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### **British Naval Policy and the War against Japan, 1937-1945: Distorted Doctrine, Insufficient Resources, or Inadequate Intelligence?**

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In spring 1945, the Royal Navy participated in its first major engagement against the Japanese since the opening stages of the Pacific War. The British Pacific Fleet, composed of an armada of aircraft carriers, battleships and supporting vessels commanded by Admiral Bruce Fraser, joined its US counterparts in providing air and naval support for the Allied invasion of the Japanese island bastion at Okinawa. Britain's motive for contributing a force to this decisive battle was largely political.<sup>[1]</sup> For Britain, a key wartime objective, in addition to securing Japan's unconditional surrender and the total destruction of its war-making potential, was to re-establish its empire in the Far East. Yet, throughout the course of the Pacific War, Churchill's Cabinet realized that Britain needed to secure US consent in order to achieve this goal. US approval for British post-war objectives, in turn, hinged on the latter's ability to contribute to the war effort against Japan in a manner that was sufficient to convince Britain's allies that it had earned the right to reconstitute its imperial rule in Southeast Asia.

However, the Royal Navy's performance during the battle of Okinawa clearly reflected Britain's failure to devise the methods and technologies that were necessary for conducting the type of naval engagement which the Allies had faced in the Asia-Pacific

theaters. Although experiences during the Pacific War clearly illustrated the importance of air power when operating in the vast expanses of water prevailing in the Far East, the Royal Navy failed to match its US and Japanese counterparts in the use of its air arm. British anti-aircraft defenses were also inadequate for the purpose of countering the Japanese naval air services. Clearly, the Royal Navy failed to adapt its capabilities in accordance with its requirements. In order to understand why Britain's naval policy in the Far East was not in accordance with the challenges it faced, it is important to explore the question as to whether Britain faced problems in obtaining accurate intelligence on the IJN. An explanation of the material and doctrinal difficulties which the Royal Navy faced in devising an appropriate war plan is also in order.

During the recent decades, two main historiographic schools of thought have emerged concerning British naval policy during the inter-war period and Second World War. Both schools have also attempted to draw a connection between British naval strategy and the Royal Navy's shortcomings vis-à-vis the IJN. The first school has focused mainly on Britain's resource shortages, and has included scholars such as Andrew Gordon and Michael Howard.<sup>[2]</sup> They have argued that strategic overextension was the main reason why Britain failed to provide sufficient naval forces for its empire in the Far East. Throughout the inter-war period and the Second World War, Britain needed to treat the protection of its home waters and trans-Atlantic lifelines as a top priority. The Royal Navy could not defend Britain's worldwide interests from all of its adversaries, and it was thus devoid of surplus forces that could be devoted for operations against Japan.

The second mainstream debate has focused on the Royal Navy's doctrine. The aspect which has received the most attention is the Admiralty's efforts to depart from the traditional practice of relying upon surface fleets, and its attempts to develop a carrier fleet and Fleet Air Arm, as well as the appropriate methods of employing naval air power. Within this cluster, there have emerged a number of competing views concerning the difficulties which the British faced. The first view, put forward by Correlli Barnett and Stephen Roskill, dictated that British admirals were fixated on the idea of achieving a decisive victory through a surface engagement and thus failed to understand how the

advent of the aircraft carrier had rendered such actions largely obsolete.<sup>[3]</sup> British naval strategy in the Far East envisioned a battleship-centered action, and overlooked the threat posed by the Japanese naval air arm. Thus, distorted doctrine lay at the root of the Royal Navy's shortcomings. Arthur Marder also argued extensively that the Admiralty was fixated on fighting another Jutland, and doing it correctly the next time around.<sup>[4]</sup> His two-volume series on British naval strategy against Japan also extensively illustrated how the Admiralty's miscalculation of the IJN prior to the outbreak of the Pacific War was largely due to a combination of flawed doctrine and prejudices concerning Japanese martial qualities.<sup>[5]</sup> Yet, Marder did concede that Britain's commitments in the Atlantic and Mediterranean theaters precluded the dispatch of any sizeable naval forces to the Far East for the larger part of the conflict.

A number of historians have provided alternative interpretations to the scathing views put forward by Roskill, the most prominent of whom are Paul Kennedy and Geoffrey Till. Kennedy has focused on the fact that Britain did not possess the resource base to develop a large carrier fleet.<sup>[6]</sup> In addition, the Royal Navy had to simultaneously prepare for confrontations against Germany, Italy and Japan, each of whom presented a different type of challenge, with the Japanese navy concentrating more on surface vessels and the Germans focusing on the development of a submarine fleet. The countermeasures required to confront both adversaries differed widely, and the Admiralty simply could not provide the equipment which the navy needed to fight all of its enemies effectively. Till, on the other hand, has focused more on doctrine, and has conducted a head-on assault on the contention that the Royal Navy's main problem was its 'surface minded' attitude.<sup>[7]</sup> On the contrary, the British made a number of concerted efforts to develop their naval air capabilities. There were, however two main problems which hindered progress, the first of which was stemmed from material and political factors. Inter-service rivalries between the Royal Air Force and Navy meant that the fleet air arm could not easily procure adequate numbers of aircraft. The second problem did stem from operational doctrine; however, it had little to do with the fact that British admirals were fixated on the idea of fighting surface actions. The trouble was more a result of the ambiguities which surrounded the role which air power was likely to play in future engagements. The

uncertainty was largely due to the fact that combat experience had yet to provide firm answers as to whether aircraft were able to destroy enemy targets in the open sea, and if so, what were the logistical, tactical and technological requirements for success? Under the circumstances, it was only natural to not fully comprehend the capabilities of the IJN's air arm and the dangers which the Royal Navy could face when engaging its opponent.

During the recent decades, a number of scholars have vindicated Till's views. Jon Sumida concluded that the Royal Navy's adherence to its practice of relying upon the battleship as the centerpiece of its strategy was logical in light of the fact that carriers had not been used extensively in the European theaters, where the proximity of land bases negated the need for navies to project their air power over large expanses of ocean.<sup>[8]</sup> Christopher Bell has defended the underestimation of the impact of naval aviation, stating, 'it does not point to any intrinsic flaw in the Admiralty's strategic thinking'.<sup>[9]</sup> After all, the manner in which aircraft carriers could affect the outcome of engagements in the expanses of water prevailing in the Asia-Pacific theaters had yet to be fully discovered. In addition, as events were to reveal, battleships and surface vessels did play a significant role in the Pacific theaters.

Neither resource shortages nor inadequate operational doctrine can fully explain the Royal Navy's problems in coping with the IJN and its air arm. A comprehensive answer needs to take into account Britain's lack of prior experience in engaging its Japanese opponent, which precluded opportunities for obtaining intelligence on the IJN's capabilities. Britain entered the Pacific War with a misinformed perception of the IJN, as well as an erroneous notion that it possessed sufficient strengths and capabilities to confront the Japanese. Although the establishment of Japanese naval superiority in the Far East and western Pacific during the opening months of the war clearly highlighted the IJN's proficiency, for the large part of the Pacific War, Britain's preoccupation with its war against Germany, and subsequent lack of surplus naval forces, meant that it was unable to send a naval force to the Far East that could effectively engage the enemy. Consequently, the Royal Navy was unable to obtain the combat experience needed to

devise an offensive strategy that was likely to defeat the IJN. The absence of naval encounters after the sinking of the *Prince of Wales* and *Repulse* in December 1941, followed by the attack on the Eastern Fleet's main base at Ceylon in April 1942, meant that even towards the latter stages of the conflict, British assessments had to be based on experiences which highlighted the IJN's ability to cause considerable damage. Naval planning often took place with an understanding of the challenges posed by the IJN and its air arm, but at the same time with a clear comprehension of the fact that the Royal Navy did not possess the resources and technology to overcome them. By the time the British Pacific Fleet commenced its operations in Okinawa, naval crews found themselves having to deal with a situation for which they were not fully prepared, and needed to use their ingenuity to develop new methods with existing resources.

