

Daniel Knowles. *Yamato: Flagship of the Japanese Imperial Navy*. Stroud, UK: Fonthill Media, www.fonthill.media, 2021. 192 pp., illustrations, notes, appendices, bibliography, index. UK £35.00, US \$49.00, cloth; ISBN 978-1-78155-814-0. (E-book available.)

The *Yamato* and its sister ship, *Musashi*, were the largest battleships ever created and put to sea during wartime. Neither vessel, however, was employed for the purpose for which it had been designed: to engage and destroy the principally intended targets – American battleships. The two were built in secrecy by the Japanese in late 1937 and 1938 respectively, using sophisticated domestic naval construction. American naval experts repeatedly dismissed accurate information about the two ships that proved the Japanese had mastered innovative technologies. There was widespread assumption in the US Navy that Japanese workmanship was inferior to that of the United States. This was the result of racial and cultural prejudice combined with strict Japanese concealment that thwarted American naval intelligence leading up to the Second World War. In many ways, this makes Knowles's book an international, maritime ghost story. The plans for *Yamato* were drafted in strictest secrecy and few photographs were taken of the completed vessel, either at anchor or underway. Upon sinking, *Yamato's* remains lay hidden under 1,120 feet (340 metres) of water until 1985, when her broken hull with its Imperial chrysanthemum bow ornament was discovered. After the war, her blueprints and pictorial documents were destroyed by the defeated Japanese government.

Yamato was known as battleship number one and the model of the Yamato-class. Its keel was laid at the Kure Naval Arsenal on 4 November 1937, and her commissioning occurred on 16 December 1941, just after the Japanese attack on Pearl Harbor. The Asian empire had won a decisive naval victory in the Russo-Japanese war in 1904-1905 by applying the tenets put forth in Captain Alfred Thayer Mahan's *The Influence of Sea Power upon History, 1660–1783*. Thayer argued that naval dominance was achieved through the employment of a fleet of powerful battleships. The last great battleship clash among these powerful vessels was the 1916 Battle of Jutland near the end of the First World War. The Japanese hierarchy was content to use the old but successful naval engagement playbook.

The rise of airpower over heavily armoured battleships was in the development stage shortly after that conflict. United States Senator William Borah proposed an international conference at which major naval powers might agree to cut their fleets and save much of their national treasures. Delegations from Japan, Great Britain, British commonwealth nations, Italy, Germany, and France assembled in Washington, D.C., to discuss a possible reduction of

a naval arms race, the first such disarmament conference in history. Various formulas were debated, and, in time, one was agreed to. This lasted for more than a decade before reinterpretation of the treaty's rules was overtaken by perceived political needs, gaining military advantage if another war ensued.

Japan saw the United States as an imminent threat in the Pacific that sought to dominate the region and control its natural resources. The Japanese reasoned that if they built huge battleships, too large to fit through the Panama Canal, the Americans were unlikely to match them in size because their east coast shipyards were the main battle-shipwrights. Deploying them it would necessitate sailing around Cape Horn or the Cape of Good Hope, plus creating a resupply logistical nightmare. Also, the *Yamato* class vessels were to be equipped with superior armour and possess greater fire power than the United States could reasonably muster. It was believed that this would enable the Imperial Japanese government to dominate the western Pacific. They gambled that, although the United States was far more industrialized and had greater access to more natural resources, they were strategically vulnerable because they were heavily engaged in an Atlantic War front.

The 71,659-ton *Yamato* and *Musashi* were 862 feet 10 inches in length overall with "pagoda" masted towers. Their beams were 127 feet, 7 inches and each drew about 36 feet when loaded. Their range was 8,300 miles cruising at 26 knots, but with a top speed of 27 knots. *Yamato* was manned by 2,767 officers and men. Both battleships were fitted with two catapults located on the stern and could accommodate up to seven aircraft. Their most formidable arms were nine 18.1-inch guns covered with 26-inch armour casement that fired 3,200lb (1452kg) 6-foot-long, armour-piercing shells with a range of up to 27 miles. They also used Sanshikidan shells that, when detonated, release an incendiary 20-degree cone designed to thwart incoming aircraft. Each firing required spotter seaplanes down range to report back to the fire direction centre to adjust their elevation and aim-bearing. The flight time to impact a target fired at 45° took just under 100 seconds. Each was also equipped with 6.1-inch guns, 5-inch guns and 40 mm Vickers "pom" anti-aircraft weapons. For comparison American battleships fired 16-inch guns that weighed between 1,100 to 2,700-lbs with a maximum range of approximately 22 miles. Therefore, there was a five-mile range difference, but speed of aim adjustment, accuracy and rate of salvo delivery were arguably the most important factors in a sea battle.

Each battleship met its end about six months apart. *Musashi* was sunk on 24 October 1944 in the battle of Leyte Gulf. *Yamato* met her demise during Operation Ten-Go after being struck by two torpedo hits and many aircraft bombs on 7 April 1945. Both vessels were destroyed valiantly in battle, but not due to a slug fest of big guns fired from huge ships. Their demise was a quasi-metaphor for the emergence of the new age of naval warfare. "The imperatives

of the war brought a technical efficiency and capability to naval air power that rapidly eclipsed the awesome, traditional power of the battleship. The aircraft carrier had emerged as the new capital ship. Nevertheless, as a visual manifestation of sheer power, the battleship had an aura of omnipotence which the carrier could never quite match” (136).

Yamato is a slim book with an abundance of excellent illustrations. Knowles provides an assortment of technical information about the ship assembled in a coherent way and background data to place the Pacific conflict in its historical perspective. The author vividly narrates the battles of Leyte Gulf and Ten-Go mostly from the Japanese standpoint, but also integrating it with the American counter-narrative or viewpoint. This is different from the classic Samuel Eliot Morrison Pacific Theatre Second World War book and the more recent and similarly compelling trilogy by Ian Toll. A major problem is the use of only one confusing map to illustrate the locations of the warship manoeuvres and counter-manoevres in the naval battles among the participants. Still, Daniel Knowles’s book is a valuable addition to the library of maritime historians, especially those interested in the design, building, and demise of the largest and most powerful battleship(s) to ever put to sea.

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Mark Lardas. *B-25 Mitchell vs. Japanese Destroyer. Battle of the Bismarck Sea 1943.* Oxford, UK; Osprey Publishing, www.bloomsbury.com, 2021. 80 pp., illustrations, bibliography, index. US \$22.00, CDN \$30.00, paper, ISBN 978-1-47284-517-7.

Air warfare in the Pacific in the Second World War is often thought of as US Navy (USN) aircraft taking off from aircraft carriers to do battle with Japanese aircraft, both land- and carrier- based. Less well-known are the accomplishments of the US Army Air Force (USAAF) in the Pacific—particularly in New Guinea and the Solomon Islands. In *B-25 Mitchell vs. Japanese Destroyer. Battle of the Bismarck Sea*, Mark Lardas relates one critical engagement between the USAAF (and aircraft of the Royal Australian Air Force) and destroyers of the Imperial Japanese Navy (IJN).

The battle of the Bismarck Sea was a series of encounters between Allied aircraft and Japanese destroyers and convoy ships. In a three-day battle, USAAF B-25 Mitchell medium bombers, RAAF Beaufort torpedo bombers, and RAAF Beaufighter fighter bombers engaged and sank 75 percent of the destroyers and transports. The key to the successful outcome of the battle was the USAAF’s adoption of skip bombing and mast-top bombing. Early in