took carefully calculated risks on 5/6 April and that, after the loss of the *Dorsetshire* force, his actions were heavily motivated by the need to rescue up to

While Somerville had survived and kept his core fleet intact, albeit more by luck than judgement, he had still suffered a strategic defeat. Having already contributed to the loss of the Far East Empire the RN was now obliged to retreat west and cede control of the bulk of the Indian Ocean for at least a temporary period. The naval losses off Ceylon, Dorsetshire, Cornwall, and later Hermes, along with various minor vessels, were bad enough and, given their immediate strategic effect and the blow to British confidence, were a defeat as substantial for the RN as Matapan had been for the Italians. The wider balance sheet from Nagumo's raid and the related operations of Admiral Ozawa's Malaya force in the Bay of Bengal also looked grim from the British point of view. The RAF had suffered badly from the two attacks on Ceylon, losing a third of its fighter strength and almost all its admittedly feeble strike force.¹⁴⁵ 23 merchant vessels had also been lost, almost all to Ozawa, and there was moderate damage to port facilities. The British took some comfort from the aircraft losses they believed they had inflicted on the IJN but these were grossly exaggerated and in fact the total loss to the Japanese from their whole Indian Ocean foray was just 18 aircraft with about 31 damaged.¹⁴⁶ Despite these Japanese successes, one historian argues that failure to detect and destroy the main Eastern Fleet, the primary IJN goal, represented "strategic" failure.¹⁴⁷ At one level this seems an overstatement. Asserting control over the East Indian Ocean and driving Somerville back to East Africa was a strategic gain by any standard which could have been extended

¹⁵⁰⁰ potential survivors which he achieved. Edden letter to John Somerville of 24 July 1990, SMVL 8, CCA. Edden's view is probably fair for 6 April when it is difficult to see what alternatives Somerville could have adopted given the information available to him that morning. Returning to Port T or Colombo were both too risky. Positioning to pick up the *Dorsetshire* force survivors while maintaining a rigorous all round air search, which he did, seems the least bad option.

¹⁴⁴ The only major historians to offer serious criticism of Somerville's performance during Operation C are H P Willmott in *Empires in the Balance*, p 444, and Malcom Murfett in *Naval Warfare 1919-1945: An Operational History*, p 161-3, and 491. Willmott's case is presented more as assertion than reasoned evidence based argument. Murfett looks more clinically at Somerville's performance. He judges he was "not at his best" in coping with the Ceylon raid and sees his decision-making as "flawed, irresponsible and costly". As shown earlier, Murfett is even more critical of Nagumo.

¹⁴⁵ The losses were: 17 Hurricanes, six Fulmars, six Swordfish, five Blenheims and three Catalinas. Tomlinson, p 176. However, there were enough reserves of fighters immediately available on the island to bring those squadrons up to strength.

¹⁴⁶ Tomlinson gives a broadly accurate summary of the balance of losses at p 175 - 177. He suggests 17 aircraft were lost. A much more detailed analysis in the website Combinedfleet.com puts the losses at 18 (two B5N2 bombers, ten D3A1 dive-bombers, and six A6M2 Zero fighters) with 31 damaged (almost all B5N2s and D3A1s). See Rob Stuart posting "Operation C" under forum "Battles".

¹⁴⁷ Ashley Jackson, The British Empire and the Second World War, p 348.

through different choices in the next two months. However, successful destruction of the Eastern Fleet might have persuaded Japan to pursue an all out offensive in the Indian Ocean while remaining on the defensive in the Pacific. As discussed below, this might then have had far reaching consequences for the progess of the whole war. In that sense, missing the Eastern Fleet was indeed more than a lost opportunity and represents one of the "great "might-have-beens for the Axis".¹⁴⁸

Strategic consequences of Ceylon and British reinforcement

The strategic consequences of the IJN attack on Ceylon and the resulting exposure of the Eastern Fleet were addressed in two JPS papers dated 18 and 21 April.¹⁴⁹ These drew on an updated JIC Assessment which anticipated further IJN raids and the continuing risk of a full scale invasion of Ceylon as well as simultaneous pressure on North East India.¹⁵⁰ The key lesson the JPS drew was that RN ship-borne air strength was greatly inferior to that of the IJN.¹⁵¹ The IJN could therefore exercise air superiority at sea to command sea communications where it wished and the Eastern Fleet was powerless to intervene. The JPS judged that the first Japanese priority was no doubt to consolidate their hold on South-East Asia and Burma but a rapid move to drive Britain out of the war by disrupting supplies to the Middle East and India and Persian oil must be tempting.¹⁵² To achieve this they must take Ceylon and destroy the Eastern Fleet. Since the maintenance of a "fleet in being" remained of paramount importance, and took precedence over holding Ceylon, the Eastern Fleet must retreat to East Africa until it could be reinforced sufficiently to contest the central Indian Ocean on acceptable terms. The ideal target strength was five modern

¹⁴⁸ Ashley Jackson, ibid.

¹⁴⁹ JP (42) 413 of 18 April, 'Indian Ocean: Strategy in Certain Eventualities'; and, JP (42) 429 of 21 April, "Indian Ocean Area – Appreciation for CinCs". Both CAB 79/20, TNA.

¹⁵⁰ JIC (42) 141 of 18 April, 'Japan's Intentions'. This assessment was updated a week later in JIC (42) 152 of 25 April. Both are in CAB 79/20, TNA.

¹⁵¹ By this time, more intelligence was available on the precise composition of the IJN forces that had operated against Ceylon and in the Bay of Bengal, and on their subsequent movements. See NID 00866A of 19 April, ADM 223/322, TNA.

¹⁵² At least one piece of current sigint supported this judgement. On 13 April, the Japanese Foreign Minister told the German Ambassador in Tokyo that Japan had started to thrust towards Ceylon and the area north of it. This thrust would extend "step by step" into the western Indian Ocean. This was reported by NID on 17 April as report 00860, ADM 223/322, TNA.

capital ships and seven fleet carriers of which it was hoped to achieve five and four by August. In the meantime defence of Ceylon must rely on airpower.

Churchill had meanwhile highlighted the grave risks he saw in the Indian Ocean in two letters to the President dated 7 and 15 April.¹⁵³ In his second letter, he emphasised that Britain would not be able to match the naval forces the Japanese had demonstrated they were willing to deploy in the Indian Ocean for some months.¹⁵⁴ The loss of Ceylon and invasion of North-East India were real possibilities but this would only be the beginning. There was little to stop the Japanese dominating the western Indian Ocean and bringing about the collapse of Britain's whole position in the Middle East. He stressed here the consequences of losing Persian oil and the supply line to Russia. Overall, the situation was "more than we can bear". He sought US support through diversionary action in the Pacific, or further reinforcement in the Atlantic which could release RN units, or direct naval support in the Indian Ocean itself. This letter reflected discussion at the Defence Committee the previous day at which Marshall and Hopkins were present.¹⁵⁵ This Defence Committee meeting has proved controversial for historians. Essentially, the record shows that the British war leadership gave positive, indeed enthusiastic, endorsement to Marshall's proposals for the earliest possible invasion of Western Europe. However, it also shows that the British team, primarily the PM and Brooke, entered a strong caveat that it was essential to hold the Middle East, India and Australasia, and that a second front in Europe must not compromise these interests. Andrew Roberts, who has produced the most recent account of how high level Anglo-US strategy evolved in this period, recognises there are different perspectives on how the meeting should be interpreted but presses three points. He accuses Brooke of conjuring up a "lurid scenario"

¹⁵³ PREM 3/163/8, TNA.

¹⁵⁴ NID's initial post attack assessment was that the IJN Ceylon force probably comprised five battleships (three *Kongos* and two *Nagatos*), four carriers (*Hiryu, Soryu, Shokaku* and *Zuikaku*) and six heavy cruisers. WIR No 109 of 10 April, ADM 223/154, TNA. A week later, drawing on intelligence up to 12 April, they were still struggling to confirm the battleship force (now thought to comprise two *Nagatos*, two *Yamashiros*, and possibly two *Kongos*), while *Akagi* had been added to the carrier force though (wrongly) she was not thought to have joined until after the raid on Ceylon. The number of heavy cruisers present had been reduced to three but the ship identifications were incorrect. NID had also rightly concluded that a separate force had operated in the Bay of Bengal and here they correctly identified the presence of the carrier *Ryujo* and three of the five heavy cruisers. WIR No 110 of 17 April, ADM 223/154, TNA.

of the consequences that would follow Japanese control of the Indian Ocean. He also accuses him of wanting an open-ended commitment from the US to preventing collapse in the Indian Ocean and Middle East. And, finally, he suggests the British were engaged in deliberate deception. They had no real intention of committing to a second front at this time but were rather engaged in a play to keep the US focused on "Germany first" while they pursued their own interests.¹⁵⁶

Variants of these Roberts arguments have been promoted by many other historians over the years especially those keen to demonstrate that Britain's "Mediterranean Strategy" was an irrelevant sideshow. Few, if any, historians have, however, attempted to look dispassionately at the balance of risk in the Indian Ocean as it appeared at the time. It is worth therefore taking the arguments in turn. To describe Brooke's "scenario" as lurid is a cheap shot that owes more to hindsight than to serious appraisal of the risks as Brooke saw them. In the wake of Nagumo's raid, a return operation to seize Ceylon looked entirely credible and so did a concerted IJN effort across the rest of 1942, by raiders, submarines and select use of carrier task forces to cut effective communication in the western Indian Ocean. If the Japanese chose to pursue this option all out, there was little the USN could do in the Pacific during 1942 to prevent them. From the British perspective, an IJN offensive might, at a minimum, eliminate the prospect of a British Empire material advantage in the North African campaign by the autumn, drastically reduce oil supplies across the Eastern theatre with major consequences for the Empire war effort, and severely disrupt aid on the primary military lend-lease route to Russia with unknowable consequences for Russia's survival. Japan might achieve even more. Countering these risks surely had to be a top priority.

It is equally unfair to argue that Britain was seeking an "open-ended commitment". The wider records show that Britain was seeking US support for a limited period of two and a half months while sufficient reinforcements were gathered to make the Eastern Fleet reasonably competitive with the maximum force the Japanese were likely to deploy. In

¹⁵⁶ Andrew Roberts, *Masters and Commanders: The Military Geniuses who led the West to Victory in WWII*, p 153 - 163.

effect, Britain's war planners needed to bridge a period while key RN units were under repair, or working up, and before new construction became available.¹⁵⁷ By the time the Defence Committee met again just a week later on 22 April, a target date of 30 June had been set for assembling this enhanced fleet and the relevant forces had been earmarked.¹⁵⁸ This fleet would have been significantly stronger than the forces available to the USN to hold Hawaii. As to the charge of deception, there are obvious points to make. The British leadership may well have been privately doubtful how far Marshall's vision for an early second front reflected realistic understanding of the logistics and the quality of enemy opposition and hindsight shows they were absolutely right. They were also bound to give priority to the protection of the wider Empire both because it defined Britain's status as a world power and because it was perceived to provide important war resources. There is also plenty of evidence that there were many in the US leadership who supported Churchill's emphasis on the Middle East, India and Australasia for their own reasons.¹⁵⁹

In response to British pleas, the US judged it could not help in the Indian Ocean but it did offer limited support in the Atlantic and, most important, diversionary action was already underway in the Pacific in the form of the Doolittle raid.¹⁶⁰ Pound underlined British anxieties during a visit to Washington in late April and received sufficient assurances from

¹⁵⁷ *Valiant* was under repair in Durban following her damage at Alexandria in December and expected to complete in June. *Nelson* and *Rodney* were working up after repair and refit. The carriers *Eagle* and *Furious* were in refit. The new battleships *Anson* and *Howe* were expected to be operational in August and October respectively.

¹⁵⁸ DO (42) 12th meeting of 22 April, CAB 69/4, TNA.

¹⁵⁹ For example: King and Stark. On 5 March, King wrote to the President with his views on war priorities. He stated that the Middle East was an important line of effort for the British, "but also for us, and one we cannot afford to let go". He also stressed the need to support British effort on the India-Burma-China line. And he emphasised the importance of Australia and New Zealand which were "white men's countries" we cannot afford to lose to Japan because of the repercussions elsewhere. King to Roosevelt of 5 March, FDR Library. At the Combined Chiefs of Staff 11th meeting, five days later, on 10 March, Stark stated that the loss of the Middle East would be more serious to the United Nations cause than the loss of the Far East. It was the only place Germany could currently be engaged and was critical to perceptions across the Muslim world. King endorsed the importance of the Middle East. Marshall was not present. CCS 11th of 10 March, CAB 88/1, TNA.

¹⁶⁰ This raid on Tokyo by a small force of B25 bombers launched from the US carriers *Enterprise* and *Hornet* and led by Lt Colonel James Doolittle took place on 18 April. The military impact was negligible but the psychological impact on the Japanese military leadership was profound and it may have been decisive in convincing the Commander of the Combined Fleet Yamamoto to focus on eliminating the US carrier force rather than pursuing other options including the Indian Ocean.

Admiral King, the new CNO, to confirm the feasibility of giving significant reinforcements to Somerville.¹⁶¹

Somerville, clearly shocked by the ferocity of the IJN strike on the *Dorsetshire* force and aware how close he had come to disaster, was completely in accord with the views reached in London.¹⁶² He reinforced the disparity in airpower in a sharp exchange with the Admiralty at the beginning of May. He stated that, for day-time air strike, the RN was "completely outclassed" by the Japanese though he judged that in low cloud or at night it had an advantage. He hoped by now it would be appreciated that the FAA "suffering from arrested development for many years", could not expect to compete successfully with an IJN carrier arm "which had devoted itself to producing aircraft fit for sailors to fly in".¹⁶³ Pending the arrival of better aircraft, he proposed a substantial increase in fighter complement employing deck parking and outriggers where necessary.¹⁶⁴

The FAA aircraft deficiencies were not easily solved.¹⁶⁵ Despite constant British lobbying at the highest level, the flow of Martlet fighters from the US remained barely adequate through most of 1942 and it would be well into 1943 before the first new strike aircraft

¹⁶¹ Minutes CCS 16th Meeting on 21 April, CAB 88/1, TNA. Stark, newly appointed as Commander US Naval Forces in Europe, made two significant comments at this meeting. He saw the Russian Army as a critical ally and every effort must be made to prevent its defeat which would be a catastrophe. He also stressed the importance of the Middle East. If it fell the blockade of Germany would be broken. See also: J R M Butler, *Grand Strategy, Vol III, Part II*, (HMSO, 1964), p 502.

