

= Japanese battleship Hiei =

Hiei ( ?? ) was a warship of the Imperial Japanese Navy during World War I and World War II . Designed by British naval architect George Thurston , she was the second launched of four Kongō class battlecruisers , among the most heavily armed ships in any navy when built . Laid down in 1911 at the Yokosuka Naval Arsenal , Hiei was formally commissioned in 1914 . She patrolled off the Chinese coast on several occasions during World War I , and helped with rescue efforts following the 1923 Great Kantō earthquake .

Starting in 1929 , Hiei was converted to a gunnery training ship to avoid being scrapped under the terms of the Washington Naval Treaty . She served as Emperor Hirohito 's transport in the mid 1930s . Starting in 1937 , she underwent a full scale reconstruction that completely rebuilt her superstructure , upgraded her powerplant , and equipped her with launch catapults for floatplanes . Now fast enough to accompany Japan 's growing fleet of aircraft carriers , she was reclassified as a fast battleship . On the eve of the US entry into World War II , she sailed as part of Vice Admiral Chuichi Nagumo 's Combined Fleet , escorting the six carriers that attacked Pearl Harbor on 7 December 1941 .

As part of the Third Battleship Division , Hiei participated in many of the Imperial Japanese Navy 's early actions in 1942 , providing support for the invasion of the Dutch East Indies ( now Indonesia ) as well as the Indian Ocean raid of April 1942 . During the Battle of Midway , she sailed in the Invasion Force under Admiral Nobutake Kondō , before being redeployed to the Solomon Islands during the Battle of Guadalcanal . She escorted Japanese carrier forces during the battles of the Eastern Solomons and Santa Cruz Islands , before sailing as part of a bombardment force under Admiral Kondō during the Naval Battle of Guadalcanal . On the evening of 13 November 1942 , Hiei engaged American cruisers and destroyers alongside her sister ship Kirishima . After inflicting heavy damage on American cruisers and destroyers , Hiei was crippled by enemy vessels . Subjected to continuous air attack , she sank on the evening of 14 November 1942 .

= = Design and construction = =

Hiei was the second of the Imperial Japanese Navy 's Kongō class battlecruisers , a line of capital ships designed by the British naval architect George Thurston . The class was ordered in 1910 in the Japanese Emergency Naval Expansion Bill after the commissioning of HMS Invincible in 1908 . The four battlecruisers of the Kongō class were designed to match the naval capabilities of the other major powers at the time ; they have been called the battlecruiser versions of the British ( formerly Turkish ) battleship HMS Erin . With their heavy armament and armor protection ( the latter of which made up 23 % of their approximately 30,000 ton displacement ) , Hiei and her sister ships were vastly superior to any other Japanese capital ship afloat at the time .

The keel of Hiei was laid down at Yokosuka Naval Arsenal on 4 November 1911 , with most of the parts used in her construction manufactured in Britain . She was launched on 21 November 1912 , and fitting out began in December 1913 . On 15 December 1913 , Captain Takagi Shichitaro was assigned as her chief equipping officer . She was completed on 4 August 1914 .

= = Armament = =

Hiei 's main battery consisted of eight 14 inch ( 36 cm ) heavy caliber main guns in four twin turrets , two forward and two aft . The turrets were noted by the US Office of Naval Intelligence to be " similar to the British 15 inch turrets " , with improvements made in flash tightness in the gun chambers . Each of her main guns could fire high explosive or armor piercing shells 38,770 yards ( 19.14 nmi ; 35.45 km ) at a rate of two shells per minute . In keeping with the Japanese doctrine of deploying more powerful vessels than their opponents , Hiei and her sister ships were the first vessels in the world equipped with 14 inch ( 36 cm ) guns . The main guns carried ammunition for ninety shots and had an approximate gun life of 250 ? 280 shots . In 1941 , dyes were introduced for the armor piercing shells of the four Kongo

@-@ class battleships to assist their gunners in distinguishing the hits from a distance , with Hiei 's armor @-@ piercing shells using black dye .