### ***British miscalculations of the IJN prior to the outbreak of the Pacific War***

Three key factors prevented Britain from formulating an accurate evaluation of the IJN prior to December 1941, the first of which was a widespread air of complacency. Indeed, previous works on the subject by Arthur Marder and Wesley Wark have argued that the Admiralty's assessments of the IJN were largely based on preconceptions regarding the fighting capabilities of non-European powers, which dictated that as an Oriental race, the Japanese could never construct nor maintain ships to match the strength of their Western counterparts.<sup>[10]</sup> The second factor was the difficulties which arose from military secrets laws which shrouded the IJN's capabilities, which in turn meant that Britain was unable to obtain adequate information.<sup>[11]</sup> Third, the situation was complicated by the absence of prior encounters between the IJN and its Western rivals, which meant that the Japanese had yet to prove their potential. Consequently, the Royal Navy entered the war with a flawed image of its ability to withstand the Japanese onslaught. The misperception was one of the key factors which led to the decision to dispatch the battleship *Prince of Wales* and battlecruiser *Repulse* on a mission to forestall the Japanese landings on the east coast of Malaya in December 1941, which was to terminate with their destruction two days following the outbreak of the conflict.

Britain's apparatus for collecting and analyzing intelligence on the IJN prior to the outbreak of the Pacific War consisted of three main ranks, the lowest of which were the organizations responsible for collecting intelligence. Intelligence analysis and dissemination was mainly under the jurisdiction of the Admiralty's naval intelligence directorate (NID) and the planning staffs. At the Cabinet level, the Joint Intelligence Committee (JIC), an inter-departmental body manned by representatives from the service ministries and the Foreign Office, was responsible for providing Churchill and his Chiefs of Staff (COS) with regular updates on the strategies and capabilities of Britain's adversaries. At all three levels, intelligence activities reflected the perpetual difficulties in obtaining reliable material.

Responsibility for collecting intelligence on the IJN fell upon two main organizations, the first of which was the Naval Attaché's office in Tokyo. Due to the Japanese government's increasingly stringent control over the movements of foreign nationals and restrictions on visits to naval facilities and shipyards during the 1930s, the information emanating from this source was invariably restricted. For example, during spring 1939, the Naval Attaché admitted to the Director of Naval Intelligence (DNI) that he had no means of ascertaining how the IJN was planning to use the funds that it had been appropriated by the Japanese Diet's annual budget.<sup>[12]</sup> The central organization responsible for processing intelligence on Japan, the Far Eastern Combined Bureau (FECB), faced similar problems. Although the organization's headquarters in Hong Kong was managed and manned primarily by officers from the Royal Navy, it did not have the manpower resources to collect intelligence via clandestine methods. Its primary activity was therefore to decode Japanese naval cyphers, and this source provided little apart from information on the IJN's movements. Diplomatic signals decrypts also provided intelligence on the quality and performance of Japanese vessels; however, the material tended to reveal a one-sided picture. The Government Codes and Cyphers School (GCCS) provided decoded communications between the Japanese Naval Ministry and its representatives in Europe. The decrypts often revealed requests that Japan's naval attachés make a concerted effort to secure contracts for badly needed imports of steel, ammunition, and radio equipment.<sup>[13]</sup> While information of this nature correctly signified

the IJN's difficulties in satisfying the requirements of its construction program, it tended to obscure the fact that its efforts to build a fleet capable of challenging the US and Britain had enjoyed some remarkable successes.

Within the Admiralty, assessments of the IJN demonstrated an equal level of misinformation. The absence of effective means by which to obtain naval intelligence meant that estimates were often based on information from sources which could not be considered entirely reliable. In November 1938, the DNI minuted that his calculation of the IJN's annual construction program was premised on the levels of production that were possible within the allocated budgets.<sup>[14]</sup> Figures on naval armaments production were completely lacking, and in January 1939, the DNI admitted that, although Kure Naval Dockyard was the only known site for manufacturing armor plate, his minute was based on a vernacular newspaper article obtained back in November 1937.<sup>[15]</sup> The use of press sources was not an uncommon practice, as was revealed by the Admiralty's monthly summary for April 1939. The section on Japan consisted entirely of an article in the *Japan Times* which stated that the purpose of the construction program was to replace obsolete ships.<sup>[16]</sup> In addition to the problems arising from their lack of accuracy, production figures could never act as an effective substitute for qualitative information on the technology and performance of Japan's fleet.

Due to the extreme secrecy with which capital ship construction was undertaken, estimates on the size and armament of Japanese capital ships were based on speculation. On the possible construction of capital ships with 18-inch guns and displacements exceeding 40,000 tons, the DNI merely stated that the possibility could not be ignored.<sup>[17]</sup> In fact, British intelligence did not even know about the existence of the super-battleships *Yamato* and *Musashi* until 1942.<sup>[18]</sup> The only source of tangible information was evidence pointing to Japan's shortages of industrial plant and raw materials, which suggested that the IJN's expansion had reached the limit. Disseminated intelligence regularly propagated reports that Japan's shipbuilding industry was unable to keep pace with the Navy's demands, which suggested that the IJN could not construct a fleet superior to the US and British fleets.<sup>[19]</sup> While assessments of this nature correctly highlighted the

difficulties which Japan faced in developing its naval capabilities, they also demonstrated an awareness of the fact that the IJN's vessels had achieved a high standard of performance and efficiency.

At the Cabinet level, assessments were equally plagued by a lack of intelligence. The difficulties involved in obtaining accurate information meant that appreciations were often based on the ethnocentric assumption that as an Oriental force, the IJN could never match the performance of its Western rivals. The COS's conclusion in June 1939, that the IJN's efficiency stood at 80% in comparison to that of the Royal Navy was arbitrary, and based on preconceptions that the Japanese suffered problems in maintaining their vessels and that their ordinance officers possessed a low standard of training.<sup>[20]</sup> By the eve of the Pacific War, the notion that the IJN's capabilities were not on par with that of its Western rivals gave rise to the conclusion that Japan's leaders would think twice before provoking a naval confrontation with US and Britain. As late as November 1941, the JIC reiterated the conclusion it had reached back in January, namely, that the IJN's strategy at the onset of war would be strictly defensive, and that the IJN would use the bulk of its capital ship fleet to defend its home islands against a US attack.<sup>[21]</sup> The corollary to the above assumption was that Japan would not be able to set aside sufficient forces for an expedition into Southeast Asia.