¹⁶² Marder, Vol 2., p 131. The COS authorised a telegraphic summary of the JPS paper of 18 April to be sent to Somerville and other Eastern theatre CinCs. COS (42) 128th meeting of 23 April, CAB 79/20, TNA. The conclusion to this is worth quoting because it neatly encapsulates how London saw the position in the East at this time. It stated: "If the Japanese press boldly westwards, without pause for consolidation and are not deterred by offensive activities or threats by the Eastern Fleet or American Fleet, nor by the rapid reinforcement of our air forces in North-East India, then the Indian Empire is in grave danger. The security of the Middle East and its essential supply lines will be threatened. The Middle East and India are inter-dependent".

¹⁶³ AT of 1 May and CinC EF response of 2 May, REDW 2/9, CCA, Cambridge. See also Somerville comments on the current limitations of his carriers as regards aircraft complements, state of training and general performance in his signal to FSL of 1 May 1942 advising against temporary diversion of the Eastern Fleet to the Eastern Mediterranean. PREM 3/171/4, TNA.

¹⁶⁴ CinC EF signal to Admiralty of 17 April 1942. The PM took a personal interest in Somerville's proposals which were broadly agreed though it was recognised that achieving an adequate supply of Martlets would require high level political lobbying in the US. First Lord minute to PM dated 3 May 1942, PREM 3/171/4, TNA.

¹⁶⁵ The sad history of FAA fighter procurement is well summarised in a memo circulated by the PM to the Defence Committee in mid-June 1942. DO (42) 40 of 16 June 1942, Fleet Air Arm Fighters, CAB 69/4, TNA.

arrived.¹⁶⁶ In the meantime, Somerville's belief that the IJN had deployed fighterbombers led the Admiralty briefly to contemplate employing unsuitable Hurricane IIs in a similar role.¹⁶⁷ Some in the RN leadership, including Pound, still struggled to understand the revolutionary nature of carrier warfare as practised by the IJN and shortly by the USN.¹⁶⁸ This was partly poor intelligence assessment which continued to underestimate the number and quality of IJN carrier aircraft and therefore their lead over an equivalent RN force.¹⁶⁹ But it also reflected the persistent belief that the IJN would deploy capital ship raiders against trade on the German Atlantic model and therefore to over emphasis on comparative capital ship strength in measuring the effectiveness of the Eastern Fleet.¹⁷⁰ Churchill was also still inclined to default to the battleship as the arbiter of strength. However, before the end of the year, the newly appointed Deputy First Sea Lord, Admiral Sir Charles Kennedy-Purvis, was powerfully arguing the case for carriers representing "the core of the future fleet".¹⁷¹

The few historians who have studied the Indian Ocean in 1942 tend therefore to paint the Eastern Fleet which collected at Kilindini in Kenya during April as an ineffective force incapable of contesting further serious IJN incursions and whose survival would have depended on keeping its distance had not the US victories at the Coral Sea and Midway rendered its existence largely irrelevant. Its status is seen as more evidence of chronic British overstretch and RN inability to keep up with the demands of modern air warfare at sea.¹⁷² This view is unfair. During April and May, in line with the JPS recommendations on 18 April and the Defence Committee discussions on 22 April, and following the reassurances of indirect support from Washington, the Admiralty pushed ahead with plans

¹⁶⁶ For the lobbying, see: First Lord minute to PM of 3 May, PM letter to US President of 12 May, Fifth Sea Lord minute to First Sea Lord of 13 May, all in ADM 205/13, TNA. On 10 July, the First Lord expected 86 Martlets to be delivered by end July and a further 133 by end September but then no more until early 1943. First Lord minute circulated under DC (S) (42) 61 of 10 July 1942, CAB 70/5, TNA.

¹⁶⁷ First Sea Lord minute to First Lord, ADM 205/13, TNA.

¹⁶⁸ Pound appears initially to have thought the American success at Midway was primarily due to land-based aircraft operating from the island. FSL minute to PM of 10 June 1942, ADM 205/14, TNA.

 ¹⁶⁹ Paper for PM on IJN carriers in response to PM minute M. 136/2 of 14 April, PREM 3/163/8, TNA.
 ¹⁷⁰ First Sea Lord comment and corrections on note of 3 May probably from D of P, ADM 205/13, TNA.
 Pound reiterated here the value of the *R*-class.

¹⁷¹ DFSL minute to FSL dated 18 November 1942, ADM 205/20, TNA.

¹⁷² For example, see Barnett, *Engage the Enemy More Closely*, p 863-864; and Douglas Ford, 'British Naval Policy and the War against Japan 1937-1945: Distorted Doctrine, Insufficient Resources, or Inadequate Intelligence', (*International Journal of Naval History*, Vol. 4, No 1, April 2005).

to send significant reinforcements to the Indian Ocean. By September at the latest it intended to return an enhanced Eastern Fleet to Ceylon with six modern or modernised capital ships and four fleet carriers.¹⁷³ This was broadly the force planned in the original December VCNS paper but with some additions. It implied three quarters of the RN's major units would indeed be in the Indian Ocean. The Home Fleet would be reduced to a minimum while defence of the Mediterranean would rest on airpower and light forces.¹⁷⁴ The Ceylon bases were to be upgraded in the interim with a Ceylon air group of nine RAF squadrons including a Beaufort torpedo force.¹⁷⁵ These were by any standard serious forces which demonstrated the continuing naval priority accorded to the Eastern theatre. This enhanced fleet could certainly have contested the central Indian Ocean with every prospect of success. The Admiralty also clearly anticipated that the enhanced Eastern Fleet would be a sustained commitment with first call on aircraft carriers for the foreseeable future.¹⁷⁶

The FAA aircraft limitations, highlighted by Somerville, would still have existed in the enhanced Eastern Fleet carrier force but the RN technological lead in radar and VHF radio and their exploitation would have substantially compensated for the continuing disparity in aircraft numbers and quality as discussed in Chapter Five. The training shortfall evident in April would also have been addressed.¹⁷⁷ Proof that the RN could conduct

¹⁷³ VCNS to FSL of 22 April proposing deployment of battleship *Duke of York*, new sister to *Prince of Wales*, and battle-cruiser *Renown* to Eastern Fleet, ADM 205/19, TNA. Also, D of P minute of 18 May proposing deployment of Fleet carrier *Victorious* or *Furious* along with Escort carriers, ADM 205/13, TNA. ¹⁷⁴ The only major units left at home would be two *KGVs* (*KGV* herself and the new *Anson*) and either the carrier *Victorious* or *Furious*. *Force H* would have the old battleship *Malaya* and old carrier *Eagle*. CinC Home Fleet expressed strong objections to these reductions in a submission to the COS and Defence Committee which appears as Annex 1 to DO (42) 12th meeting of 22 April, CAB 69/4, TNA. In the event, the plan to deploy *Duke of York* to the Eastern Fleet had to be abandoned when the *KGV* was damaged in a collision with the destroyer *Punjabi* on 1 May and was under repair until late July.

¹⁷⁵ See: "Revised Defence Plan for Ceylon", COS (42) 236 of 26 April, CAB 80/36; and 'The Indian Ocean', COS (42) 156 (O) of 2 June 1942, CAB 80/63, both in TNA. A Beaufort squadron was to be deployed by the end of April.

¹⁷⁶ AT to BAD Washington of 11 April anticipated that, at the end of 1943, there would be four fleet carriers and six escort carriers deployed in the Indian Ocean. This compared with one fleet carrier and sixteen escort carriers allocated to the Home Fleet and no carriers at all in the Mediterranean. In addition, the old carrier *Eagle* and six further escort carriers would be allocated to Atlantic escort. PREM 3/492/2, TNA. The RN would receive some 35 escort carriers between April 1942 and December 1943, almost all built or converted in the US, so the total force was a realistic projection. HT Lenton.

¹⁷⁷ If *Indomitable, Formidable* and *Illustrious* had all remained in the Indian Ocean through 1942, the official records of their aircraft complements suggest these three carriers alone would have deployed some 80 fighters and 60 strike aircraft between them in September. See: HT Lenton, p 126-127; and "Counter-

advanced multi-carrier operations by the second half of 1942 against the most sophisticated air opposition is demonstrated by its performance in Operation Pedestal, the convoy run to relieve Malta in August.¹⁷⁸ Pedestal involved four carriers including Somerville's *Indomitable* transferred from the Indian Ocean.¹⁷⁹ The three carriers charged with air defence deployed 72 fighters against an estimated Axis force of 650 aircraft employed against the convoy during a three day running battle between 11 – 14 August. Although, convoy losses, both merchant vessels and naval escort, were high, the majority of these were caused by submarine and E-boat action not air attack where the defence proved very effective.¹⁸⁰ And, despite the losses, the convoy was a strategic success because enough supplies got through to enable Malta to survive with important implications for the Eastern theatre. As noted in Chapter Five, it is doubtful whether either the IJN or USN could have carried out a comparable operation against an equivalent level of air attack, and in such a complex multi-threat environment, at this time.

While the traditional historical narrative has underestimated the true potential of the RN in the Indian Ocean during 1942, it has also overestimated that of the IJN. The JPS assessments of mid-April arguing that the IJN could achieve air superiority where it wished, at least in the eastern half of the Indian Ocean but potentially further west too,

offensive v Japan", JP 42 466 of 1 May, CAB 79/20, TNA. The latter anticipated that the RN would have three or four carriers in the Indian Ocean by end August with 140 – 180 aircraft. The fighters would have included 50 Martlets. This RN fighter strength would be comparable to that deployed by the three US carriers at Midway in June but the RN had better radar detection and direction. It would have posed a formidable defence to any likely IJN air strike. For USN Midway figures, see: H P Willmott, *The Barrier and the Javelin*, p 340-341. 60 ASV equipped Albacores and Swordfish would have been an equally formidable night strike force. It is also important to recognise that the disparity between IJN and RN numbers was reducing through 1942 due to the increasing difficulty the IJN had in maintaining its frontline strength. The IJN Midway strike force only had 151 aircraft. Jonathan Parshall, *Shattered Sword*, chapter five.

¹⁷⁸ There are good accounts of Pedestal in: Jack Greene and Alessandro Massignani, *The Naval War in the Mediterranean*, chapter 19; and Peter C Smith, *Pedestal – The Convoy that saved Malta*, (London: William Kimber, 1970).

¹⁷⁹ The others were: *Victorious* (sister to *Indomitable*), *Eagle* and *Furious*. The latter was used to fly 40 Spitfires to Malta.

¹⁸⁰ Smith notes that the two most intense days of air attack (11 and 12 August) succeeded only in damaging one of the merchant vessels, which were their primary target, although they also achieved minor damage to *Victorious* and more serious damage to *Indomitable*. He ascribes this to very effective fighter defence from the carriers with sophisticated use of radar and aircraft direction, and intense AA fire from a wellconstructed screen. Greene and Massignani note that, on the morning of 12 August, 117 Italian aircraft and 58 German achieved just one ineffective hit on *Victorious*. They state that never before had the Axis air forces used so many aircraft for so little result.

were only true within narrow limits. It was one thing to conduct raids on the lines of Operation C but quite another to mount the sustained aerial effort necessary to capture Ceylon or to provide the logistic back-up required for deep operations to challenge the Eastern Fleet and disrupt communications along the African coast and into the Persian Gulf. The reality is that the First Air Fleet was not capable of any immediate follow up to Operation C. After six months of intense operations it needed a period of maintenance and replenishment.¹⁸¹ But, more seriously, the IJN was struggling to maintain its frontline air strength. Jonathan Parshall states that, six months into the war, and immediately before Midway, IJN aircraft complements, especially in the carrier force, were not "just fraying around the edges" but were "downright awful".¹⁸² The official Japanese figures confirm this. On 7 December, aircraft strength within the overall carrier force was 473 with just 22 reserves.¹⁸³ By the end of May, naval fighter production had kept pace with losses with a net gain over this period of 121. However, production of the two main carrier attack aircraft was woeful with just 143 aircraft built against losses of 273, a net deficit of 130.¹⁸⁴ This meant the available frontline carrier attack force by the time of Midway had declined a staggering 40%.¹⁸⁵ The situation with the IJN land bomber strength was better. Here production almost kept pace with losses over the first six months of the war with a net deficit of just 17 which was easily covered by reserves. However, total IJN land bomber strength at the start of the war was just 339 aircraft with 106 reserves.¹⁸⁶ This was a very small force to cover the numerous commitments the IJN faced in mid-1942.

¹⁸¹ Parshall, *Shattered Sword*, chapter one.

¹⁸² Parshall, *Shattered Sword*, chapter five.

¹⁸³ Japanese Monograph 160, Outline of Naval Armaments and Preparations for War, Part III, Chart 6, Air Strength at time of the outbreak of war, p 37, Office of the Chief of Military History, US Army.

 ¹⁸⁴ These were the Nakajima B5N2 Type 97 torpedo bomber and Aichi D3A1 Type 99 dive-bomber.
 Incredibly, no Type 99s were produced at all during the four months December 1941 to March 1942.
 ¹⁸⁵ Parshall suggests there were two main reasons for the low production of attack planes. First, neither Nakajima, the producer of the Type 97 torpedo bomber, nor Aichi, producer of the D3A Type 99 divebomber, had adequately prepared for wartime output. Second, both companies were focusing most of their attention on successor aircraft at the expense of existing types.