Her secondary battery was originally sixteen 6 @-@ inch ( 15 cm ) 50 @-@ caliber medium guns in single casemates ( all located amidships ) , eight 3 @-@ inch ( 7 @. @ 6 cm ) guns and eight submerged 21 @-@ inch ( 53 cm ) torpedo tubes . The sixteen 6 @-@ inch / 50 caliber guns were capable of firing between 5 and 6 rounds per minute , with a barrel life of 500 rounds . The 6 @-@ inch / 50 caliber gun was capable of firing both antiaircraft and antiship shells , though the positioning of the guns on Hiei made antiaircraft firing impractical . The eight 5 @-@ inch / 40 caliber guns added later could fire between 8 and 14 rounds per minute , with a barrel life of 800 ? 1500 rounds . These guns had the widest variety of shot type of Hiei 's guns , being designed to fire antiaircraft , antiship , and illumination shells . Hiei was also armed with a large number of 1 @-@ inch ( 2 @. @ 5 cm ) Type 96 antiaircraft autocannons .

= = Service = =

= = = 1914 ? 1929 : Battlecruiser = = =

On 4 August 1914 , Hiei was formally commissioned and assigned to the Sasebo Naval District , before being attached to the Third Battleship Division of the First Fleet two weeks later . On 23 August 1914 , Japan declared war on the German Empire , occupying the former German colonies in Palau and in the Caroline , Marshall and Mariana Islands . In October 1914 , Hiei departed Sasebo alongside Kong? to support Imperial Japanese Army units in the Siege of Tsingtao , but she was recalled on 17 October . On 3 October 1915 , Hiei and Kong? participated in the sinking of Imperator Nikolai I , a Russian pre @-@ dreadnought captured in 1905 during the Russo @-@ Japanese War that had subsequently served in the Japanese Navy under the name Iki as a coastal defense ship . In April 1916 , she patrolled the Chinese coast with her newly launched sisters Kirishima and Haruna . From 1917 to the end of World War I , Hiei remained primarily at Sasebo , patrolling the Chinese and Korean coasts with her sister ships on several occasions .

Following the end of World War I , the Japanese Empire gained control of former German possessions in the central Pacific per the terms of the Treaty of Versailles . Due to Japan 's warm relations with the British Empire and the United States at the time , Hiei and other Japanese warships became significantly less active after the war . Other than a patrol alongside Haruna and Kirishima off the Chinese coast in March 1919 , Hiei remained in the Japanese home ports . On 13 October 1920 , she was placed in reserve . Following the Great Kant? earthquake of September 1923 , the capital ships of the Japanese Navy assisted in rescue work until the end of the month . Hiei arrived at Kure Naval Base on 1 December 1923 for a refit which increased the elevation of her main guns from 20 to 33 degrees and rebuilt her foremast .

With the conclusion of World War I , the world powers attempted to stem any militarization that might re @-@ escalate into war . Under the terms of Washington Naval Treaty of 1922 , the Imperial Japanese Navy was significantly reduced , with a ratio of 5 : 5 : 3 required between the capital ships of the United Kingdom , the United States , and Japan . The treaty also banned Japan from building any new capital ships until 1931 , with no capital ship permitted to exceed 35 @, @ 000 tons . Provided that further additions did not exceed 3 @, @ 000 tons , existing capital ships were allowed to be upgraded with improved torpedo bulges and deck armor . By the time the Washington Treaty had been fully implemented in Japan , only three classes of World War I @-@ era capital ships ? the Fus? class ( e.g. Yamashiro ) and Ise @-@ class battleships , and the Kong? @-@ class battlecruisers ? remained active .

In July 1927 , Crown Prince Takamatsu ? Emperor Hirohito 's younger brother ? was assigned to Hiei . From October to November 1927 , the ship underwent a minor refit at Sasebo to accommodate two Yokosuka E1Y floatplanes , though no launch catapults were added . On 29 March 1928 , Hiei departed Sasebo alongside Kong? and the battleships Nagato and Fus? to patrol off the Chusan Archipelago , before arriving in the company of Kong? in Port Arthur in April 1928 . In

October 1929 , she returned to Kure in preparation for her demilitarization and reconstruction .

== 1929 ? 1937 : Demilitarization and training ship ==

To avoid having to scrap Hiei under the terms of the Washington Treaty , the Imperial Japanese Navy decided to convert her into a demilitarized training ship . On 15 October 1929 , she went into drydock at Kure Naval Arsenal . Her aft 14 @-@ inch gun turrets were removed , and she was stripped of all eight of her submerged torpedo tubes , as well as her 6 @-@ inch guns and armor belt . All but nine of her boilers were taken out , reducing her speed to 18 knots ( 33 km / h ) , and one of her three funnels was removed . She was reclassified as a reserve ship at the end of November 1929 . On 24 April 1930 , reconstruction was halted due to the signing of the London Naval Treaty , which further restricted battleship construction and possession amongst the great naval powers , and preservation work was begun at Sasebo . Reconstruction would not resume until July 1931 .