Aside from a failure to grasp the capabilities of the IJN's capital ship fleet, British assessments demonstrated a complete ignorance regarding the capabilities of Japan's naval air arm. The problem once again stemmed from the fundamental handicap posed by Japan's military secrets laws, which prevented the collection of intelligence through reliable channels such as visits to air regiments. Assessments by the Air Attaché in Tokyo were admittedly based on a dearth of information.<sup>[22]</sup> The only source of tangible intelligence was observations of Japan's operations in China, which frequently gave rise to negative impressions. The sections on the Far East in the Air Ministry's bulletins frequently propagated critical accounts of an air force that was unable to cause permanent damage to vital targets such as railway lines and factories even in the presence of negligible Chinese anti-aircraft defenses.<sup>[23]</sup> The absence of accurate intelligence on the



Japanese air services' relative effectiveness against its Western rivals led to a gross under-estimation of its abilities at the highest levels of the establishment. By 1941, the consensus was that Japan's air capabilities were on a par with the Italian *Regia Aeronautica*.<sup>[24]</sup>

British images of an ineffective Japanese air arm revealed a complete unawareness that the naval air services had made painstaking preparations to ensure that its convoys destined for Southeast Asia were fully protected by land-based air support, and that Allied air power in the Philippines and Malaya was neutralized with adequate speed.<sup>[25]</sup> A similar level of ignorance prevailed as regards the extent to which the naval air services had conducted thorough examinations of the means to destroy enemy naval forces with improved dive-bombing techniques, the result of which to be the nearly complete elimination of the Allied fleets in the Pacific and Far East during the opening stages of the conflict.<sup>[26]</sup>

Of equal importance, British assessments showed an ignorance of the important role which air power could play naval battles conducted over the stretches of ocean which were common in Southeast Asia and the Pacific. The failure to grasp this reality magnified British miscalculations of the Royal Navy's readiness to confront the IJN. Britain's war plans prior to December 1941 were based on the assumption that the main fleet would be operating in areas such as the South China Sea with the support of aircraft based in the Malay Peninsula. Under the circumstances, it was natural for the Admiralty to adhere to its belief that the battleship was the centerpiece of its strategy, and not fully comprehend the importance of developing its carrier tactics.<sup>[27]</sup> Furthermore, experiments during the inter-war period revealed that fighters were incapable of providing full protection. Consequently, naval officers concluded that anti-aircraft cover provided the most reliable defense, with supporting aircraft filling the gaps.<sup>[28]</sup> When adequate fighter cover was unavailable, the Royal Navy's practice of relying on its battleships rendered its vessels vulnerable against determined attacks.

However, the fact remains that Japan's naval air services had yet to prove their ability to provide support for operations conducted thousands of miles away from their advanced bases. The difficulties involved in supporting operations across the expanses of the South China Sea led the Air Ministry to predict that, in addition to shortages of aircraft with adequate ranges, maintenance difficulties and wastage resulting from operations over large stretches of water were likely to limit the scale of attack.<sup>[29]</sup> Furthermore, prior experiences had highlighted the difficulties of maintaining carrier-borne attacks in the face of shore-based air opposition. Thus, in August 1941, Brooke-Popham, the C-in-C Far East, suggested that the danger of the IJN launching a seaborne air attack was minimal.<sup>[30]</sup> In the absence of evidence suggesting that Japanese pilots and aircraft were capable of conducting expeditions over large stretches of ocean, assessments on the matter were likely to be based on evidence which suggested ineptitude. Indeed, in January 1942, Dudley Pound, the First Sea Lord, admitted that prior to the sinking of the *Repulse* and *Prince of Wales*, war experience did not suggest that high-level bombings against capital ships could cause serious damage.<sup>[31]</sup> Hence, British naval staffs had no reason to believe that the Japanese were able to perform advanced manoeuvres so effectively.

For the purpose of operational planning, the notion that the IJN was neither willing nor capable of challenging its Western rivals led to a number of faulty moves. The decision to send the capital ships HMS *Repulse* and *Prince of Wales* (Force Z) to Singapore in October 1941 was purely the result of Churchill's conviction that the mere presence of a token British capital ship fleet in Southeast Asia alongside a US fleet in the Pacific was sufficient to negate whatever optimism Japan had in its ability to advance southwards, despite contrary advice from the Admiralty.<sup>[32]</sup> Likewise, the order to dispatch Force Z on its fateful mission was based on the fact that prior experiences indicated that torpedo aircraft had not conducted raids at long range, and that reports on the Japanese air services had been adverse.<sup>[33]</sup> Hence, Admiral Phillips predicted that enemy aircraft would not be loaded with anti-ship ordnance and that his fleet would only have to contend with long-range bombers from Indochina that were flying at the limits of their fuel capacity. The provision of air cover was deemed necessary only on an

intermittent basis. In his recollections of the Far Eastern conflict, Hillgarth, who served as the Chief of Naval Intelligence in the SEAC theaters, admitted that the gravest miscalculation made in regard to the force which was to attack Malaya was not on its strength and location, but the quality of the bomber convoy.<sup>[34]</sup> Only the total destruction of Force Z could convince the Royal Navy that its strengths and capabilities were in need of drastic improvements.

***The outbreak of the Pacific War and its effect on British assessments of the IJN, 1942 to early 1943 - defeatism and continued ambiguity***

The establishment of Japanese naval superiority in the Far East during the opening stages of the conflict led to a reassessment of the IJN's capabilities, and a reconsideration of the Royal Navy's ability to engage its enemy. By spring 1942, the consensus within the Admiralty as well as the Eastern Fleet was that British vessels operating in the Far East needed to undergo extensive modernization in order to cope with the IJN's capital ships and air arm. However, the provision of naval reinforcements was made difficult by the Royal Navy's continued preoccupations in the Atlantic and Mediterranean theaters. Britain was thus unable to conduct any large-scale naval operations against the Japanese for the large part of 1942 to 1943, thereby precluding any opportunities for obtaining the combat experience necessary for developing appropriate countermeasures against the IJN. In the absence of first-hand encounters, the British had few alternative means to obtain accurate intelligence. Consequently, as late as 1943, British assessments of the IJN remained ambiguous, and tended to emphasize the fact that the Japanese had proven beyond doubt their capacity to pose a formidable challenge for the Allies.

The Royal Navy's failure to curb the IJN's advance into Southeast Asia undeniably illustrated its inferior performance. Evidence of Japanese weaknesses had to be viewed in light of the fact that the British vessels had shortcomings of their own. Commenting on the battle of the Java Sea in February 1942, Twiss, the Gunnery Officer onboard the cruiser HMS *Exeter*, noted that Japanese surface vessels tended to conduct their attacks at long ranges.<sup>[35]</sup> Events of this nature suggested that the IJN's crews were reluctant to bring their ships within proximity of enemy ships, where fire could be delivered more

accurately. However, the most important lesson of the encounter was that Allied fleets had failed to sink the Japanese fleet, and that poorly trained naval crews were no match for the IJN. In March 1942, the Admiralty's Gunnery and Anti-Aircraft Warfare Division stressed that Japanese capital ships were able to fire at long ranges with a high level of accuracy, thereby necessitating British battleships to be refitted with guns that could deliver fire with a similar efficiency.<sup>[36]</sup> In February 1942, Somerville, the C-in-C Far East, insisted to Pound that operations in the Far East needed to be led by flag officers who were well informed on gunnery matters.<sup>[37]</sup> Objections against the operation of the obsolete battleship *Malaya* with Somerville's main fleet for the defense of waters adjacent to Ceylon were based on the grounds that only the most modern ships were likely to be able to counter a concentration of enemy vessels.<sup>[38]</sup> Japan's naval victories had created a realization that the enemy was capable of posing challenges which could be overcome only with a first-class fleet.