¹⁸⁶ The figures in this paragraph draw on aircraft production data in Japanese Monograph 172, Outline of Naval Armaments and Preparations for War Part V, Chart 4, Actual Aircraft Production 1941 – 44, p 49. Parshall, *Shattered Sword*, chapter five, states Japan produced only 56 "carrier attack aircraft" (by which he presumably means Type 97s) during all of 1942. It is not clear what his source for this is and the figure is not correct. JM 172 has 271 aircraft built over FY 1942 and a further 81 between December 1941 and March 1942.

The message in these figures is clear. To mount a successful invasion of Ceylon the Japanese would have needed to eliminate any British air threat and generate sufficient air support for their landing forces to ensure a secure bridgehead against a defence force of two Australian brigades. The necessary air effort could only be provided from a carrier force.¹⁸⁷ The Japanese could have chosen to attack Ceylon in place of Midway at the beginning of June and with a similar force.¹⁸⁸ But the limitations to Japanese strength described above, when set against the RAF reinforcements in place by that time, suggest success would have been beyond their powers without quite unacceptable levels of attrition leaving them wide open to US intervention elsewhere.¹⁸⁹ Without the use of Ceylon, sustained operations in the western Indian Ocean were not possible and even a limited raid would be difficult. The shortage of aircraft also demonstrates that British fears regarding Japanese use of Madagascar were exaggerated. It might have been possible to base a small submarine force there but there was clearly no prospect of finding aircraft to deploy there during 1942.¹⁹⁰

Neither the British nor the Americans had intelligence at this stage to illuminate them on the specific problems faced by the First Air Fleet. However, Churchill's view of the prospects in the Indian Ocean underwent a remarkable turnaround within weeks of his gloomy letter to the President of 15 April. As early as 24 April, he advised the President of Eastern Fleet reinforcement plans which he hoped would complete by the end of June. The RN would then be capable of dealing with a "very heavy IJN detachment".¹⁹¹ By mid-May he was confident that the capture of Madagascar was now effectively beyond

¹⁸⁷ In theory the Japanese could also have deployed land-based bombers from the Andaman Islands. But these were 650 miles away, the navigation challenges would have been formidable, and the aircraft would have been very vulnerable to RAF radar directed fighters.

¹⁸⁸ This is broadly the scale of attack which the JPS anticipated when preparing a "Revised Defence Plan for Ceylon" at the end of April. This assumed attack by 250 aircraft, bombardment by a capital ship force, and a large invasion force. COS (42) 236 of 26 April, CAB 80/36, TNA.

¹⁸⁹ COS (42) 107 (O) of 19 April provides details of RAF strength in Ceylon on 16 April, a week after the Nagumo raid, and the reinforcements to be delivered by 30 April. This demonstrates not only that the RAF recuperated quickly but also the arrival of significant enhancements. By late May, an IJN carrier force would have faced three Hurricane squadrons with 64 aircraft and a further 50% reserves and three strike squadrons also with 50% reserves, one of which had Beaufort torpedo bombers. Radar coverage and AA defences would also have vastly improved. CAB 80/62, TNA.

¹⁹⁰ Such aircraft could only have been flown in from carriers with the necessary support personnel coming by ship, all deployed under cover of a substantial task force.

¹⁹¹ J R M Butler, *Grand Strategy III*, p 502. This letter drew on a memo he circulated for the Defence Committee on 22 April. See Annex II to DO (42) 12th meeting of 22 April, CAB 69/4, TNA.

Japan's power and that the Eastern Fleet would be re-established in Ceylon by July.¹⁹² During May he increasingly badgered the COS, JPS and indirectly Somerville to consider offensive operations in the eastern Indian Ocean in the autumn.¹⁹³

The Prime Minister's confidence that the Eastern Fleet with its planned reinforcements, together with the RAF additions in Ceylon and India, would be able to meet further Japanese attacks probably went beyond that of the Naval Staff and indeed Somerville at this point.¹⁹⁴ On this occasion, for the reasons set out above, his confidence was justified and the new Eastern Fleet would have been competitive. It is nevertheless worth considering where this confidence came from. It was partly no doubt over-simplistic "bean counting" - his belief that an RN force of four modernised capital ships and three modern fleet carriers should be able to deal with an equivalent IJN force. The passage of time helped - he intuitively realised the Japanese had only a limited window for operations in the West before increasing US strength made these too risky.¹⁹⁵ Above all, he retained faith in the ability of the USN to pose a threat in the Pacific which the Doolittle raid and Coral Sea action at the beginning of May amply confirmed. The evolving intelligence picture may also have encouraged the PM.¹⁹⁶ NID reported (correctly) on 19 April that the bulk of the IJN forces deployed in the Indian Ocean were returning to Japan though

¹⁹² See his personal signal to the Operation Ironclad commander, Vice Admiral Neville Syfret, of 14 May. Annex VI to COS (42) 287 of 1 June 1942, CAB 80/36. The same signal states that the Eastern Fleet would be reinforced by July to comprise four modernised battleships (*Warspite, Valiant, Nelson, Rodney*), the four *R-class*, and three carriers (*Indomitable, Formidable, Illustrious*), and would be deployed back to Colombo and Port T. He confirmed these reinforcements in a telegram to Field Marshal Smuts at the end of May. Smuts had written on 26 May stressing the critical importance of holding the Indian Ocean. PREM 3/158/6, TNA.

¹⁹³ See JP (42) 466 of 1 May, Counter-Offensive Against Japan, which commented on proposals raised by the Prime Minister over the previous two weeks and gave the references of his minutes. CAB 79/20, TNA. ¹⁹⁴ At the beginning of May, the JPS remained distinctly cautious, if not gloomy, about the balance of forces in the Indian Ocean for the rest of 1942, "Counter-offensive against Japan", JP (42) 466 of 1 May, CAB 79/20, TNA.

¹⁹⁵ The time factor applied to the Germans also. In his end May telegram to Smuts, the PM acknowledged the risk of a German drive southward into the Middle East from the Caucasus highlighted by Smuts. However, he noted: "The year is advancing and the Germans have a long way to go….". PREM 3/158/6, TNA.

¹⁹⁶ The PM had asked his Chief of Staff, Major General Ismay, for an estimate of Japanese wartime losses to date on 28 February. The response, prepared by the JIC and taking account of US figures, was broadly accurate for aircraft losses but significantly overstated naval losses. Interestingly, the JIC already doubted that Japanese aircraft production was sufficient to maintain their frontline. While this was true for some specific categories, such as carrier attack aircraft, it was not yet true overall. Indeed in FY 1942, overall aircraft production would exceed overall losses by a small margin though with deficits in specific categories. PM minutes of 28 February and 13 March and Ismay replies on 7 and 25 March, PREM 3/252/3, TNA.

there were also indications that the carriers *Zuikaku* and *Shokaku* were being redeployed for operations in the South-west Pacific.¹⁹⁷ Successive NID assessments over the next month confirmed the IJN was conducting a major redeployment back to Japan probably aimed at future operations in the central Pacific. Naval forces in the Southern area would be sharply reduced.¹⁹⁸ The JIC assessed in mid-May that the bulk of the Japanese Fleet was deployed between the Mandates and New Guinea with no indication that significant forces were being earmarked for the Indian Ocean.¹⁹⁹

At the end of May, the JPS circulated a first draft setting out how the war against Japan might best be prosecuted.²⁰⁰ This correctly identified two significant Japanese vulnerabilities which, although the draft did not say so, were relevant to its ability to conduct sustained operations in the Indian Ocean. First, it judged that Japan's frontline air strength was small in relation to the commitments it had now acquired and that aircraft production was too low to sustain even this frontline if it undertook sustained large-scale operations. Second, it emphasised Japan's dependence on NEI oil but noted that, in exploiting this, it faced long sea routes, an acute shortage of tankers, and quite inadequate anti-submarine forces. In mid-June, the JIC produced a more detailed assessment of Japan's air capability after six months of war. Although it admitted its figures for aircraft losses were of variable quality and that it had no precise intelligence on production rates, its estimates for frontline strength were nevertheless accurate and it correctly forecast that production was struggling to keep up with losses as the JPS had already suggested.²⁰¹

The JPS draft on future prosecution of the war against Japan resurrected the concept of a joint British/US fleet taking the offensive in the Pacific.²⁰² The JPS recognised that

²⁰⁰ JP (42) 537 of 30 May, Appreciation of the War Against Japan, CAB 79/21, TNA.

¹⁹⁷ NID report 00866A of 19 April, ADM 223/322, TNA. This probably drew on JN25B intercepts.
¹⁹⁸ WIR 111 of 24 April, WIR 112 of 1 May, and WIR 113 of 8 May. ADM 223/154, TNA. By 8 May, NID assessed that all fleet carriers had left the Southern area along with most of the battleships leaving only *Hiei* and a number of heavy cruisers. WIR 116 of 29 May, which drew on intelligence up to 24 May, confirmed that virtually the whole IJN fleet was now concentrated in Japanese home waters.
¹⁹⁹ JIC (42) 189 of 19 May, Situation in the Far East from the Japanese Point of View, CAB 79/21, TNA.

²⁰¹ JIC (42) 231 of 15 June 1942, Japanese Air Situation, CAB 79/21, TNA. The figures have been compared with the official Japanese production data in JM 172 and aircraft loss figures in NAV No 50, USSBS No 202.

²⁰² The PM first raised this concept in Part IV of his "Memorandum on the Future Conduct of the War", drafted on 20 December 1941 for the COS, and formally circulated as Annex 1 to DO (42) 6 of 22 January

redeploying the bulk of RN major units to the Pacific involved carrying risk in the Indian Ocean so this transfer could only be considered when retained defences were adequate, when reinforcements had made Australasia secure, and when the arrival of USN new build ensured adequate superiority over the IJN.²⁰³ Almost in parallel with this JPS thinking, Pound received requests from King for more immediate help to take the pressure off the USN which had seen its effective carrier strength cut by half following the Coral Sea action.²⁰⁴ King would accept a diversion operation by the Eastern fleet but would prefer the transfer of one or more RN carriers to the South-west Pacific. It has been argued that Britain had an opportunity here to take an early stake in the Pacific campaign buying significant influence for minimal investment. She also risked lasting resentment from King and the USN if she refused to help and Midway had then turned out badly.^{205 206} Pound was clearly reluctant to weaken the Eastern Fleet while a major IJN attack in the Indian Ocean remained possible and King failed to make a persuasive case that RN intervention in the Pacific would make sufficient difference to compensate.²⁰⁷ Simple time/distance and the difficulty arranging logistic support also argued against the transfer which was not therefore pursued.

^{1942,} CAB 69/4, TNA. The Australian PM raised the idea of a "superior" combined British/US fleet based in the Pacific in his letter to the PM of 29 December, PREM 3/163/8, TNA.

²⁰³ The thinking here broadly reflected that in a telegram to Eastern Theatre Commanders and JSM Washington, some six weeks earlier on 15 April. This argued that it was currently impossible to cover Allied interests across two oceans from a single base. It was essential on the one hand to cover India, the Middle East and Persian oil, and, on the other, the US west coast, Hawaii, and communications across the Pacific to Australasia. The Indian Ocean was critical to the British Empire but it covered no comparable interests for Japan. It consequently offered no offensive potential. To defeat Japan, a strategic offensive in the Pacific would be necessary but this was only possible once vital interests elsewhere were secure. PREM 3/492/2, TNA.

²⁰⁴ The sinking of the *Lexington* and serious damage to *Yorktown* reduced the Pacific Fleet to two operational carriers (*Enterprise* and *Hornet*) though *Yorktown* was repaired in time for Midway. ²⁰⁵ H P Willmott explores this issue in some detail at p 331 -335 of *The Barrier and the Javelin*.

²⁰⁶ Somerville advised the Admiralty on 20 May that the US believed Japan was planning an attack on Midway, Alaska or Hawaii in the near future. His source was clearly FECB who were in contact with the US sigint stations in Melbourne and Pearl Harbour. This may have been the first pointer to Midway received in London. CinCEF Zymotic signal to Admiralty 1436z of 20 May, ADM 223/867, TNA. John Prados states that King and Nimitz concluded the Japanese target was Midway three days earlier on 17 May. *Combined Fleet Decoded*, p 318.

²⁰⁷ King did not inform the British of the loss of the *Lexington* until 22 May, some two weeks after the event. He also implied to Admiral Charles Little, Head of BAD in Washington that the request was driven more by a panicky General MacArthur than from him. Letter from Little to Pound of 22 May, ADM 178/323, TNA.

The first significant reinforcements reached Somerville at the beginning of May as part of the forces allocated to seize Madagascar (Operation Ironclad).²⁰⁸ These were a third fleet carrier, *Illustrious*, and a heavy cruiser *Devonshire*. Three other modern cruisers also reached him from new build or refit during the next two months.²⁰⁹ In the event, this was the peak strength reached by the Eastern Fleet.²¹⁰ The further reinforcements anticipated in the planning papers of April and May were never delivered and from early July, the strength of the Fleet went into rapid decline.²¹¹ By the autumn, Somerville would be down to one modernised battleship and one carrier and he would not recover the mid-1942 strength until early 1944. There were two related reasons for this rapid reduction of the Eastern Fleet: the crippling of the IJN carrier arm at Midway on 4 June; and the demands of the Mediterranean. Once the scale of the US achievement at Midway was evident, it appeared to the British that IJN ability to intervene in the Western Indian Ocean with anything more than occasional surface raiders or submarines had effectively been eliminated.²¹² The threat to Persian oil would remain a British anxiety into the autumn but post Midway the primary risk was now from German attack in the west or north.²¹³

²⁰⁸ An assessment of Ironclad is outside the scope of this chapter. There are good summaries in Marder, *Old Friends, New Enemies* Vol II, and Barnett, *Engage the Enemy More Closely*, chapter 28. The JPS produced a final balance of argument for and against the operation in JP (42) 435 of 23 April, CAB 79/20, TNA. By late April, the JIC judged a full-scale landing by the Japanese was unlikely. The main threat was that the Vichy French leadership might collaborate in providing the IJN with a refuelling base. JIC (42) 152 of 25 April, ibid.