In September 1931 , Japanese army units invaded the Chinese province of Manchuria , transforming it into the puppet state of Manchukuo . In December 1932 , Hiei was reassigned to the Imperial Japanese Navy 's training squadron . On 25 February , the League of Nations ruled that Japan had violated Chinese sovereignty and international law in her invasion of Manchuria . Refusing to accept the League 's judgment , the Empire of Japan withdrew from the League the same day . This also signaled its exit from the Washington and London Naval Treaties , which removed all restrictions on the Imperial Japanese Navy 's construction of capital ships . From the end of May 1933 to 13 August , Hiei received upgrades that allowed her to perform regular duties for the Emperor , and she served as the Emperor 's observation ship for the Imperial Naval Review three days later . From January to March 1934 , her No. 4 turret and ammunition magazine were refitted . In November 1935 , Hiei served as the Emperor 's ship for his official visit to the Kagoshima and Miyazaki Prefectures .

== 1937 ? 1941 : Reconstruction and fast battleship ==

No longer bound by the restrictions of the Washington and London Treaties , the Imperial Japanese Navy proceeded to reconstruct Hiei along the same lines as her sisters . She received eight new oil @-@ fired Kampon boilers and geared turbines , while her stern was lengthened by 26 feet ( 7 @-@ 9 m ) to increase speed . Her aft 14 @-@ inch turret was refitted and fire control systems installed for all four main turrets . The elevation of her main and secondary guns was increased , and she was equipped with two Nakajima E8N " Dave " and Kawanishi E7K " Alf " reconnaissance floatplanes . To this end , catapults and launch @-@ rails were also fitted aft of turret # 3 . Fourteen of her 6 @-@ inch guns were refitted , and an antiaircraft suite of eight 5 @-@ inch dual @-@ purpose guns and ten twin mounts of Type 96 25 mm autocannons were mounted . Her superstructure was rebuilt as a prototype of the tower @-@ mast that would eventually be used on the Yamato class , then still in the design phase .

Hiei 's armor was also extensively upgraded . Her main belt was reapplied and strengthened to a uniform thickness of 8 inches ( as opposed to varying thicknesses of 6 ? 8 inches before the upgrades ) , while diagonal bulkheads of a depth ranging from 5 to 8 inches ( 127 to 203 mm ) reinforced the main armored belt . The turret armor was strengthened to 10 inches ( 254 mm ) , while 4 inches ( 102 mm ) were added to portions of the deck armor . The armor around her ammunition magazines was also strengthened over the course of the refit . Though still less heavily armored than other Japanese battleships , Hiei was significantly faster . The reconstruction was declared complete on 31 January 1940 . Capable of speeds of up to 30 @-@ 5 knots ( 56 @-@ 5 km / h ; 35 @-@ 1 mph ) , Hiei was reclassified as a fast battleship . She participated in the Imperial Fleet Review in October 1940 , where she was inspected by Emperor Hirohito , members of the royal family , Navy Minister Koshir? Oikawa , and Admiral Isoroku Yamamoto . In November , she was assigned to the Third Battleship Division of the First Fleet .

On 26 November 1941 , Hiei departed Hitokappu Bay , Kurile Islands , in the company of Kirishima

and six Japanese fast carriers of the First Air Fleet Striking Force ( Akagi , Kaga , Soryu , Hiryu , Shokaku , and Zuikaku ) under the command of Vice Admiral Chuichi Nagumo . On 7 December 1941 , aircraft from these six carriers attacked the United States Pacific Fleet at their home base of Pearl Harbor , sinking four US Navy battleships and numerous other vessels . Following the attack and the declaration of war by the United States , Hiei returned to Japan .

== 1942 : Combat and loss ==

On 17 January 1942 , Hiei departed Truk Lagoon Naval Base with the Third Battleship Division to support carrier operations against Rabaul and Kavieng . In February , she deployed alongside a force of carriers and destroyers in response to American raids on Japanese bases in the Gilbert and Marshall Islands . On 1 March , following carrier operations against Darwin and Java ( in the Dutch East Indies ) , Hiei , Kirishima and Chikuma which were acting as escorts for the carrier task force engaged the destroyer USS Edsall , with Hiei firing 210 mm and seventy 6 inch shells . When the ships failed to score any hits , dive bombers from three of Admiral Nagumo 's carriers immobilized the destroyer , which was then sunk by gunfire from the three ships .