Assessments of the threat posed by Japan's naval air arm also revealed the extent to which the experiences of defeat provided unquestionable signs of the Royal Navy's weaknesses. The sinking of the *Repulse* and *Prince of Wales* demonstrated the exceptional accuracy which Japanese dive-bombers could achieve.<sup>[39]</sup> The failure to provide adequate defenses against the IJN's air arm led both intelligence staffs and naval commanders to reconsider whether their opponent's weaknesses in fact justified complacency. For example, while the decision to seek a night fleet action during the IJN's foray against Ceylon was based on the belief that the enemy was less adept at employing night-fighting tactics, the fact was still acknowledged that British ships needed to maneuver themselves skillfully in order to avoid detection.<sup>[40]</sup>

Most importantly, the skill and accuracy of Japanese attacks against naval targets revealed the necessity of bolstering the defenses onboard British vessels against the IJN's anti-ship weapons. The high level of co-ordination demonstrated by the enemy's combined naval and air attacks on the *Repulse* and *Prince of Wales* raised urgent calls for a reassessment of existing defenses onboard capital ships.<sup>[41]</sup> The sinking of the HMS *Hermes* and *Vampire* during the IJN's foray against Ceylon in April 1942 provided

further proof that British vessels were unable to operate effectively unless they were equipped with the most modern radar and anti-aircraft guns.<sup>[42]</sup> Efforts to provide adequate protection for sea-going vessels were further complicated by the fact that the design of British fighters was too heavy for carrier-based operations, while their performance could not match the maneuverability and range of their Japanese counterparts.<sup>[43]</sup> The realization of such deficiencies led Churchill to lodge urgent requests for the loan of suitable aircraft from the US.<sup>[44]</sup> The Japanese naval air services' capabilities had therefore not only forced a reassessment of the enemy. More importantly, it created a realization that British forces were incapable of countering the threat posed by their opponent without undergoing extensive modernization.

Britain's ability to counter the IJN's threat to its territories in the Indian Ocean was further hindered by its shortage of surplus naval forces. The Royal Navy thus had to follow a strictly defensive strategy, thereby denying any opportunities for encounters that could provide lessons on how the IJN could be neutralized. Although the Japanese naval sortie into the Bay of Bengal in April undeniably highlighted the extent to which the Eastern Fleet's base at Ceylon was exposed to attack, Britain's strategy continued to be shaped by commitments arising from its war against Germany. Requests by Churchill and the COS for US intervention on Japan's eastern flank suggested that the raid had confirmed the conclusion arrived at previously, namely that because the Eastern Fleet could not be adequately reinforced for the foreseeable future, Britain's only hope for defending the Indian Ocean areas was to obtain US co-operation in the form of naval offensives in the Pacific to keep the IJN pre-occupied.<sup>[45]</sup> As a matter of fact, the Eastern Fleet's vulnerability led to the withdrawal of its capital ship fleet from the enemy's striking range and its relocation to East Africa, on the premise that the presence of a fleet in the Indian Ocean was more likely to be a liability until adequate capital ships and carriers could be provided.<sup>[46]</sup> The mounting indications of Britain's precarious situation thus led its military planners to accept the fact that until adequate resources could be provided, they had few alternatives apart from attempting to minimize their potential losses. The COS's decision to dispatch the carriers *Illustrious* and *Victorious* to the Southwest Pacific in autumn 1942 was also based on the grounds that their presence in

the Indian Ocean would simply expose them to attacks for which they were ill-prepared, and that they would be better used as a contribution to the US Fleet's operations against the IJN in the Southwest Pacific.<sup>[47]</sup> However, by 1943, following Japan's defeat at Guadalcanal, the IJN adopted a policy of avoiding action against the Allied fleets, and retained the bulk of its fleet in the home waters. Consequently, the British carriers experienced no encounters with the enemy fleet. By the spring of 1943, the Eastern Fleet's carrier fleet was entirely withdrawn owing to more pressing commitments in the Mediterranean, thus completely dashing the Royal Navy's hopes of obtaining any operational experience against the IJN.

As late as 1943, the Eastern Fleet's lack of engagements against the IJN rendered accurate assessments of the enemy's naval forces virtually impossible. Furthermore, the secrecy which continued to surround the IJN's capabilities meant that naval intelligence continued to be a grey area in which a shortage of information was the general rule. Evidence was obtained primarily from US sources, which provided little aside from rough estimates of Japan's naval construction.<sup>[48]</sup> In response to Churchill's request for an investigation into rumors of the IJN's construction of additional capital ships and carriers, the NID clearly stated that their answers were derived from a source which could not be regarded as fully reliable.<sup>[49]</sup> When Churchill enquired about the reasons why Japanese carriers were able to hold more aircraft than their British counterparts, Pound could not go further than to suggest that the actual tonnage was probably greater than disclosed.<sup>[50]</sup> The lack of first-hand encounters also meant that the development of methods for countering the IJN had to be based on speculation. To provide a key example of this dilemma, in June, the Admiralty propagated suggestions of possible methods to counter enemy submarines with an accompanying comment that amounted to a disclaimer that the report merely represented the opinion of US commanders.<sup>[51]</sup> The available intelligence could not provide a clear picture of the IJN's capabilities against its British counterpart. In the absence of British successes, assessments hesitated to suggest that Japanese ships possessed deficiencies which were open to exploitation, and were more likely to highlight evidence of the IJN's capacity to build and operate technically advanced vessels.

British appreciations of the threat posed by the IJN's air arm also continued to reveal a realization that the Royal Navy had yet to prove its capabilities. The Allied victories during the naval air engagements at Coral Sea and Midway during May and June 1942 did little to diminish images of the Japanese air services as an effective fighting force. As a matter of fact, combat reports from US sources were seized upon as evidence that Allied aircraft needed to be equipped with improved firing capabilities and manned by skilled pilots. In his minutes to the report on the battle of the Coral Sea, the Director of the Naval Air Division (DNAD) acknowledged that Japanese aircraft were constructed with light armament in order to enable them to conduct rapid climbs and achieve a high level of manoeuvrability. While this practice rendered enemy aircraft exceptionally vulnerable to gunfire, the fact remained that the British could exploit such weaknesses only when more advanced fighters became available for the Eastern Fleet.<sup>[52]</sup> The provision of optimistic assessments was further hampered by evidence which continued to reveal that Japanese pilots and aircraft were capable of putting up a serious challenge for the Allies. An Admiralty intelligence summary in December 1942 warned that Japanese naval pilots were highly trained and that aircraft output had kept pace with losses.<sup>[53]</sup> The only source of comfort was that intensified battles were likely to take a heavier toll on the enemy's reserves.