²⁰⁹ Birmingham, Mauritius and Gambia.

²¹⁰ Pound provided the PM with a detailed statement of the Eastern Fleet strength on 14 July. It then comprised: two modernised battleships, Warspite and Valiant (the latter about to work up following damage repair at Durban), two fleet carriers Formidable and Illustrious (Indomitable had departed a week earlier for Pedestal), two R-class battleships, Royal Sovereign and Resolution (Ramillies had been damaged by IJN submarine attack), one heavy cruiser, three modern six inch cruisers, six older cruisers and nine destroyers. The July fleet here had a more modern core to it than that in April and was much better trained and more cohesive as a fighting force. However, it is worth noting it remained very weak in destroyers and this would be a major constraint on Somerville's mobility in the coming months. PREM 3/163/8, TNA. ²¹¹ The last document which anticipates an Eastern Fleet in the form planned during April and May is probably JP (42) 586 of 12 June, Appreciation of the Problem of Re-opening the Burma Road in the Autumn of 1942, CAB 79/21, TNA. This includes a section giving force levels expected in the Eastern theatre by 1 October. The Eastern Fleet was at this point (mid – June) still planned to reach a strength of: four modernised battleships, three fleet carriers, one 8 inch cruiser, five to six modern 6 inch cruisers, two older 6 inch cruisers, 16 modern destroyers, and 9-12 submarines. In addition, the four *R*-class with six to seven older cruisers and nine old destroyers, would be retained for trade protection duties. In terms of numbers, this fleet was comparable to the "maximum Eastern Fleet" of August 1939 discussed in Chapter Two. ²¹² See exchange of minutes between PM and Pound on 10 June 1942. The PM noted that the loss of four carriers by the Japanese would impose a severe restraint on their movements in the Indian Ocean. Pound agreed. ADM 205/14, TNA.

²¹³ Ironically, at the very moment Midway took place, the Japanese Army General Staff revived the idea of major operations in the Indian Ocean including the seizure of Ceylon to which the Army had been distinctly

The British war leadership were clear during the first five months of 1942 that the Indian Ocean must take priority over the Mediterranean and the actual and planned naval reinforcements, largely at Mediterranean expense, reflected that. This had raised the difficult question of sustaining Malta since experience demonstrated that effective convoy operations were only possible with substantial naval cover. If Somerville was to receive his planned reinforcements, such cover was not possible. A proposal was therefore developed during April for a major part of the Eastern Fleet to deploy through the Suez Canal for the two weeks necessary to run a convoy to Malta from Alexandria.²¹⁴ This risky plan was put on hold when it was assessed Malta could hold out until August. An August convoy was, however, an inescapable commitment if Malta was to survive and it meant either resurrecting the Eastern Fleet option or running a convoy from the west which would require Somerville to release a carrier. The western option was militarily more attractive and Midway made it possible. By the time this convoy operation (Pedestal) took place, the wider strategic context for fighting the war had further evolved and the major US/UK landing in North-West Africa (Torch) was planned for November. The RN commitment to Torch required substantial forces that could only come from Somerville.²¹⁵

In essence, in the autumn of 1942, the naval defence of the Eastern Empire had come full circle. The Indian Ocean, so critical not just to Britain's position in the East but to the whole Allied war effort in the first half of 1942, had reverted to a calm backwater while the need and opportunity to remove the western Axis threat to the Middle East had moved centre stage. Priorities had changed and RN resources, in the view of the British war leadership, were now better deployed elsewhere. That meant the Mediterranean during

lukewarm in February. Planning continued during June and an Army Directive (No 1196) was produced on 29 June. The reason for this new enthusiasm was the perceived success of the German drive towards Egypt which spurred ideas for achieving an Axis "junction" in the Middle East. The Navy apparently endorsed the concept but had to accept the resource realities especially as the Guadalcanal campaign got underway. Toshikazu Ohmae essay, ibid, p 113 – 117; and Marder Vol 2, p 185 – 189.

²¹⁴ DO (42) 12th meeting dated 22 April and related DO (42) 44 record, both CAB 69/4, TNA.

²¹⁵ The PM summarised the history of the Eastern Fleet in 1942, its rise and decline, and the rationale for this, in a letter to the Deputy Prime Minister, Clement Attlee, dated 29 October. The PM stated that he had anticipated bringing the fleet back up to strength after Torch but that other priorities had intervened. PREM 3/163/8, TNA.

1943 but it also included deploying the fleet carrier *Victorious* to help the USN Pacific Fleet for much of that year as well.²¹⁶

Conclusion

The key message from this chapter therefore is that, while the RN was certainly overstretched in 1942, it did indeed face an inescapable commitment in the Eastern theatre for the first half of that year. If the Axis had secured control of the Indian Ocean, denying Britain the resources of India and Australasia, and cutting the supply lines to the Middle East and Russia, while giving Germany potential control of Persian oil, the Allied task would have been immeasurably harder and a clear victory might have been impossible. The RN had to counter this risk and this chapter contends that it had just enough latent strength in modern ships, modern technology, fighting effectiveness, and global support and experience, to do this provided it had enough time to redeploy the necessary forces. The weakness of RN forces off Ceylon in April 1942 reflected temporary limitations and was not representative of what the RN could do and would do if required. It remained a powerful and resilient force with global reach.²¹⁷ As it was, while Somerville undoubtedly hazarded his fleet in an unacceptable way, he also came very close to inflicting serious damage on the IJN.

It follows that the standard historical narrative which portrays an RN reduced to tokenism in the East, and sees this as the inevitable consequence of a flawed inter-war "Singapore strategy" is seriously misleading. In the ultimate crisis, the British war leadership was prepared to withdraw all major units from the Mediterranean, and run significant risks with the Home Fleet, in order to secure the East. Despite some limitations, the fleet available to Somerville at the beginning of July 1942 was stronger than any fleet the RN had deployed in the war to date and fully comparable with the US Pacific Fleet as it stood at that time. The RN made a much more important contribution to the overall Allied cause

²¹⁶ Hobbs, p 15.

²¹⁷ The RN's ability, during the middle part of 1942, to project a substantial expeditionary force 7000 miles from UK to seize Madagascar and then to mount the immensely complex Pedestal operation at the other end of Africa, and using some of the same forces, just two months later, demonstrates the declinist picture of RN power promoted by historians such as Barnett is overdone.

through this commitment to the Eastern theatre than historians have so far recognised. The second quarter of 1942 in the Indian Ocean is best viewed as a window of vulnerability. If the Japanese had made the Indian Ocean their main focus at this time, they had the chance for a short period to bring more force to bear than Britain could and perhaps radically to shift the global strategic balance with incalculable consequences for the future direction of the war. However, given enough time, Britain still had just enough capacity to close the window off.²¹⁸

²¹⁸ As stated earlier in this thesis, H P Willmott and Ashley Jackson are two of the very few historians to highlight the strategic stakes in the Indian Ocean in the first half of 1942. Willmott provides an excellent summary of what the Japanese might have achieved with an all-out effort in this theatre set against a sound appraisal of the logistic limitations they faced. He concludes that Japan's overall strategic position was all but impossible but that the adoption of an Indian Ocean strategy could not have produced worse results than the ones the Japanese actually registered in the period March – July 1942. Willmott does not, however, take sufficient account of British determination to reinforce the Indian Ocean at the expense of other theatres in the way brought out in this chapter. H P Willmott, *Empires in the Balance*, p 437 – 438. Jackson, *The British Empire and the Second World War*, chapters 10 and 11.

Conclusions

This thesis began by asking whether the traditional explanations offered by historians for the RN defeats and apparent collapse of Britain's naval defence strategy in the Far East theatre in the first phase of the war with Japan are satisfactory or sufficient. Those explanations are: inadequate resources leading to imperial overstretch; chronic underestimation of the IJN enemy reflecting poor intelligence; and a failure of innovation, notably in not recognising the full impact of modern airpower at sea. The preceding chapters demonstrate that these all have some validity, although less than is usually claimed, but that neither individually nor taken as a whole were they decisive in determining events during the first year of the naval war in the East.

Where this thesis breaks new ground is in developing three related arguments which together provide a fundamental reassessment not just of the RN role in protecting Britain's Eastern Empire but the significance this had for the overall British and Allied war effort. The first point is that the naval defence of the Eastern Empire must be viewed in a different way. Historians have focused too much on the role of Singapore and defence of the specific Far East territories. However, the real strategic challenge, which emerged in the late 1930s and reached its climax following the fall of France, was how to secure the war potential of the Eastern Empire core, comprising the resources of Australasia, India and Middle East oil, and, equally important the obverse; to deny the three Axis powers access to those same resources, but from the west as much as the east. The thesis has argued that this war potential was essential not just to enable Britain to continue the war, and perhaps even survive at all, but ultimately to overall Allied success too. The naval defence of the Eastern Empire core was neither irrelevant nor discretionary as many historians imply. It proved an inescapable commitment.

The second argument is that, in protecting this Eastern Empire war potential, Britain, with US support, had sufficient resources to adopt a *forward defence position* at either end of the Empire *but not both*. The real British strategic failure in 1941 was to believe that this choice could be avoided or deferred. The thesis has shown that the failure to rationalise

Far East defence by adopting an "outer ring" position based on the Indian Ocean was reinforced by reckless Admiralty risk-taking in the autumn of 1941. In contrast to mainstream historical opinion, it was *the Admiralty's* shift to an offensive strategy in late 1941 - rather than political pressure from the Prime Minister, as most historians have forcefully argued - which was primarily responsible for placing *Force Z* in an exposed position at Singapore when the Japanese attacked. This contributed significantly to the destruction of the force and left the RN weaker in the Indian Ocean in early 1942 than it would otherwise have been. The final point has been brought out in Chapter Eight. Despite the early disasters, the RN was still strong enough to stabilise the Eastern theatre by mid-1942. The many critics of the "Singapore Strategy" were therefore only partly right. Singapore fell as they predicted but the RN demonstrated that it could nevertheless still deploy a competitive Eastern Fleet fully capable of securing the Indian Ocean.

Before considering this reassessment further, it is important to be clear how the thesis has qualified the established explanations. In regard to overstretch, it has shown that, from 1935, the RN anticipated the growing possibility of a two hemisphere war and that its building plans reflected this. It did not get all the resources it wanted but sought to manage the global risks it faced in an optimum way with the resources available at any given time. It recognised it could not take on the full weight of all three Axis navies but hoped to have sufficient capability to deal with any two of them while keeping the third in check with a reliable ally, whether France against Italy or the US against Japan. This is a fundamental reassessment of the Chatfield rearmament programme and a criticism of those who have argued it provided too little too late. On the contrary, the thesis has shown that larger investment earlier in the 1930s might paradoxically have given the RN less of the capability it most needed in 1941 - 1942.

Chapter One has demonstrated that the RN rearmament programme of 1937-39 was sufficiently strong and well balanced, including in carrier power, to make the two hemisphere aspiration viable. The thesis does not accept therefore the argument that Britain lacked the naval resources to defend the critical core of the Eastern Empire. It is true that, during the period reviewed, it could not provide competitive fleets in both the Eastern Mediterranean and Singapore but, even in the worst days of 1940, it could still maintain a forward position in either one of these while retaining the option of falling back to secure the Indian Ocean in extremis. And, by end 1941, the output of the rearmament programme meant its strength compared to the three Axis navies was slowly improving.

As regards underestimation, the thesis has provided new evidence to demonstrate that British assessments of Japanese intentions and the scale of military forces they could deploy were consistently good throughout the period covered. Judged in the round, the intelligence record compares well with that on any other enemy at any other time. That is generally true of the more specific monitoring of IJN strength and movements which was better than many historians suggest. The evidence that the RN consistently downplayed the IJN's fighting efficiency, as opposed to more legitimate questioning of its maintenance and support, is not convincing. Nevertheless, the thesis recognises that the RN's ability to manage the naval risk from Japan suffered from one fundamental strategic miscalculation and one specific intelligence failure. The miscalculation was the consistent belief that US forces in the Pacific were strong enough either to deter Japan from southern expansion or to reduce an attack to manageable proportions. The intelligence failure was in not recognising the full potential of IJN airpower. That failure lay less in judging numbers and performance and more in not anticipating the scale on which IJN airpower could substitute for traditional gun power and how a concentrated carrier force could now project strategic effect at great distance.

The thesis concludes that the argument that the RN suffered a general failure of innovation in the 1930s compared to the IJN and USN is not correct, and it has demonstrated this in some detail. The RN was technically innovative in the development and deployment of radar, in anti-submarine warfare, and in aircraft communications, all areas which the IJN neglected. It was tactically innovative in the development of the all arms task force, in its emphasis on night fighting, and especially in its exploitation of integrated intelligence. It was at least equal to the IJN in the first two areas and far superior in the last.¹ The thesis

¹ For a good summary of the strengths and weaknesses of IJN intelligence and Japanese intelligence in general, see: Ken Kotani, *Japanese Intelligence in World War II*, (Oxford: Osprey Publishing, 2009), esp his Conclusion at p 159.

also challenges the still prevailing historical view that the RN failed adequately to recognise the impact of airpower at sea and to prepare accordingly. The evidence for this is partly in the crude numbers: the RN ordered as many fleet carriers as battleships in the fiscal years 1936-38, more than either the IJN or USN; but it also displayed much innovation in carrier deployment in 1940-41 although it was constrained by the need to deploy across five different theatres whereas the IJN and USN could essentially focus on one. The RN was also much quicker to invest in AA firepower than its competitors and its assumption that the Mediterranean would be closed to through traffic in wartime shows few illusions about the potential of land-based airpower. The thesis has emphasised that the RN nevertheless faced two weaknesses in managing the air dimension of Eastern Empire naval defence. First, its carrier aircraft lagged the IJN competition, and indeed the USN, in both numbers and performance, although it has also showed that the disparity was less when aircraft are judged as overall weapon systems; where limitations in aircraft performance were offset by radar, a good communications fit and excellent torpedoes. Divided responsibility with the RAF for aircraft procurement was a key factor here; but the US failure to meet contracted obligations, notably in the supply of Martlet fighters, was just as important. The second failing was the lack of an adequate land-based maritime strike capability in overseas theatres prior to mid-1942. This did not reflect lack of a suitable modern aircraft type in the inventory or failure to recognise the potential of torpedo bombing but rather RAF refusal to give this requirement adequate priority for production and deployment until it was too late.