In April 1942 , Hiei and the Third Battleship Division joined five fleet carriers and two cruisers in a massive raid against British naval forces in the Indian Ocean . On 5 April ? Easter Sunday ? the Japanese fleet attacked the harbor at Colombo , Ceylon while seaplanes from the cruiser Tone spotted two fleeing British cruisers , both of which were later sunk by aerial attack . On 8 April , Japanese carrier aircraft attacked the Royal Navy base at Trincomalee , only to find that all of Admiral James Somerville 's remaining warships in the British Eastern Fleet had withdrawn the previous night . Returning from the attack , a floatplane from Hiei 's sister ship Haruna spotted the aircraft carrier HMS Hermes , which was quickly sunk by massive aerial attack . The fleet then returned to Japan , arriving at the home bases on 23 April .

On 27 May 1942 , Hiei sortied with Kong and the heavy cruisers Atago , Chikao , Myoko , and Haguro as part of Admiral Nobutake Kond's Invasion Force during the Battle of Midway . Following the disastrous loss of four of the Combined Fleet 's fast carriers on 4 June , Kond's force withdrew to Japan . In July , Hiei was drydocked for refits to her aircraft complement and the addition of single and twin 25 mm gun mounts . In August , she escorted the Japanese carrier Shokaku during the Battle of the Eastern Solomons . In October , Hiei sortied as part of Rear Admiral Abe 's Vanguard Force , and maintained distant cover as Kong and Haruna nearly destroyed Henderson Field on Guadalcanal on the night of 13 October . From 26 ? 30 October , Hiei and her sisters participated in the Battle of the Santa Cruz Islands .

On 10 November 1942 , Hiei departed Truk alongside Kirishima and eleven destroyers in preparation to shell American positions near Henderson Field in advance of a major convoy of Japanese troops . Under the command of Rear Admiral Hiroaki Abe , the force was spotted by US Navy reconnaissance aircraft several days in advance . A force of two heavy cruisers , three light cruisers and eight destroyers was deployed under the command of Rear Admiral Daniel J. Callaghan in Ironbottom Sound to meet them . At 01 : 24 on 13 November , the Japanese force was detected 28 ,000 yards ( 26 km ) out by the light cruiser USS Helena . Because Abe had not anticipated resistance , his battleships ' main guns were loaded with high explosive shells for bombarding Henderson Field , and thus they were unable to open fire immediately while the switch was made to armor piercing shells . At 01 : 50 , Hiei activated her searchlights and opened fire on the light cruiser USS Atlanta , commencing the First Naval Battle of Guadalcanal . Though Atlanta 's guns succeeded in disabling the searchlight , Hiei was able to concentrate her main batteries on the bridge , crippling the light cruiser and killing Rear Admiral Norman Scott . Hiei and Kirishima then disabled two American destroyers ( one of which later sank ) . In turn , Hiei became the target of the majority of the American firepower , with the American 5 inch guns inflicting severe damage on Hiei 's superstructure at close range ; Admiral Abe himself was later injured after USS Laffey shelled the bridge with her own guns , killing his chief of staff , Captain Suzuki Masakane . This concentration enabled Kirishima to evade the American barrage and cripple USS San Francisco , killing Admiral Callaghan . However , shells from San Francisco disabled Hiei 's

steering machinery .

With one of his battleships crippled , Abe ordered the remainder of the Japanese fleet to withdraw at 02 : 00 . Kirishima attempted to tow Hiei to safety , but water flooded her steering compartments , jamming her rudder to starboard . Throughout the morning of 14 November , Hiei was subjected to attack from American Army B @-@ 17 Flying Fortress bombers . She continued circling starboard at 5 knots ( 5 @.@ 8 mph ) . At 11 : 30 , two torpedoes launched from Grumman TBF Avenger torpedo @-@ bombers struck Hiei . After suffering several more torpedo and dive @-@ bomber attacks throughout the day , the order was given for her crew to abandon ship before her escorting destroyers scuttled her . Hiei sank sometime in the evening on 14 November with the loss of 188 of her crew , the first battleship ever lost in action by Japan . She was removed from the Navy List on 20 December 1942 .