***Royal Navy attempts to formulate an adequate war plan in the Far East, 1943 to 1944 - the triple dilemmas of inadequate resources, poor intelligence and insufficient combat inexperience***

Throughout the course of the Pacific War, the IJN remained the branch of Japan's armed services on which the least information was available. The uncertainty was a direct consequence of the absence of major encounters between the IJN and Royal Navy which persisted following the raid on Ceylon in April 1942. The IJN's adherence to a policy of conservation by retaining its fleet within its Inner Zone, combined with Britain's need to follow a strategy confined to the defense of the Indian Ocean until the very late stages of the conflict, minimized the prospects of a major engagement. To quote Marder, 'Britain's interests went no further east than Japan's went to the west'.<sup>[54]</sup> This situation led to an

inability to determine the IJN's capabilities even during the latter stages of the war. Furthermore, evidence pointing to Japanese efficiency continued to give rise to assessments that erred on the cautious side, and warn against undue optimism regarding the Royal Navy's ability to challenge its opponent.

The apparatus for collecting and processing intelligence on the IJN remained largely the same as prior to the outbreak of the conflict. The FECB was the primary body responsible for collecting intelligence that was to be used by Somerville's Eastern Fleet. After several relocations following the fall of Singapore, the FECB established its headquarters at Ceylon in 1943 which came to be known as HMS *Anderson*. Its chief task was to crack naval cyphers. Within Whitehall, the Operational Intelligence Center (OIC) was responsible for collating the material obtained through Japanese naval signals and thereafter providing the Admiralty with regular situational updates. The main bodies responsible for processing intelligence on qualitative aspects such as the IJN's performance and technology were the Admiralty's naval intelligence directorate (NID), and within the Eastern Fleet, the Chief of Operational Intelligence Services (COIS). The Air Ministry's intelligence directorate also provided a significant amount of information on the IJN's fleet air arm, the bulk of which consisted of reports on US encounters in the Pacific theaters. A key indication of the frequent exchange of information between the Admiralty and Air Ministry is the fact that their weekly intelligence summaries often contained duplicate copies of appreciations on the IJN's air arm. Higher up, the planning staffs within the Admiralty were responsible for deciding how intelligence was to be implemented. Although Somerville frequently voiced his opinions regarding the need to improve the efficiency of British vessels operating in the Far East, the Admiralty's response to his proposals was invariably that its meager financial resources and supplies of raw materials did not permit improvements to be made in the near future. At the apex of the hierarchy, Churchill and his Chiefs of Staff were also responsible for ensuring that the Admiralty undertook the necessary measures to improve the Eastern Fleet's capabilities. However, once again, Britain's resource shortages meant that their efforts did not always bear fruit.



At every level, efforts to formulate an accurate image of the IJN were fundamentally handicapped by the absence of engagements between the Japanese and Allied main fleets during the months between Guadalcanal and the battle of Leyte Gulf in November 1944. To complicate matters, the secrecy with which the Japanese guarded information about their armed forces precluded the collection of accurate data. Basic aspects such as the composition of the IJN's fleet remained a mystery. For example, as late as May 1944, the OIC was unable to determine whether the battleships *Ise* and *Hyuga* were being converted into carriers.<sup>[55]</sup> Assessments had to be based on a collation of circumstantial evidence in the form of ship movements and the assumption that Japan was unlikely to be constructing carriers due to the defensive nature of its strategy. The dearth of accurate information resulted in correspondingly uncertain estimates. Information regarding Japanese capital ship production was completely lacking, and as late as December 1943, the COIS minuted that the Eastern Fleet's intelligence summary on the construction of Japanese carriers and their defensive capabilities was based on speculation.<sup>[56]</sup> Estimates of the IJN's strengths also had to take into account the fact that nine out of its ten carriers in operation were ones on which little information was available at the outbreak of war.<sup>[57]</sup>

Information regarding more detailed matters such as the equipment onboard Japanese vessels and the IJN's tactics was equally inadequate. Material obtained from POWs was considered valid only when confirmed by more reliable sources. An Australia Station intelligence summary disseminated information obtained from a POW on the measurements and speed of the carrier *Shokaku* with a warning that it had to be treated accordingly.<sup>[58]</sup> Intelligence from captured documents on matters such as radar equipment was treated with an equal level of skepticism.<sup>[59]</sup> Photographic information did not always prove reliable, as was revealed in a report in January 1944, on the new *Agano* class of cruisers.<sup>[60]</sup> The paper stated that the photos did not provide answers as to whether the vessels were heavy or medium cruisers. Signals intelligence provided little apart from information on Japanese naval movements, and sporadic material which pointed to the IJN's efforts to develop radar technology and cryptography. <sup>[61]</sup>

The uncertainty surrounding the question of the IJN's capabilities was compounded by an air of caution. Although the IJN's strategy after 1943 clearly demonstrated hesitancy and an unwillingness to engage the Allied fleets, the Royal Navy's wartime experiences against the *Kriegsmarine* in the Atlantic and Mediterranean had demonstrated how technology and equipment could make a crucial difference. British intelligence staffs and naval commanders therefore adopted an 'equipment first' outlook when assessing the IJN.<sup>[62]</sup> Thus, while the IJN's tactics demonstrated a lack of innovation, the British paid due heed to the fact that its technology often posed a threat which could be guarded against only through the development of adequate counter-measures.

Assessments of Japanese submarines provided a key illustration of this dilemma. The primary reason why the IJN's underwater fleet failed to inflict damage on Allied supply lines was because Japanese admirals did not comprehend the submarine's potential as an offensive weapon.<sup>[63]</sup> The prevailing belief was that submarines operating beyond the cover of protecting aircraft and battleships were more likely to face destruction in detail than inflict significant damage on enemy vessels. In addition, throughout the years leading up to the war, the Japanese high command remained ignorant of the effects which attacks on sea communications and enemy logistics could have on the progress of military operations. Aside from the total neglect of the safety of its own supply lines,<sup>[64]</sup> a major by-product of this unawareness was a failure to inflict damage on Allied logistics in the Pacific and Indian Ocean. The IJN's use of submarines was limited to attacks on enemy warships and sporadic attacks on coastal areas, or in the absence of such opportunities, the ferrying of supplies to beleaguered island garrisons. Observations of enemy submarines in action also revealed weaknesses stemming from the fact that torpedoes were constructed primarily with a view to inflicting high levels of destruction, with little attention being paid to the development of measures to facilitate accurate aiming.<sup>[65]</sup> This weakness disabled submarines from conducting effective long-range attacks. An Eastern Fleet intelligence summary in October revealed that Japanese submarines were not equipped with radar, and that their manoeuvrability was below that of their German counterparts.<sup>[66]</sup>

However, for the Admiralty and the Eastern Fleet alike, the most pertinent fact was that Japanese torpedoes were remarkably effective. In every action where Japanese submarines appeared, such as at Guadalcanal and at Savo island, their destructive capabilities caused concern.<sup>[67]</sup> During spring 1944, when Japanese submarines mounted a brief offensive against Allied shipping routes in the Indian Ocean, Somerville frequently referred to the difficulties faced by British vessels.<sup>[68]</sup> Furthermore, the Eastern Fleet needed to enable its ships to conduct long-range attacks against submarines to alleviate the threat posed by Japanese torpedoes.<sup>[69]</sup> The dearth of encounters in which British anti-submarine measures had proven successful worked to urge due caution in determining the potential dangers and the effort required to neutralize it.