The central insight in the reassessment at the heart of this thesis is recognition of the Eastern Empire as an integrated whole which embraced a span from Egypt in the west to the Pacific territories in the east. This portrayal of the Eastern Empire has not generally been adopted by historians but it is certainly how the COS saw it by spring 1942 even if by then its eastern frontier had reduced considerably. The thesis has also shown that this wider vision was increasingly evident from late 1938 when Britain's leadership, with the Admiralty to the fore, began to recognise that the Eastern Mediterranean could not easily be abandoned for the sake of the Far East as Chatfield had argued just a year earlier. The real problem posed by Italian hostility was not the loss of Mediterranean transit, as many

historians have suggested, but that it offered the Axis multiple entry points to the Middle East and beyond. Providing security for the western boundary of the Eastern Empire was now as important as insuring against Japan in the east. With limited resources, Britain faced a strategic trade-off between the two theatres from this time. The established historical view is that the demands of Europe and the Mediterranean therefore now rendered the despatch of a competitive fleet to the Far East impossible and to pretend otherwise was pure deception.²

This thesis argues that this view ignores the extent to which British strategy adapted to new circumstances. Chamberlain's focus on a critical "inner core" of Eastern Empire interests in his message to the Dominions of March 1939 and Cunningham's new flexible reinforcement policy were not signals of strategic failure or empty gestures. What they did was, rather precisely, to establish a reduced defensive goal for the Far East; and they recognised that the allocation of naval forces between the two boundaries of the Eastern Empire should be calibrated to the perceived level of risk. Given French assistance in the Western Mediterranean, it was still credible for the RN to maintain adequate deterrence in the Eastern Mediterranean while deploying sufficient strength to secure the Indian Ocean and severely disrupt a full-scale Japanese attack on Singapore which still had to be mounted from long distance and for which, unknown to the British, the Japanese had yet to do any planning.

Chapter Three has shown that it was the collapse of France that drastically reduced Britain's scope to maintain a trade-off between the Eastern Mediterranean and Far East offering adequate security for both. Britain now had to find substantial extra resources to secure the Western Mediterranean and counter increased German access to the Atlantic while Japanese access to Indo-China made an attack on Britain in the Far East a far easier proposition. Meanwhile, over the next fifteen months, the damage Britain would suffer if it surrendered a forward defence position in the Middle East became increasingly apparent. Historians have long argued that Britain effectively sacrificed the Far East to

² Recent exponents of this view are: Steven Morewood, *The British Defence of Egypt 1935 – 1940*, p 206; and Brian Farrell, *The Defence and Fall of Singapore 1940 – 1942*, p 46 – 48.

hold this forward position. This thesis has shown that the Middle East did indeed absorb almost all the air and land resources that Britain could afford to deploy overseas from the UK. But it also argues that the justification used by Britain's war leadership at the time, largely validated by what is now known of German thinking, was stronger than most historians acknowledge. It has emphasised three factors here - all under-recognised by those historians - which largely determined British strategy and investment in the theatre. It has demonstrated both the negative and positive sides of the oil question: the value of Iraq oil to the Axis and the serious consequences the loss of Persian oil would have on Eastern Empire war potential and indeed economic survival. It has also highlighted the link between the Mediterranean and Middle East theatre and the Atlantic supply route. The stronger the British position in the Mediterranean and Middle East, the less likely it was that Spain or Vichy would provide Germany with additional Atlantic bases. Finally, it has emphasised the growing importance of the Persian supply route to Russia from late 1941 and its perhaps critical role in Russia's survival in late 1942.

As Chapter Three demonstrates, it is easy to find evidence, especially in the attitude of the PM, to support the proposition that Britain sacrificed Far East defence in 1941 for the sake of its position in the Middle East. However, the dominant thrust of this thesis is to insist that this argument requires crucial qualifications. That is even more true of the related argument that, if despatch of a fleet to the Far East was improbable by 1939, the fall of France rendered it impossible, thus demonstrating the fundamental bankruptcy of the whole Singapore strategy. The first qualification is that Britain's Middle East investment brought benefit as well as loss to the security of the Eastern Empire. It denied access to India but, above all, it protected the Persian oil on which its economy depended. The second qualification is that the whole Middle East strategy, and meeting the key strategic goals within it described above, depended on supplies and manpower delivered through the Indian Ocean. Likewise the delivery of Persian oil through the Eastern Empire depended on Indian Ocean security. Defending the Indian Ocean was not only an inescapable commitment but, in the last resort, as the COS regularly recognised, it was more important than holding a forward position in the Middle East. From the naval point of view therefore, the strategic trade-off between the Eastern Mediterranean and Indian

Ocean during 1941 was merely an evolution of the choice addressed by Cunningham in April 1939. Britain could always deploy a respectable fleet to meet a major IJN threat to the Indian Ocean during 1940 - 1941 but most of it would have to come from the Eastern Mediterranean. The timing and scale of any withdrawal here depended on an assessment of comparative risk but the Indian Ocean ultimately mattered most.³

If the Indian Ocean was an inescapable commitment, then this thesis argues that the real choice facing Britain's war leadership, and above all the Admiralty, was whether its security really required the use of Singapore and whether its viability as a base was ever achievable with the resources Britain could make available given potential Japanese access to Indo-China, Thailand and the NEI. The 1940 FEA acknowledged the increased vulnerability of Singapore but effectively deferred these questions with its adoption of a temporary holding operation based on air power. Deferral was not unreasonable during the winter of 1940 - 41 while Japanese bases remained at a distance and Britain harboured hopes of getting the Americans to assume primary responsibility for Far East defence. Chapter Four has shown that British aspirations for the US to combine a major role in the Atlantic with forward deployment of the Pacific Fleet to cover the South China Sea from Singapore were never realistic given political constraints in the US and the limitations of existing US resources. It argues that, had the British played their hand better, it might have been possible to create a more modest, but still credible, combined task force which would have bound the US into defence of the Malay Barrier. But this opportunity was

³ This judgement is rather different to that reached by Jon Robb-Webb at p 28 - 29 of his recent book, *The* British Pacific Fleet Experience and Legacy, 1944 – 50, (UK: Ashgate, 2013). He argues that the temporary transfer of forces to the Indian Ocean in late 1941 and early 1942 was only possible because of the victories won by Cunningham in the Mediterranean and the transitory nature of this deployment underlined that what mattered most was the Middle East not the Far East. It was here that forces from all parts of the Commonwealth could be most easily concentrated against the Axis on terms most favourable to Britain. Britain could not spare significant naval resources for an Eastern war until the Atlantic and Medterranean had been secured. The problem with this argument is that it fails to acknowledge that it was impossible to hold a forward position in the Middle East, let alone pursue a successful offensive strategy there, without securing the Indian Ocean. It was the sharp reduction in the IJN threat after Midway that allowed the RN to redeploy the bulk of its Eastern Fleet back to the Mediterranean from mid-1942 not any fixed belief that the Mediterranean mattered more. As Chapter Eight demonstrates, without Midway, the Eastern Fleet would have stayed in place. Nor is it really true that the transfer to the Indian Ocean reflected Cunningham's victories. By end December 1941, the fruits of these victories had evaporated and the Mediterranean Fleet had virtually ceased to exist. The Eastern Fleet came from new build, from ships released from repair, and from cutting the Home Fleet to a bare minimum.

fleeting and it is doubtful if the US would have modified the Atlantic priority which the British had done so much to encourage.

This US refusal to support forward deployment in the Far East before and during the ABC-1 talks should have obliged the British now to address the hard questions about the viability of Singapore. However, the ABC-1 compromise, comprising "Atlantic substitution" and Pacific Fleet "distraction operations", effectively offered a means of extending deferral. Even if air reinforcement and modernisation in Malaya was delayed, the potential resurrection of an Eastern Fleet made holding Singapore both necessary and apparently feasible. The problem was that the primary forces released by "Atlantic substitution" (the obsolescent *R-Class* battleships) were quite unsuitable to take on the IJN. The irony was that "Atlantic substitution" made an Eastern Fleet possible: but it was to be created out of what was available not what was needed. The Admiralty was willing to embrace a fleet composition here that it would never have contemplated against the Italians in the Eastern Mediterranean and without any of the substantial air and land cover available in that theatre either.

"Atlantic substitution" still did not in itself make the Far East naval disasters inevitable. Chapter Six argues that, until the end of August, both PM and Admiralty were agreed naval reinforcements should concentrate in the Indian Ocean even if they disagreed on force composition. This consensus coincided with the separate decision by the British war leadership that the build-up to the Crusader offensive in Egypt must have absolute priority and that Far East air and land reinforcement should be further delayed. This thesis argues that the mismatch between the growing risk of Japanese attack following their move into southern Indo-China at the end of July and the decision to rule against early reinforcement in favour of the Middle East should have triggered a major COS review of Far East defence. Such a review would surely have anticipated much of the VCNS paper on Future Naval Strategy produced immediately following the Japanese attack and summarised at the end of Chapter Seven. Although this paper followed the initial British losses, the arguments it deployed were as valid in September as they would be three months later. It admirably defined Britain's vital interests in the Eastern theatre, protecting Eastern Empire war potential, Persian oil, and the Persian supply route to Russia, and distinguished between the security of the Indian Ocean and Australasia, which were critical to the Empire war effort, and the British territories and interests in Southeast and East Asia which were ultimately discretionary. Given the scale of naval forces the IJN could send south and the limitations to US support, it advocated a defensive holding strategy while a balanced fleet of modern units was concentrated at Ceylon. The defence of Singapore, and by implication the Malay Barrier, must rely on air, land and submarine power and, although it did not say so, were evidently recognised as dispensable rather as Hong Kong had been in the late 1930s. Judged by ends, ways and means, this was an achievable Eastern strategy for Britain in the autumn of 1941 given forthcoming additions to RN strength from the rearmament programme, ships coming out of repair and units released by the US in the Atlantic. In essence it was a more detailed and logically argued exposition of the Admiralty intent conveyed by Pound to the PM at the end of August to prioritise the defence of the Indian Ocean and to base the new Eastern Fleet at Ceylon for the foreseeable future.

The historical interpretation established by Roskill and supported by almost all subsequent historians is that the Admiralty abandoned the defensive strategy advocated by Pound in August, and reaffirmed by the December VCNS paper, to send an inappropriate deterrent force forward to Singapore under pressure from the PM. This thesis has argued that this interpretation is fundamentally wrong. There certainly was political impetus for the RN to deploy a highly visible deterrence force to the Eastern theatre. It reflected the new US commitment to base a powerful deterrent air force in the Philippines and the reasonable belief that clear signals of Allied solidarity and military intent would dissuade a wavering Japanese leadership from further southern adventures. However, the evidence suggests that this political desire for deterrence was never linked to any insistence that the force must base at Singapore. It was rather the Admiralty who from late September became determined not only to place a fleet in Singapore as soon as possible but then to conduct offensive operations northwards. It adopted this policy: because it aligned with its longstanding strategic principles; because it offered a means of creating the desired strategic depth around Singapore highlighted in the 1940 FEA; because, with "Atlantic

substitution" getting underway, it thought it had sufficient resources to do so; and to reinforce American commitment to more pro-active Far East naval defence.

The policy was the direct opposite of that claimed by Roskill and subsequent historians. It was reckless because it proposed to place an inappropriate capital ship force in an exposed position where the enemy could bring concentrated force to bear. The RN could no more aspire to meet a potential IJN fleet of five battleships and five carriers in the South China Sea in October than it could when VCNS issued his paper in December. Even with maximum US support in the Atlantic, and a less defensive US stance in the Pacific, Britain could not credibly guarantee to hold the Barrier at this time, let alone reach beyond it, without a far greater commitment of air resources than the British war leadership was willing to make. To propose that an intact US fleet at Pearl Harbour and a small USAAF component in the Philippines justified the risk of deploying an unbalanced fleet of predominantly obsolescent battleships north of the Barrier in the face of IJNAF airpower was a delusion and a classic failure of sensible risk management. This thesis contends that this policy, more than any other factor, led to the presence of *Force Z* in Singapore and its subsequent deployment and loss.

The established historical narrative has not only presented the loss of *Force Z* as the inevitable consequence of poor political judgement trumping professional advice in a hopeless attempt to rescue a flawed "Singapore Strategy". The loss is also widely portrayed as signalling the collapse of Britain's whole naval position east of Suez and the effective end of the RN's role as a global force reflecting here failure to adapt to modern naval warfare. From 10 December 1941, it is suggested, the RN became a minor player in the naval war against Japan reduced to hanging on the coat tails of the Americans and even then not until it joined the USN in the Pacific in 1945. Chapter Eight demonstrates that this view too is wrong. For all the reasons set out in the VCNS December paper, the security of the Indian Ocean mattered hugely to the Allied cause during 1942. Indeed the immediate risks posed by Axis success here were arguably greater than any in the Pacific. In the face of this challenge, Britain was not reduced to tokenism. It undertook a drastic redeployment and the naval and air forces moved to the theatre by mid-1942 were

substantial. The Eastern Fleet took time to reach acceptable strength and efficiency but, by July, it was not only competitive enough to hold the Western Indian Ocean against any force the IJN could send, but broadly comparable to USN forces then in the Pacific and the modern carriers laid down in the rearmament programme were at its core. The weakness of RN forces off Ceylon in April 1942, much remarked by historians, reflected temporary limitations and was not representative of what the RN could do and would do if required. Chapter Eight has drawn on new evidence to demonstrate that Somerville undoubtedly hazarded his fleet in an unacceptable way at Ceylon but even so came close to inflicting serious damage on the IJN. This may have been a case of fortune favouring not so much the brave as the foolhardy. Somerville ran greater risks than Phillips off Malaya and with less justification and, while the losses he suffered were less high profile, they were comparable in human terms. Nevertheless Ceylon demonstrated RN potential in the new carrier warfare as well as the limits to IJN competence. A British Midway here was not impossible.

The reassessment provided in this thesis ultimately matters for three reasons. First, it argues that, during the period studied, Britain's political and military leaders had a more realistic view of what mattered in the Eastern Empire, the competing risks facing it, and how limited resources could best be deployed to meet those risks than historians have generally allowed. Britain got the most important choices right and, where it made mistakes, as with the Admiralty's forward deployment of late 1941, it demonstrated good ability to adapt and recover. This deserves more recognition and respect. Second, the widely held perception of the RN as a declining naval power by 1939, lacking innovation, compromised by industrial and technical weakness, and unable to project serious force beyond the Atlantic and Mediterranean, requires major adjustment.⁴ Like other navies, the RN certainly suffered from the financial stringency of the interwar period. However, it got its investment decisions broadly right and rearmed more quickly and more effectively than its future enemies for the war it would have to fight. With some notable exceptions it was quick to embrace new technology and markedly improved its fighting quality through

⁴ The most forthright exponent of this view is probably Corelli Barnett especially in his essay "The Influence of History upon Sea Power: The Royal Navy in the Second World War", in *Naval Power in the Twentieth Century*.

the 1930s. The RN was rapidly overtaken by the pace of USN expansion in 1943 when it would also start to lag in key areas of capability but until the end of 1942 it remained fully competitive in size and performance. Contrary to the Barnett view it was still a global force to be reckoned with.^{5 6} Finally, this thesis argues that the role of the British Empire and that of the RN in safeguarding the Middle East and Indian Ocean from the Axis between spring 1941 and autumn 1942 has been understated through comparison with later US strength once it was properly mobilised from 1943 onward and against the dominant contribution of the Soviet Army to breaking German land power. The ability of Britain to maintain control of the area from Egypt in the west, through the Indian Ocean to Ceylon, and thence to Australia was critical in ensuring ultimate Allied success while Russia's fate was still in the balance and before US potential could take effect.⁷ The ability of British leaders to recognise the risks posed by Axis command of the Indian Ocean and control of Middle East oil, to make credible provision against them, and thereby make them less likely, again deserves more recognition.⁸

⁵ Three historians who do offer useful correctives to Barnett's negative view of RN potential and which stress the relative success of late 1930s rearmament are: David Edgerton, *Warfare State*, and *Britain's War Machine*; G A H Gordon, *British Seapower and Procurement Between the Wars*; and, J R Ferris, "The Fulcrum of Power: Britain, Japan and the Asia-Pacific Region: 1880-1945, in *Maritime Strategy and National Security in Japan and Britain*, edited Alessio Patalano, (Leiden, Netherlands: Koninklijke Brill NV, 2012).

⁶ By every reasonable measure, the RN was immensely stronger in 1945 than 1939. Construction in every category of warship far exceeded losses with the notable exception of battleships where new build equalled losses although even here *Vanguard* was nearing completion. Leaving aside the increases in major fleet units, especially carriers, total destroyer strength had risen to 259 with a further 542 escort vessels and 131 submarines. Roskill, *War at Sea*, Vol III, Part II, Appendix S. Indeed, this 1945 strength had been largely achieved by October 1943 by which date the RN had suffered more than 90% of its overall war losses. *War at Sea*, Vol III, Part I, Table 1. It is also worth noting here how vast the RN commitment to the East (comprising the two separate East Indies and Pacific fleets) became in 1945 with an effective fighting strength dwarfing the 1941 IJN. It included six battleships (modern or modernised), six fleet carriers, four brand new light carriers, no less than 25 escort carriers, four heavy cruisers, 19 light cruisers, 73 destroyers, and 42 submarines. See: H P Willmott, *Grave of a Dozen Schemes: British Naval Planning and the War Against Japan 1943-45*.

⁷ This judgement is consistent with the important reappraisal of Britain's contribution to Allied success in World War II set out by Robert Tombs in his new study *The English and Their History*, (Allen Lane, 2014), p 752.

⁸ There is further good analysis of these issues, primarily from the German standpoint, in *Germany and the Second World War*: Volume 6, ibid, notably p181-3 and 848-50. The authors state that, in April 1942, Berlin and Tokyo were a long way both in material capacity and thinking from realising the effective combined strategy necessary to destroy Britain's position in the Middle East whatever the ambitions of the German Naval War Staff. However, they also add that, if there ever was in the Second World War a realisable chance of strategic cooperation between the Tri-partite powers to deliver decisive effect, then it lay in the vulnerability of the Allies in the Indian Ocean during the first half of 1942.

Annex 1

The historiography of the naval defence of the Eastern Empire 1919 - 1942

The Introduction argues that a powerful and persistent historical narrative views RN failures at the start of the war with Japan as the inevitable result of pre-war naval weakness and underinvestment which left the RN inadequately resourced for the Far East theatre given the overwhelming priority of meeting an existential threat from Germany and a significant naval threat from Italy. The narrative argues that the RN compensated for its resource weakness during the inter-war period by embracing a flawed strategy "Main Fleet to Singapore". Strategic overstretch was compounded by equally flawed assumptions about IJN capability reflecting poor intelligence and a failure to understand the realities of modern naval warfare especially the impact of airpower. This annex provides more detail on the historiography which has both informed this narrative and, in later years, introduced some qualifications.

This narrative was first established in relevant parts of the British Official History of World War II, notably *The War at Sea* by S W Roskill¹ and the *War Against Japan* by S Woodburn Kirby². Both authors ascribe the successive RN defeats to Britain's inability to provide the right mix of balanced forces, either for the effective defence of Malaya or later in the Indian Ocean, and the fatal underestimation of Japanese strength, especially airpower. They see this resulting from the demands of other theatres against a context of heavy previous war losses but also a firm conviction, in both London and Singapore that Japanese attack was "possible but improbable" – that ultimately the Japanese "would not dare".³ Both historians place heavy blame on Churchill for poor risk judgement and

¹ S W Roskill, *The War at Sea* (London: HMSO, 1954-1961)

Vol. 1 The Defensive (1954)

Vol. 2 *The Period of Balance* (1956)

² S Woodburn-Kirby, The War against Japan: (London, HMSO, 1957-60).

Vol. 1 The Loss of Singapore (1957)

Vol. 2 India's Most Dangerous Hour (1958)

³ Woodburn-Kirby, Vol 1, Chapter XXVII, Retrospect.

acting against Admiralty advice on naval reinforcement to the Far East in late 1941.⁴ Churchill meanwhile established his own influential perspective on these issues in his *Second World War*.⁵

Roskill developed his arguments explaining RN failure in the East in his *Naval Policy between the Wars* published in 1976. This further emphasised: under-resourcing of the RN in the face of three potential enemies; inadequate investment in organic air power; and the tendency to under-rate IJN capability.⁶ The Roskill view was supported by a substantial literature, stimulated by the declinist view of British power fashionable from the late 1960s, which interpreted the Far East disasters of 1941/42 as the inevitable consequence of an inter-war "Main Fleet to Singapore" strategy that was never credible.⁷ Under this strategy, the RN would not maintain a permanent fleet in the Far East to meet a potential threat from Japan but rather deploy one from Europe to a dedicated base at Singapore in time of crisis. The critics of the "Singapore" strategy argued that it rested on the illusion that a two hemisphere Empire could somehow be defended with a one hemisphere navy.⁸ These arguments surrounding the "Singapore" strategy merit close

⁴ Both sharpened their criticisms of Churchill in later works: S W Roskill, *Churchill and the Admirals*, (London: Collins, 1977); and, S Woodburn-Kirby, *Singapore: The Chain of Disaster*, (London: Cassell, 1971).

⁵ Winston S Churchill, *The Second World War* (London: Cassell, 1948-1954). The first four volumes are relevant to this thesis:

The Gathering Storm (1948) *Their Finest Hour* (1949)

The Grand Alliance (1950)

The Hinge of Fate (1951)

Churchill includes several primary documents covering the Far East from 1940 - 42. His exchanges with the Admiralty on naval reinforcements for the Far East in the second half of 1941 are at Appendix K of Volume 3.

⁶ S W Roskill, *Naval Policy between the Wars* (London: Collins, 1968-1976). Vol. 2 The Period of Reluctant Rearmament, 1930-1939 (1976)

⁷ Robert Tombs provides a good summary of the "declinist" interpretation of Britain in the 20th Century and the inherent flaws in this approach in *The English and their History*, (Allen Lane, 2014), esp p 751 – 756 and 759 – 761.

⁸ The critics' case is well summarised in Malcom Murfett's essay "Reflections on an Enduring Theme: The "Singapore Strategy" at Sixty", in *Sixty Years On: The Fall of Singapore Revisited*, edited by B P Farrell and Sandy Hunter, (Singapore: Eastern Universities Press, 2003). The significant works in this genre include: Raymond Callahan's article "The Illusion of Security: Singapore 1919 – 1942", (*Journal of Contemporary History*, Vol 9, No 2, April 1974, pp 69 – 92) which he expanded into a book *The Worst Disaster: The Fall of Singapore*, (First published 1977 with an updated second edition - Singapore: Cultured Lotus, 2001); Ian Hamill, The Strategic Illusion, (Singapore, 1981); Paul Haggie, *Britannia at Bay: The Defence of the British Empire against Japan 1931-1941*, (Oxford: Clarendon Press, 1981); and, more recently, Brian Farrell, *The Defence and Fall of Singapore 1940-1942*, (Stroud, UK: Tempus, 2005). Farrell has also produced an

attention because, as this thesis demonstrates, pre-war strategic thinking exerted continuing influence on the RN leadership throughout 1940 and 1941.

Although some historians have qualified the standard critique of the "Singapore Strategy"⁹, the core narrative first established by Roskill has received surprisingly little challenge over the last 50 years.¹⁰ Subsequent classic studies of the RN in World War II by Paul Kennedy¹¹, Arthur Marder¹² and Corelli Barnett¹³ all broadly endorsed his interpretation of RN failures in the East as did more general studies of the war with Japan

Vol 2 The Germans come to the Help of their Ally: 1941 (1956)

Vol 3 British Fortunes reach their Lowest Ebb: September 1941 – September 1942 (1960) Both of these series include some relevant context from the pre-war period. Grand Strategy Volume 1 titled Rearmament Policy deals exclusively with the pre-war period. It includes an authoritative summary of naval rearmament from 1935-39 and excellent insights on RN strategy in the same period. Its coverage here is arguably better than that available from Roskill either in *The War at Sea* or his later work *The Period of Reluctant Rearmament*.

¹¹ Paul Kennedy, *The Rise and Fall of British Naval Mastery*, (Basingstoke: Macmillan, 1976).

¹² Arthur J Marder, *Old friends, New Enemies: the Royal Navy and the Imperial Japanese Navy, 1936-1945.* (London and New York: Oxford University. Press, 1981-1990).

Vol. 1 Strategic Illusions 1936-1941 (1981)

Vol. 2 The Pacific War 1942-1945 (1990)

Marder remains the only historian to explore the RN's engagement with the IJN in detail across this period. ¹³ Corelli Barnett, *Engage the Enemy More Closely* (London: Hodder and Stoughton, 1991). The sinking of *Prince of Wales* and *Repulse* is covered in Chapter 13. He draws heavily here on the papers collected by Roskill and available in ROSK 4/79, CCA, Cambridge. The Indian Ocean in 1942 is covered in pages 862-868. Half of this relates to the Madagascar operation.

excellent general work on overall British strategy in World War II, *The Basis and Making of British Grand Strategy – Was there a Plan*, (UK: Edwin Mellen Press, 1998).

⁹ It is important to stress that not all historians writing in the 1970s and 1980s viewed the "Singapore Strategy" through a declinist lens. David McIntyre, *The Rise and Fall of the Singapore Naval Base, 1919 – 1942*, (London:Macmillan, 1979), and James Neidpath, *The Singapore Naval Base and the Defence of Britain's Eastern Empire, 1919 – 1941*, (Oxford: Clarendon Press, 1981), both acknowledged the importance of strategic overstretch but saw this as part of a more complex picture. Neither saw the ultimate fall of Singapore as implicit in the strategy itself.

¹⁰ It is worth noting, however, that, even within the British Official History of WWII series, there are some significant qualifications to elements of the Roskill (and Kirby) interpretation, notably in the *Grand Strategy* volumes. *Grand Strategy* is more aware of the difficult trade-offs facing Britain's war leaders, judges they had few illusions about the Japanese threat, and consciously relied on the US to contain it. Roskill and Kirby are inevitably more parochial in their viewpoint but both are also selective in some of their evidence and susceptible to prejudice. In general, the analysis throughout the *Grand Strategy* series is more balanced and perceptive and holds up well against the latest research. See especially J M A Gwyer, *Grand Strategy Volume III: June 1941 – August 1942, Part I*, (London: HMSO, 1964). Gwyer is noteworthy for the different slant to Roskill which he provides on important aspects of the debates over Far East naval reinforcement in autumn 1941. These qualifications have been largely missed or forgotten by subsequent historians. I S O Playfair's series on the Mediterranean and Middle East is also an important source. His interpretation is better aligned to the *Grand Strategy* series than Roskill and Kirby. See: I S O Playfair, *The Mediterranean and Middle East*, (HMSO, 1954 - 1966).