As for the IJN's capital ship and carrier fleet, Japan continued to possess substantial strength in spite of its losses. Combat experience during the opening stages of the conflict had also revealed a high level of tactical skill, and the Royal Navy had yet to prove its capabilities. The situation continued to give rise to warnings not to take the threat lightly. The IJN's reluctance to engage its opponents and its growing numerical inferiority in comparison to the Allied fleets was not a reason to fully discredit its performance. The IJN's inability to match the capabilities of its Allied counterparts, in particular the US navy, in the development of carrier tactics was a primary cause for its demise.<sup>[70]</sup> Following the defeat at Midway, Japan's inability to match the US rate of construction meant that the IJN's defeat was only a matter of time.<sup>[71]</sup> Equally important was that Japan's meager resources for scientific research precluded the development of advanced naval technologies such as radar. Moreover, the naval high command's failure to devise a long-term strategy to see Japan through the period following the consolidation of its conquests, along with their insistence on refraining from action until the fleet could fight a decisive engagement in the Inner Zone, ensured that the IJN's resources did not pose a threat.<sup>[72]</sup> A historical perspective does allow one to conclude that the IJN's numerical and technical inferiority severely limited its ability to forestall the Allied advance.

However, in the absence of concrete indications that the IJN would adhere to its defensive strategy, the possibility of its seeking an engagement with the Eastern Fleet could not be ruled out. Because the IJN's operational codes remained indecipherable for the duration of the conflict, predictions of its future moves remained open to speculation. The only definite conclusion was that the IJN continued to possess an albeit diminished reserve of capital ships and aircraft carriers, and that the Royal Navy remained unable to achieve the numerical superiority necessary to counter the strength which the enemy could muster. Although COS concluded that the move of the IJN's capital ship fleet to Singapore in February 1944, following the US onslaught against the main base at Truk, was as a defensive measure aimed to keep the fleet out of harm's reach, the possibility of raids against Allied shipping targets and ports could not be ruled out.<sup>[73]</sup>

The dearth of encounters between the Eastern Fleet and the IJN precluded any reassessment concerning the relative strengths of the opposing fleets. British appreciations were thus more likely to remain based on evidence from the opening stages of the conflict which revealed that the IJN's ships were capable of outmaneuvering their Western counterparts. The absence of British victories over the IJN also dictated caution. For example, the JIC warned in August 1943 that while construction was low, the quality of Japanese capital ships was high.<sup>[74]</sup> As late as the end of 1944, intelligence summaries warned that the enemy's capital ships and carriers continued to be able to withstand punishment, and that their handling had demonstrated a commendable level of skill.<sup>[75]</sup> In March 1944, a meeting held at the NID concluded that with the exception of radar, the efficiency of the opposing fleets was more or less on par.<sup>[76]</sup> Furthermore, evidence of the IJN's shortcomings had to be viewed alongside the fact that the Eastern Fleet had problems of its own. As late as March 1944, Somerville complained that all British capital ship crews in the Far East lacked proper training.<sup>[77]</sup> In the absence of enemy defeats that could provide concrete evidence that the British fleet had achieved ascendancy over the IJN, indications of the latter's material inferiority were likely to be of secondary importance in assessing the threat that it could pose for the Royal Navy.

As for the IJN's air arm, the formulation of conclusive assessments regarding was somewhat handicapped by the fact that evidence of current enemy capabilities rarely permitted predictions of future improvements. The uncertainty was compounded by apprehensions caused by the enemy's success in remedying the disadvantages that arose from its numerical and technical inferiority through the use of equipment and methods that were capable of inflicting significant levels of damage. Furthermore, British forces suffered shortcomings which were open to exploitation, thus necessitating the development of improved counter-measures.

As was the case with the IJN's submarine and surface fleet, Allied combat experience proved to be the most reliable source of information. As the conflict progressed, intelligence obtained through this source correctly revealed that Japan's air services suffered a number of problems related to its shortage of resources and skilled manpower, all of which prevented it from defeating its Allied counterparts. An important weakness which hindered the IJN's air arm from challenging the Allies after the defeats at Midway and the Solomons, and one that eventually resulted in its downfall, was the loss of skilled pilots and the absence of a training program that could quickly produce replacements.<sup>[78]</sup> Japan's narrow industrial and scientific research base also resulted in a corresponding inability to introduce more advanced aircraft types and to develop modern technologies such as radar. One of the most significant results of this shortcoming was the failure to introduce bombers with enhanced armor and defensive armament, along with the absence of new fighters until the *Raiden* was introduced in 1944.<sup>[79]</sup>

However, evidence of declining efficiency had to be viewed alongside reliable indications that the IJN continued to possess an albeit diminished reserve of skilled pilots, and that its aircraft continued to inflict attrition on Allied warships. Disseminated intelligence thus propagated warnings that the only source of comfort was that high-quality aircrews were likely to appear less frequently.<sup>[80]</sup> The imponderable possibility of future improvements also had to be taken into account. On one hand, the available intelligence following the Japanese reverses in late 1942 and early 1943 provided reliable indications that the initial image of a technologically advanced opponent had been

illusory, and that enemy aircraft in fact suffered from a number of serious deficiencies, the most noteworthy of which was inadequate armament. Tests which revealed that the *Oscar*'s only strength was its maneuverability led to the dissemination of suggestions that enemy aircraft were of inferior quality.<sup>[81]</sup> At the same time, evidence of current deficiency did not provide a concrete indication of future trends. Predictions regarding improvements thus were not possible. By early 1944, the non-appearance of newly introduced types and the fact that enemy aircraft had proved ineffective, led the JIC to speculate that the Japanese command would realize the need for improvements and that a subsequent introduction of improved models could be anticipated.<sup>[82]</sup>

Intelligence on improvements was often sufficient to give rise to uncertainties. Allied encounters towards the end of 1944 revealed that Japanese aircraft were equipped with more powerful engines and increased armament.<sup>[83]</sup> Developments of this nature suggested that the enemy's fighting capabilities were likely to show a corresponding upturn. The only source of comfort was that Japan was unable to match its opponents in aircraft production and technological development. The level of attrition that Allied forces were likely to incur in the meantime remained open to speculation. The extent to which the piloted rocket bomb (*Baka*) provoked fears that the enemy had gained a vast pool of weapons with which to inflict casualties illustrated the extent to which material and technological inferiority could not provide a guarantee against unexpected innovations. The Admiralty's report on the idea of the *Baka* was propagated as a prime example of the enemy's ability to design destructive weapons with its limited resources.<sup>[84]</sup>

The Japanese air services also demonstrated their adeptness at inflicting considerable damage to shipping targets which were not equipped with adequate anti-aircraft defenses, thereby raising further concerns over their ability to delay Allied operations in Southeast Asia and the Pacific. The manner in which the evidence was propagated suggests that apprehensions were widespread. In August 1943, the Admiralty disseminated a US report which praised Japanese level bombing attacks for the persistence and determination with which they were conducted, and the extent to which they were aimed to ensure the

sinking rather than the mere crippling of targets.<sup>[85]</sup> Enemy reconnaissance methods revealed a high level of skill in deceiving Allied crews over the direction of the attack.<sup>[86]</sup>

Despite their awareness of the damage which Japanese aircraft could pose for Allied navies, even at the end of 1944, neither the Admiralty nor the Eastern Fleet were able to devise adequate means to neutralize the threat. Although the efficiency demonstrated by Japanese tactics compelled a continued reassessment of whether British vessels could withstand air attacks, resource shortages hindered the provision of adequate air cover and anti-aircraft defenses for the Royal Navy's surface vessels. Britain's limited industrial base meant that its rate of carrier construction was significantly lower than that achieved by the US. Furthermore, because the Royal Navy's vessels were built for operations in the narrow bodies of water prevalent in Europe where land-based air attack was a constant threat, the installation of heavier armor placed extra delays on completion.<sup>[87]</sup> Consequently, British carrier striking power was limited. After the Eastern Fleet was stripped of its carriers in spring 1943 owing to more pressing commitments in the Mediterranean and Atlantic theaters, no reinforcements were dispatched to the Indian Ocean until early 1944.<sup>[88]</sup> Britain's over-stretched industrial base and financial resources also precluded the development of anti-aircraft defenses that could match their more advanced US and German counterparts, whose accuracy was markedly enhanced by the use of radar to calculate the speed and location of airborne targets.<sup>[89]</sup>

British assessments concerning the possibility of improving the anti-aircraft defenses onboard the Eastern Fleet's vessels revealed a full cognizance of the above-described problem. In a memorandum to the COS in September 1943 regarding the installation of modernized radar and fire control equipment on ships operating in Southeast Asia, Mountbatten warned that delays could only expose the fleet and amphibious forces to unnecessary casualties.<sup>[90]</sup> However, at the same time, he conceded that technical research was unlikely to develop the necessary equipment until 1944, thereby delaying general modernization until the following year. In the meantime, few alternatives existed apart from hoping that Cabinet pressure could accelerate the process.<sup>[91]</sup> Observations of Allied encounters in the Pacific provided further evidence of the necessity for more effective

defenses. The damage inflicted on the US task force by Japanese night torpedo bombers at Tarawa gave rise to warnings that adequate methods of defending landing forces and their supporting vessels had yet to be devised.<sup>[92]</sup> The efficiency demonstrated by Japanese fighters in shadowing the Allied convoy also brought home the extent to which British pilots needed to develop new methods of reconnaissance.<sup>[93]</sup> The enemy's skill at flying below Allied ship-borne radar cover during the battle of Formosa brought home the need to speed up the production of equipment that could provide wider cover and in the meantime to urge crews to place a greater reliance on human observation. <sup>[94]</sup>

The Royal Navy's inability to conduct major offensives against the IJN also prevented it from surmounting the problems arising from its operational ineptitude, which meant that it faced insurmountable difficulties in matching its US counterparts in the tactical use of carrier-based aircraft. Naval battles in the European theaters had been won primarily through the use of battleships, and the role played by carriers was minimal.<sup>[95]</sup> When the carriers HMS *Illustrious* and *Victorious* arrived in the Indian Ocean in 1944, their actions were confined to bombing raids on the East Indian Archipelago. One of the main reasons why Fraser insisted that the British Pacific Fleet participate in the operations against the home islands alongside the US Fleet was the Royal Navy's dire need for first-hand experience in warfare involving the use of carriers.<sup>[96]</sup> At the same time, the under-developed state of British carrier tactics was one of a number of factors that formed the basis of doubts held by US naval staffs over the practicability of allowing the Fleet to participate.<sup>[97]</sup> The British fleet therefore commenced its operations in the Pacific while having to deal with the twin dilemmas of inadequate equipment, combined with the lack of prior experience in carrier operations. The situation required naval crews to undertake an arduous effort to quickly apply the lessons that they learned through experiences at Okinawa, and thereafter improve their defenses with existing resources.

### ***The British Pacific Fleet and the Battle of Okinawa, spring 1945 - operational ineptitude and inadequate equipment***

The British Pacific Fleet's poor level of combat readiness at the commencement of its operations at Okinawa illustrated the consequences of the Admiralty's failure to refit its



vessels with adequate equipment. Aside from the fact that its carriers could only hold less than half of the complement carried onboard their US counterparts, fighters such as the *Seafire*, which composed a fifth of the aircraft strength were mainly designed for land-based operations.<sup>[98]</sup> The performance of anti-aircraft gunnery onboard British vessels was hindered by outdated methods of fire control. The provision of effective counter-measures was also hampered by the inability among British crews to adjust effectively to the challenges posed by the particular characteristics of their enemy in the Pacific. In June 1945, Rawlings, the Vice-Admiral of the British Pacific Fleet complained that carrier crews often tended to forget that methods that aimed to use disable enemy aircraft, which proved effective against German dive bombers, were unlikely to work due to the Japanese pilot's determination to reach his targets.<sup>[99]</sup>

That the Fleet did not suffer greater damage was due to three factors, the first of which was the relatively weak scale of air assault that it faced.<sup>[100]</sup> Second, the armored decks onboard British carriers significantly reduced the damage that could be inflicted on them. Most important, however, were the improvements that were made in the use of the available anti-aircraft guns and carrier-based aircraft.<sup>[101]</sup> Developments of this nature suggest that British naval crews were not ignorant of the need to adopt adequate defenses against the threat posed by Japanese aircraft, and that they made commendable progress in overcoming the problems arising from their lack of combat experience. Furthermore, it demonstrates an awareness of the fact that resources shortages required the provision of improved protection by employing existing equipment in an effective manner. Intelligence therefore provided the British fleet with a valuable instrument with which to optimize its limited resources.

By the end of 1944, Allied naval crews were faced with a new threat, namely the Japanese suicide bomber (*Kamikaze*). British reactions to the appearance of *Kamikaze* attacks provide a key illustration of the extent to which evidence of the enemy's proficiency at exploiting soft spots was sufficient to raise apprehensions about the efficacy of existing anti-aircraft defenses. From the viewpoint of long-term gains, the limited value of suicide tactics in changing the outcome of the conflict provided grounds

for discrediting such moves as an act of desperation.<sup>[102]</sup> Hindsight has also allowed the value of *Kamikaze* tactics to be dismissed on the grounds that they entailed a waste of scarce resources at a stage when Japan's defeat was inevitable and provided nothing more than a futile last-ditch opportunity to alter the course of the conflict.<sup>[103]</sup> However, when judged according to their ability to inflict damage on Allied targets lacking adequate protection, *Kamikaze* tactics posed a menace that could not be ignored. Events at Okinawa compelled Fraser to conclude that the primary threat posed by suicide bombers was their ability to provide the enemy with a weapon that inflicted greater damage in proportion to the number of aircraft employed and the level of training among their crews.<sup>[104]</sup>