Vol. 1 The Early Successes against Italy (1954)

notably by H P Willmott.¹⁴ Where counterarguments, or at least significant qualifications, were proposed, they generally had less impact than they perhaps deserved. For example, Christopher Bell argued, that the linkage between RN thinking in 1941 and pre-war RN planning for the Eastern theatre was overstated. He emphasised that many elements present in 1941, the consequences of the fall of France, the stance of the US and the implications raised by the German attack on the USSR, were not predictable pre-war. He also demonstrated that pre-war Admiralty plans were more complex and more realistic than usually portrayed. The RN was not fixated on fighting a new Jutland but rather anticipated coercing Japan through an economic war of attrition. RN planning was also flexible, adjusting to available resources, and switching between offensive and defensive plans as circumstances allowed.¹⁵ Above all, it is difficult to sustain the argument that despatching a major fleet to the East was never realistic when, as this thesis underlines, the RN did exactly this, despite many commitments elsewhere, in early 1942.

RN ability to deploy significant forces to the Indian Ocean during 1942, despite the loss of *Force Z*, also suggests that the decline in RN strength during the inter-war period emphasised by Roskill, and even more the wider "declinist" view of British power proposed by Corelli Barnett, has been exaggerated.¹⁶ Work produced over the last 20 years by John Ferris, David Edgerton, G C Peden and Andrew Gordon, among others, supports such a reassessment. They have stressed not only the residual strength of the RN during this period in comparison with other naval powers but also the scale of RN

¹⁴H P Willmott, *Empires in the Balance: Japanese and Allied Pacific Strategies to April 1942*, (Annapolis USA: Naval Institute Press, 1982). *The Barrier and the Javelin: Japanese and Allied Pacific Strategies February to June 1942*, (Annapolis USA: Naval Institute Press, 1983).

¹⁵ Christopher M Bell, *The Royal Navy, Seapower and Strategy between the Wars*, (Basingstoke, UK: Macmillan Press Ltd, 2000). Chapter 3 is the key chapter on the Far East.

¹⁶ Barnett's argument for British economic and military "decline" across the first half of the 20th Century is primarily set out in his famous three volume "*Pride and Fall*" series. The two volumes relevant to this thesis are: *The Collapse of British Power*, (Eyre Methuen, 1972), covering the inter-war period, and *The Audit of War: The Illusion and Reality of Britain as a Great Nation*, (Basingstoke: Macmillan, 1986), assessing subsequent British performance in World War II. The arguments first set out in these volumes underpin many of his judgements on specific RN capability and performance in the later *Engage the Enemy More Closely*. His strongest exposition of RN limitations and weakness in World War II is set out in his essay "The Influence of History upon Sea Power: The Royal Navy in the Second World War", in: *Naval Power in the Twentieth Century*, edited by N A M Rodger, (Basingstoke: Macmillan, 1996).

rearmament from 1936-41.¹⁷ As Chapter One shows, during this period it out-built other powers in every category of warship except submarines while quality was always competitive and often superior.¹⁸ These historians confirm that the traditional "too little, too late" picture of RN rearmament needs adjustment. On the specific issue of naval air power, work by Norman Friedman, David Hobbs and Philip Weir on the RN and David Evans, Mark Peattie and Jonathan Parshall on the IJN have produced a better view of their comparative strengths and weaknesses in this area. ¹⁹ This demonstrates that the overall balance of capability was closer than earlier historians of RN airpower such as Geoffrey Till, who broadly endorsed the Roskill interpretation, suggested.²⁰ Finally, David Edgerton's broader work²¹, which demonstrates both the underlying strength of the British defence and industrial research base through the first half of the 20th Century and beyond, and the contribution to Britain's war potential provided by Empire resources²², is a powerful corrective to the wider "declinist" interpretation so favoured by Barnett and others.

¹⁷ John Ferris, "It is our business in the Navy to command the Seas": The Last Decade of British Maritime Supremacy, 1919-1929, in *Far Flung Lines – Essays on Imperial Defence in honour of Donald Mackenzie Schurman*, edited by Greg Kennedy and Keith Neilson, (London: Frank Cass, 1997); G C Peden, *Arms, Economics and British Strategy: From Dreadnoughts to Hydrogen Bombs*, (Cambridge University Press, 2007); David Edgerton, *Warfare State: Britain, 1920-1970*, (Cambridge, UK: University Press, 2006) and *Britain's War Machine: Weapons, Resources and Experts in the Second World War*, (London: Allen Lane, 2011); G A H Gordon, *British Seapower and Procurement between the Wars*, (Annapolis, USA, Naval Institute Press, 1988). The last three works offer important correctives to the "reluctant and late" view of RN rearmament espoused by Roskill.

¹⁸ D K Brown, *Nelson to Vanguard: Warship Design and Development 1923 – 1945*, (London: Chatham Publishing, 2006), p 187 – 191, gives a good summary here.

¹⁹ Norman Friedman, British Carrier Aviation: The Evolution of the Ships and their Aircraft, (Conway Maritime Press, 1988); David Hobbs, The British Pacific Fleet: The Royal Navy's Most Powerful Strike Force, (UK, Barnsley Yorkshire: Seaforth Publishing, 2011); Philip Anthony Weir, The Development of Naval Air Warfare by the Royal Navy and Fleet Air Arm between the two World Wars, (unpublished doctoral thesis, University of Exeter, March 2006); David C Evans and Mark Peattie, Kaigun: Strategy, Tactics, and Technology in the Imperial Japanese Navy, (Annapolis US: Naval Institute Press, 1997); Mark Peattie, Sunburst: The Rise of Japanese Naval Airpower, 1909 – 1941, (Annapolis, USA: Naval Institute Press, 2001); Jonathan Parshall and Anthony Tully, Shattered Sword: The Untold Story of the Battle of Midway, (Washington, USA: Potomac Books, 2007). See also: James Levy, 'Race for the decisive Weapon: British, American, and Japanese Carrier Fleets, 1942-43', (US Naval War College Review, Volume 58, No 1, Winter 2005). A striking point made by Levy is that the RN had more carriers operational than either the USN or the IJN during most of the 12 months from July 1942.

 ²⁰ Geoffrey Till, *Airpower and the Royal Navy: 1914 – 1945: A historical survey*, (London: Janis, 1979).
 ²¹ In addition to the references in footnote 17, see: David Edgerton, Liberalism, Militarism and the British State, (*New Left Review*, 1/185, Jan – Feb 1991).

²² Ashley Jackson, *The British Empire and the Second World War*, (Hambledon Continuum, 2006), provides a valuable overview of the war contribution provided by the wider Empire. However, it is worth noting that he broadly follows the standard narrative on Britain's Far East naval strategy and performance.

Any review of the capability the RN could bring to bear in the Indian Ocean and further east must consider not just material but also fighting effectiveness. Here too there have been important revisions during the last 20 years to perceptions of how well the RN prepared to meet the new technical and operational challenges it would encounter in World War II. The prevailing orthodoxy, enduring into the 1990s, and promoted in various ways by Roskill, Marder and Barnett, was that the RN suffered during the interwar period from a fixation on re-fighting the battle of Jutland and was at best slow to innovate either technically or tactically. The apparent neglect of air power and the submarine threat which had been so evident in 1917 are presented as obvious examples. This view has now been countered in a series of works which argue that, within the limits of resource constraints, the RN was actually a strong innovator in most aspects of naval operations.²³ Andrew Gordon addresses the Jutland fixation particularly well. He acknowledges that the RN emphasised Jutland but it did so because it was determined that the perceived mistakes must not be repeated. He states that: "If the 1914-16 Grand Fleet's doctrinal roots lay in the structured 'rationalist' certainties of the late Victorian Mediterranean Fleet, those of the RN in the Second World War lay in the empirical lessons of the First World War: and were instrumental in helping Britain survive a combination of maritime enemies by whom she should, rationally speaking, have been defeated".24

The established perception that Britain generally, and the RN specifically, underestimated the threat from Japan must be weighed against a growing body of research into the intelligence picture available to decision-makers, drawing on primary material released in the last 20 years. Prominent historians who have investigated this new information include Paul Ferris, Michael Smith, Richard Aldrich, Anthony Best and Ong Chit

²³ Important works here are: Andrew Gordon, *The Rules of the Game: Jutland and British Naval Command*, (London: John Murray, 1996); Jon Tetsuro Sumida, "'The Best Laid Plans": The Development of British Battle-Fleet Tactics, 1919-1942', (*The International History Review*, 14:4, p 681-700, 1992); Joseph Alan Moretz, *The Royal Navy and the Capital Ship Controversy of the Interwar Period: An Operational and Tactical Assessment*, (unpublished doctoral thesis, Kings College, University of London, January 1999); Philip Weir, *The Development of Naval Air Warfare by the Royal Navy and Fleet Air Arm between the two World Wars*, ibid; and, George Franklin, *Britain's Anti-Submarine Capability, 1919 – 1939*, (London: Routledge, 2003).

²⁴ Andrew Gordon, *The Rules of the Game*, p 571 – 576.

Chung.²⁵ In general, their work suggests that British intelligence performance was stronger, and more widely based, than previously understood though still with important gaps in both coverage and interpretation. They demonstrate there were: some good insights into Japanese intentions from diplomatic traffic; reasonable coverage of IJN order of battle and movements; but almost no hard information on plans and operations; and only occasional, and often misleading, insights into IJN new build and fighting capability. They also show that, despite the intelligence gaps, with some notable exceptions, the broad thrust of British strategic assessments in the Eastern theatre was surprisingly good. Michael Goodman broadly endorses this view in his new official history of the JIC although he devotes little space to the Eastern theatre and his evidence base is rather selective.²⁶ Although this body of work, taken in the round, has greatly improved understanding of the role played by intelligence in the East, there remain some striking omissions in current historical coverage. For example, there is no comprehensive study of the role and performance of the Far East Combined Bureau (FECB)²⁷, or of the British contribution to sigint in the East²⁸, while potentially significant areas like submarine surveillance mentioned in Chapter Five have been barely touched.^{29 30}

²⁵ John Robert Ferris, *Intelligence and Strategy*, (London, Routledge: 2005). See especially Chapter 3 pages 121-124, other Ferris items referenced in this book, and his recent study of FECB: "Consistent with an Intention": The Far East Combined Bureau and the Outbreak of the Pacific War, 1940-41, (*Intelligence and National Security*, 27:1, p 5 – 26, February 2012). Michael Smith, *The Emperor's Codes: Bletchley Park's role in breaking Japan's secret ciphers*, (London, Bantam Press, 2000). Richard Aldrich, *Intelligence and the War against Japan: Britain, America, and the Politics of Secret Service*, (Cambridge University Press, 2000). The most relevant sections are in Part 1, Chapters 2-5. Anthony Best, *British Intelligence and the Japanese Challenge in Asia 1914 – 1941*, (London: Palgrave Macmillan, 2002). Also, 'This probably overvalued military power: British Intelligence and Whitehall's view of Japan', (*Intelligence and National Security*, 12:3, pp 67-94, 1997). Ong Chit Chung, *Operation Matador*, (Times Academic Press, 1997). ²⁶Michael S Goodman, *The Official History of the Joint Intelligence Committee: Volume I, From the Approach of the Second World War to the Suez Crisis*, (London: Routledge, 2014).

²⁷ John Ferris, "Consistent with intention", and Ong Chit Chung, *Operation Matador*, have made valuable contributions on FECB but they would be the first to admit they have only offered a partial picture. In particular, the way FECB interacted with GC&CS, NID and the wider London Intelligence Community is still poorly understood.

²⁸ A new book by two Australian historians, Peter Donovan and John Mack, *Codebreaking in the Pacific*, (New York: Springer International, 2014), has shed significant new light here. They argue that the contribution made by sigint in the war against Japan has been much less well understood than has its role in the European and Atlantic theatre. They claim to offer the "first reasonably complete account of who did what in Pacific war cryptology" and stress the significant contribution made by GC&CS and FECB to the breaking of JN 25.

²⁹ Understanding of the role and contribution of British intelligence in the Eastern theatre has undoubtedly suffered from the lack of an official history. Despite its overarching title, Professor F H Hinsley's multi-volume history, *British Intelligence in the Second World War*, (HMSO from 1979), excluded the Far East although there are some brief mentions in the introductory chapter. This means there is not only no

The re-appraisals of the RN rearmament record, new interpretations of RN capability, notably in carrier operations, and new insights in the intelligence area, which have been noted in this annex, suggest RN performance in the East needs to be judged against a more complex picture. However, as stated in the Introduction, no major historian has yet challenged the main thread of the existing narrative with its favoured explanations. Its sheer persistence is well illustrated in recent general histories of World War II³¹, in Duncan Redford's new history of the RN³², and the more specific studies by Malcom Murfett³³ and Brian Farrell³⁴.

[&]quot;benchmark" of knowledge for historians to draw on but also a lack of "signposts" to profitable areas of further reseach.

³⁰ One interesting puzzle relating to comparative naval intelligence capability between the Far East and European theatres concerns Traffic Analysis. As Chapter Five shows this was a very effective source on IJN orbat and movements from the mid-1930s onward. Yet Hinsley states that, up to mid-1940, this was regarded as an "untested technique" by the Admiralty in plotting German naval movements and yielded negligible results here in the first nine months of the war. The contrast is surprising and merits research. See: F H Hinsley, *British Intelligence in the Second World War*, Vol 1, p 141 – 142.

³¹ For example: Andrew Roberts, *Storm of War*, (London: Allen Lane, 2009); Max Hastings, *All Hell Let Loose*, (London: Harper Press, 2011); and Anthony Beevor, *The Second World War*, (London: Weidenfeld and Nicolson, 2012).

³² Duncan Redford, A History of the Royal Navy: World War II, (London: IB Tauris, 2014).

³³ Malcom Murfett, "Reflections on an Enduring Theme: The 'Singapore Strategy' at Sixty", *Sixty Years On: The Fall of Singapore Revisited*. See also the references to the RN in his recent overview of World War II naval operations: Malcom H Murfett, *Naval Warfare 1919-1945: An operational history of the volatile war at sea*, (Oxford: Routledge, 2009).

³⁴ Brian P Farrell, The Defence and Fall of Singapore 1940-1942.