The situation was complicated by the fact that Allied counter-measures did not provide full protection. In December 1944, Somerville forwarded to Cunningham, who had replaced the deceased Pound as the First Sea Lord, a warning by Hopkins, a Royal Navy observer who had been attached to the US Pacific Fleet, which stated that, while the armored decks onboard British vessels afforded a large degree of protection, the situation was bound to change if the enemy started using heavier bombs and aircraft.<sup>[105]</sup> Nor did the available resources permit drastic improvements, thereby necessitating measures to improvise the use of existing defenses. In response to an enquiry by Churchill on the most effective defensive methods, Cunningham replied that the technology needed to effect an improvement in radar cover and fire control had yet to be devised and implemented on a large scale.<sup>[106]</sup> Encounters at Iwojima and Okinawa which revealed the enemy's skill at dispersing its aircraft among Allied formations provided grounds for warnings that British vessels needed to be equipped with more accurate methods of fire direction, the development of which was fraught with difficulties.<sup>[107]</sup> While the adeptness of Japanese pilots at exploiting blind spots in Allied radar at Okinawa revealed the necessity for all ships to be provided with full cover, few alternatives existed apart from coping with the available gear.<sup>[108]</sup> The damage inflicted on the carrier *Formidable* during the second half of the Okinawa operations brought home the need to replace the existing 20mm anti-aircraft guns onboard carriers with heavier 40mm devices.<sup>[109]</sup> However, because an immediate refitting was not practicable,

increased protection had to be provided through the employment of destroyer pickets operating at greater ranges. Of equal importance was to conduct frequent fighter patrols at extended ranges in order to ensure the timely interception of enemy aircraft.<sup>[110]</sup> A minute by the Director of the Tactical, Torpedo and Staff Duties Division, to Vice Admiral Rawlings' report on the second phase of the Okinawa operations, clearly illustrated the extent to which British naval staffs had properly taken in the lessons obtained through combat experience. Aside from improved anti-aircraft equipment, a key necessity was to ensure close mutual support between ships, as well as to maneuver vessels out of the enemy's range in a timely manner.<sup>[111]</sup>

The magnitude of the damage that could be inflicted by *Kamikaze* tactics and the inadequacy of the defenses employed by British naval forces had brought home the limited comfort that could be drawn from the fact that that the resources of Japan's air services were unable to alter the outcome of the war. Furthermore, combat experiences which highlighted the Royal Navy's inadequacies compelled naval staffs to pay due attention to the need for improvements. Indeed, the Pacific War ended before any of the lessons obtained through the British Pacific Fleet's operations at Okinawa could be applied against the Japanese; thus the extent to which improvements could have enhanced British capabilities remains open to speculation. Nevertheless, the encounter played a crucial role in enabling the Royal Navy surmount the triple problems that arose from its lack of intelligence on the IJN, inadequate operational doctrine, and equipment shortages, all of which had hindered the development of an effective strategy. In the end, the British Pacific Fleet did make good use of their limited resources to devise countermeasures against the IJN which were within its own capacity to implement.

## *Conclusion*

Inadequate intelligence was not the sole cause for Britain's failure to develop a naval policy that was adequate for neutralizing the IJN and its air arm. Throughout the course of the conflict, Britain's meager financial and industrial resources prevented it from building a fleet that was capable of simultaneously engaging the German, Italian and Japanese fleets. Because operations in the Home Waters, Atlantic and Mediterranean theaters remained the Royal Navy's top priority, Britain could not commit large forces for the Far East until the closing stages of the conflict. Resource shortages also prevented Britain from developing its carrier striking power and anti-aircraft capabilities to a level that was sufficient for coping with the IJN. Furthermore, Britain's inability to operate a large fleet of aircraft carriers precluded Royal Navy from acquiring the level of experience that was needed to efficiently engage in this type warfare was consistently. The situation was not helped by the fact that Britain's naval victories in the European and Atlantic theaters had been primarily achieved through the use of battleships, thereby disabling naval staffs from grasping the decisive role which aircraft carriers could play.

A more accurate argument is that prior to the outbreak of the Pacific War, poor intelligence exacerbated the problems arising from Britain's resource shortages and inadequate naval doctrine. Although the experiences of defeat during the opening stages of the conflict highlighted the IJN's ability to challenge its Allied rivals, intelligence on the relative strengths of the Japanese and British fleets invariably highlighted the latter's inability to engage its enemy effectively. The intelligence pointing to the Royal Navy's weaknesses, in turn, led Britain's naval establishment to adhere to a strictly defensive strategy for the larger part of the war. At the same time however, the absence of British victories against the IJN meant that even towards the closing stages of the conflict, the naval establishment was unable to fully grasp the appropriate methods for defeating the Japanese. Prior to December 1941, the lack of accurate information on the IJN prevented Britain's naval establishment from gaining an accurate picture of the Royal Navy's capacity to challenge its adversary. The secretive nature of Japan's naval construction

program combined with the absence of prior encounters between the Royal Navy and IJN hampered Britain's ability to formulate a realistic assessments of its adversary. Under the circumstances, intelligence staffs and naval commanders alike had few alternatives from adhering to their preconception that the Japanese could not build a fleet that could match their Western rivals. Consequently, the Royal Navy entered the Pacific War with the flawed notion that its strengths and capabilities were sufficient to curb a Japanese onslaught against Southeast Asia.

Although the sinking of the *Prince of Wales* and *Repulse* in December 1941 undeniably highlighted the Royal Navy's weaknesses, Britain remained unable to increase its naval commitments in the Far East to a level that was sufficient for countering the IJN. Thus for the larger part of 1942-44, British naval strategy in the Far East was strictly defensive. The absence of major naval encounters following the April 1942 raids on Ceylon disabled the Admiralty from formulating conclusions as to whether the Royal Navy's was able to confront the IJN. In the absence of successes that could prove the extent to which the IJN's numerical and technical inferiority rendered its fleet open to exploitation, assessments were likely to urge due caution on the grounds that experiences to date had revealed a high level of proficiency. Most importantly, the IJN proved adept at remedying its material and technological shortcomings by developing methods of inflicting attrition. Although Japan's capital ship and carrier fleet remained idle between the battle of Guadalcanal in January 1943 and the battle of Leyte in November 1944, its naval air services demonstrated their skill at causing significant damage on inadequately defended warships. While British naval staffs were aware that the IJN's capabilities required the Eastern Fleet to be refitted with modernized radar and anti-aircraft defenses, they were equally cognizant that their resources did not permit improvements to be implemented on a large scale. The situation was further complicated by the fact that Britain's inability to conduct large-scale operations against the IJN prevented the Royal Navy from gaining the experience that was necessary for devising adequate countermeasures against its enemy.

In the final analysis, British naval policy for the war against Japan was logical in light of the intelligence on which it was based. The Royal Navy's unreadiness to confront the IJN prior to December 1941 was understandable not only due to its shortage of resources, but also due to the fact that the available intelligence failed to show credible indications that the IJN could pose a serious threat. Following the outbreak of the conflict, intelligence which revealed the Royal Navy's inability to neutralize the IJN led Britain to adhere to a strategy of avoiding further losses. The British Pacific Fleet's poor state of preparedness at the commencement of its operations in Okinawa in spring 1945 must be attributed to an inability to undertake the measures necessary to improve British naval capabilities vis-à-vis the IJN, rather than a failure to acknowledge the need for improvisations. The Fleet's ineptitude in the employment of carrier tactics must also be chalked up to the absence of previous opportunities to engage in this new type of naval warfare. The situation required naval crews to quickly learn the nature of naval air combat against the IJN, and to develop countermeasures by making effective use of their existing equipment. In the end, combat experience was what enabled the Royal Navy formulate a strategy whereby it could avoid defeats which it was neither willing nor prepared to incur.

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