Annex 2

Warships Completed by Principal Naval Powers 1930 - 1942

This Annex contains two tables giving information on the warships completed by the principal naval powers between the beginning of 1930 and end of 1942. Table A provides the overall totals for various categories of warship for each power across the whole period. Table B breaks the figures down into individual years. 1930 was selected as the start point for three reasons. First, it marks a transition point in the building cycle of all the naval powers as they recognised the need to begin addressing the growing obsolescence of ships commissioned during and immediately after the war. Thus both the RN and the USN commenced new destroyer programmes from this date. Second, it marks the point at which the potential of air power begins to exert significant influence on naval thinking and thus to influence procurement decisions. Third, the bulk of the German and Italian navies that would fight in World War II were created after this date, as were key elements of the IJN. December 1942 is the chosen end point partly because it is the widely accepted turning point in the war when the Axis powers moved irrevocably to the defensive. But it is also the point when US industrial strength began to translate into a scale of naval power that within a year would not only overwhelm the combined Axis but also far surpass RN strength too.

The tables illustrate the overall production achieved by the different powers across the period, their comparative rates of output, and the different choices they made. Because they only list new production, the tables are not in themselves an accurate guide to overall strength at any given time which would need to take account of pre 1930 production, subsequent modernisation of those units, and war losses. The tables list units by date of completion, not when they were laid down, and therefore omit units ordered but subsequently cancelled. This presentation is more useful than that found in most histories which often do not clarify between orders, completions and previous strength. There are still obvious limitations to tables that rely on raw numbers. Numbers may not reflect

quality and the way warships are allocated between particular categories is also inevitably open to debate.

The two tables here underline three conclusions already drawn from Table 5 in Chapter One which compared RN output with that of the three Axis powers from 1935 - 42. First, they show that, with the exception of capital ships, RN output over the wider period from 1930 matched the combined Axis total in every category of warship except submarines and significantly exceeded it in destroyers. If the two *Nelsons* (completed in 1927) are taken into account, the match extends to battleships also. Second, they emphasise the weighting of RN delivery to the period 1940 - 42 and hence the Admiralty concern that the period 1938 - 40 would be a window of vulnerability in coping with a "two hemisphere" challenge. Finally, they illustrate the impact of the RN shift to investment in ASW vessels from 1939 and how this anticipated the German decision to concentrate on U-boat output by at least a year, arguably giving Britain a decisive advantage in the Battle of the Atlantic.¹

The tables illustrate how RN and USN outputs across the period from 1930 were also very similar. The USN commissioned one more battleship than the RN but the RN compensated by delivering two more fleet carriers. The USN produced twice as many heavy cruisers but the RN significantly more cruisers overall. Destroyer output was similar. The RN built more submarines but US boats were of better quality. The major difference lies in specialist ASW escort vessels where US build in this period was negligible although their output would be vast in 1943. The common perception that the USN overtook the RN in this period is again not supported by the figures. The RN was certainly somewhat smaller than the USN in terms of core fleet units by the end of 1942 because of the scale of its war losses. US output was also rising very fast through 1942, with some 80 destroyers delivered that year alone, but its re-armament had generally started later than the RN. The key point is that, taking ASW capability into account, the

¹ See Doenitz' memoirs, *Ten Years and Twenty Days*, chapter 5, for details of the ambitious Z Plan for a major surface navy and its suspension to concentrate on U-boat production.

RN remained broadly equivalent to the USN in both size and fighting capability in most areas through 1942.

Chapter One has recorded the view of the Canadian historian John Ferris that the RN suffered disproportionate damage from the twin effects of the 1930 London Naval treaty and the economic depression of 1929 - 31, that these reduced the size of the RN below the minimum needed to handle simultaneous threats in two theatres, and reduced British shipbuilding and armament capacity, making future recovery and expansion much more difficult.² The tables underline that the only credible maritime threat Britain faced in 1930, and indeed, through to 1935, was that from Japan and that threat did not seem imminent. As Ferris accepts, either Britain must maintain a stronger navy than it needed or it must get weaker. Given the significant investment the RN had made in the late 1920s compared to other powers, including two battleships and 13 heavy cruisers, the investment recorded here for 1930 - 35 was broadly in line with that of the other powers and sufficient to maintain its position. It would have been difficult for any British government to justify more. Furthermore, as discussed in Chapter One, technology was changing so rapidly through the 1930s that it is doubtful that a higher building rate through the period 1930 – 35, where treaties would have permitted it, would have worked to the RN's advantage. The tables confirm that, despite the loss of shipbuilding capacity noted by Ferris, RN re-armament from 1936 still matched the combined output of its three potential enemies. More important, the RN got the balance of investment between fleet units and ASW capacity about right. Its investment strategy was better than either Germany, which was too slow in committing to U-boats, or Japan which completely ignored the potential submarine threat to its supply lines until 1943. There is a strong argument that where the RN suffered most in the period 1939 - 42, was through Britain's lag in building up its overall airpower compared to Germany and its underinvestment in land air capabilities most important to the maritime area.

² See: John R Ferris, 'It is our business in the Navy to command the seas: The last decade of British maritime supremacy', ibid; and, 'The Fulcrum of Power: Britain, Japan and the Asia-Pacific Region: 1880-1945', in *Maritime Strategy and National Security in Japan and Britain*, edited Alessio Patalano, (Leiden, Netherlands: Koninklijke Brill NV, 2012).

Table A ³	
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		Britain	US	Japan	Germany	Italy	Total Axis
Warsł	nip Type			-		•	
BB		5	6	2	2	3	7
BC		0	0	0	2	0	2
CV		5	3	64	0	0	6
CVL		0	2	3	0	0	3
CVE		6 ⁵	11	3	0	0	3
CCH		12^{6}	25^{7}	10	6 ⁸	5	21
CCL		31	8	4	3	13	20
DD		171 ⁹	183	68	33	41	142
DE		131^{10}	0	4	10	42	56
ASV		26911	0	0	0	0	0
SM		109	80	61	550	85	696
Key:							
BB	Battlesh	ip					
BC	Battlecruiser						
CV	Fleet Aircraft Carrier						
CVL	L Light Aircraft Carrier						
CCH	Heavy Cruiser						
CCL	Light Cruiser						
DD	Fleet Destroyer						
DE	Escort Destroyer						

Total warship completions by the principal naval powers across the period 1930 - 1942

ASV Anti-submarine Vessel

SM Submarine

³ The figures in both Tables A and B are constructed primarily from the following sources: H T Lenton, *British and Empire Warships of the Second World War*, (London: Greenhill Books, 1998; Paul Dull, *A Battle History of the Imperial Japanese Navy*, (Annapolis, USA: Naval Institute Press, 1978); S W Roskill, *Naval Policy Between the Wars*, (London: Collins, 1968 – 76), especially Appendix C, Vol 1; US Naval History and Heritage Command Website; Robert Mallett, *The Italian Navy and Fascist Expansionism 1935-1940*, (London: Frank Cass, 1998).

⁴ Two of these carriers were converted merchant vessels so not built to full warship standards.

⁵ Five of these carriers were provided by the US under lend-lease in 1942.

⁶ This total includes the ten *Southampton* Class completed from 1937-39. They qualify as heavy cruisers on the basis of displacement, number of guns and level of protection.

⁷ Totals include *Brooklyn* and *St Louis* classes which merit heavy cruiser status on the same basis as the *Southampton* class.

⁸ This total includes the three "Pocket battleships" of the Admiral Scheer class.

⁹ Total includes 17 vessels either built in Australia or Canada or requisitioned at the start of the war.

¹⁰ Includes 50 old destroyers acquired from the US under the destroyers for bases deal of August 1940. The remainder are variants of the *Hunt* class but include five vessels built overseas.

¹¹ About 30 of these vessels were built pre-war. The remainder are mainly *Flower* class corvettes with some 88 of these built in Canadian yards.

Table B

Warship completion by the principal naval powers presented on an annual basis from 1930 - 1942

Year	Туре	Britain	US	Japan	Germany	Italy
1930	ССН	1	3	0	0	0
	CCL	0	0	0	1	0
	DD	8	0	4	0	6
	ASV	4	0	0	0	0
	SM	8	1	1	0	1
1931	CCH	1	3	0	0	3
	CCL	0	0	0	1	3 3
	DD	$10 + 2^{12}$	0	4	0	
	ASV	4	0	0	0	0
	SM	3	0	4	0	0
1932	CCH	0	1	4	0	1
	CCL	0	0	0	0	1
	DD	$5 + 4^{13}$	0	4	0	7
	ASV	3	0	0	0	0
	SM	3	1	0	0	0
1933	CVL	0	0	1	0	0
	CCH	0	1	0	1^{14}	1
	CCL	2	0	0	0	2
	DD	4	0	3	0	0
	ASV	2	0	0	0	0
	SM	4	0	1	0	0
1934	CVL	0	1	0	0	0
	CCH	0	5	0	1^{15}	0
	CCL	2	0	0	0	0
	DD	10	3	2	0	4
	ASV	3	0	0	0	0
	SM	2	2	5	0	4
1935	CCH	0	0	2	0	0
	CCL	$3 + 1^{16}$	0	0	1	3
	DD	8	10	2	0	0
	DE	0	0	0	1	2
	ASV	6	0	0	0	0

¹² The two additional ships here were ordered by the Royal Canadian Navy.
¹³ The four ships here were again ordered by the RCN.
¹⁴ This was a Pocket Battleship.

¹⁶ This unit was handed to the Royal Australian Navy.

¹⁵ This was a Pocket battleship.

1936	SM CCH CCL DD DE ASV SM	$ \begin{array}{c} 4 \\ 0 \\ 1 + 2^{18} \\ 17 \\ 0 \\ 4 \\ 3 \end{array} $	$2 \\ 1 \\ 0 \\ 20 \\ 0 \\ 0 \\ 5$	$ \begin{array}{c} 4 \\ 0 \\ 0 \\ 1 \\ 0 \\ 0 \\ 2 \end{array} $	$ \begin{array}{r} 14 \\ 1^{17} \\ 0 \\ 0 \\ 5 \\ 0 \\ 21 \\ \end{array} $	6 0 1 0 10 0 11
1937	CVF CCH CCL DD DE SM	0 5 1 9 0 3	1 3 0 14 0 5	1 2 0 12 0 1	$ \begin{array}{c} 21 \\ 0 \\ 0 \\ 0 \\ 7 \\ 3 \\ 1 \end{array} $	$ \begin{array}{c} 11 \\ 0 \\ 0 \\ 2 \\ 5 \\ 5 \\ 10 \end{array} $
1938	CVF CCH DD DE ASV SM	1 2 10 0 3 6	1 5 11 0 0 5	0 1 4 0 0 1	0 0 9 1 0 10	0 0 4 19 0 21
1939	BC CVF CCH DD ASV SM	$ \begin{array}{c} 0 \\ 0 \\ 3 \\ 21 + 1^{19} \\ 2 \\ 7 \end{array} $	0 0 3 13 0 10	0 1 1 5 0 8	$ \begin{array}{c} 2 \\ 0 \\ 2 \\ 6 \\ 0 \\ 18 \end{array} $	0 0 0 7 0
1940	BB CVF CVL CCH CCL DD DE ASV	$ \begin{array}{c} 1 \\ 2 \\ 0 \\ 0 \\ 7 \\ 4 + 5^{20} \\ 19 + 50^{21} \\ 52 + 7^{22} \end{array} $	$ \begin{array}{c} 10 \\ 0 \\ 0 \\ 1 \\ 0 \\ 18 \\ 0 \\ 0 \end{array} $	8 0 0 0 2 9 2 0	1 0 0 1 0 4 0 0 0 1	$ \begin{array}{c} 6 \\ 2 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0$
1941	SM BB CVF CVE CCL DD DE ASV	$ \begin{array}{r} 15 \\ 2 \\ 2 \\ 1 \\ 5 \\ 16 \\ 25 \\ 76 + 63^{23} \end{array} $	5 2 1 0 0 13 0 0	8 1 2 1 1 8 2 0	50 1 0 0 0 4 0 0	9 0 0 0 0 0 0 0 0

¹⁷ This unit was a Pocket Battleship.
¹⁸ These two vessels also went to the RAN.
¹⁹ This unit was requisitioned from a Brazilian order.
²⁰ These five vessels were also requisitioned from Brazil.
²¹ These are 50 old US destroyers acquired under the August 1940 destroyers for bases deal.
²² These seven vessels were built in Canada.

	SM	20	11	8	199	4
1942	BB	2	4	1	0	1
	CV	0	0	2	0	0
	CVL	0	0	2	0	0
	CVE	5 ²⁴	11	2	0	0
	CCL	7	8	1	0	1
	DD	$32 + 3^{25} + 2$	2 ²⁶ 81	10	3	5
	DE	38	0	0	0	6
	ASV	$22 + 18^{27}$	0	0	0	0
	SM	31	33	19	237	1
		$22 + 18^{27}$ 31	0 33	0 19	0 237	0 1

²³ These vessels were built in Canada.
²⁴ These five carriers were supplied by the US.
²⁵ These three vessels were built in Canada.
²⁶ These two vessels were requisitioned from Turkey.
²⁷ These units were built in Canada.

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www.fleetairarmarchive.net. An excellent source of material relevant to the Fleet Air Arm and guide to other research holdings.

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www.milspecmanuals.com. This contains a large range of digitised military and intelligence documents relating to World War II. The emphasis is primarily on US sources. It is especially useful for sourcing Japanese Monographs and similar material. It has a good searchable database. www.navweaps.com. The Naval Technology section has a number of useful papers on technical topics, e.g. naval weaponry of all types, armoured flight decks and the RN High Altitude Control System (HACS) for AA defence.

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www.pacificwrecks.com. This database contains much valuable information on all naval and air forces involved in the Pacific war.

www.worldnavalships.com/forums. This is a searchable database and vast series of blogs relating to every aspect of naval capabilities and operations in World War II.

www.ww2db.com. A database with useful reference material relating to World War II including copies of original documents.