

= USS Hawaii (CB @-@ 3) =

Hawaii (CB @-@ 3) was originally intended to be the third member of the Alaska class of large cruisers . She was the first United States Navy ship to be named after the Territory of Hawaii . Because her construction was delayed by higher @-@ priority ships such as aircraft carriers , her keel was not laid until December 1943 , about two years after her sister ship Guam .

After her launch on 3 November 1945 , Hawaii began fitting out , but post @-@ war budget cutbacks necessitated the cancellation of the ship on 17 February 1947 . For a time it was planned that she would be converted to be the U.S. ' first guided missile cruiser , but this did not come to fruition . A conversion to a large command ship was later contemplated ; planning went far enough that money was allocated in the 1952 budget for this purpose , but with one (Northampton) complete and a second (Wright) already chosen , no work was started upon Hawaii . Having been laid up for twelve years , the ship was towed to breakers to be scrapped on 20 June 1959 .

= = Design and description = =

The initial impetus for the design of the Alaska class came from the commerce @-@ raiding abilities of German and Japanese ships ; the three Deutschland @-@ class cruisers , also known as " pocket battleships " , the two Scharnhorst @-@ class battleships , and Japan 's large force of both heavy and light cruisers . By the time that they were built , their role had expanded to protect carrier groups . It was thought that the class 's bigger guns , greater size and higher speed would give them a marked advantage in this role over heavy cruisers , and they would also provide insurance against reports that Japan was building " super cruisers " more powerful than American cruisers limited by the London Naval Treaty .

Hawaii was 808 feet 6 inches (246 @.@ 43 m) long overall and had a beam of 91 feet 1 inch (27 @.@ 8 m) and a draft of 31 feet 10 inches (9 @.@ 7 m) . She displaced 29 @,@ 779 long tons (30 @,@ 257 t) as designed and up to 34 @,@ 253 long tons (34 @,@ 803 t) at full combat load . The ship was powered by four General Electric geared steam turbine sets , each driving one propeller , and eight oil @-@ fired Babcock & Wilcox boilers rated at 150 @,@ 000 shaft horsepower (110 @,@ 000 kW) and a top speed of 33 knots (61 km / h ; 38 mph) . The ship had a cruising range of 12 @,@ 000 nautical miles (22 @,@ 000 km ; 14 @,@ 000 mi) at a speed of 15 kn (28 km / h ; 17 mph) . She carried four floatplanes , housed in two hangars , with a pair of aircraft catapults mounted amidships .

The ship was armed with a main battery of nine 12 inch L / 50 Mark 8 guns in three triple gun turrets , two in a superfiring pair forward and one aft of the superstructure . The secondary battery consisted of twelve 5 @-@ inch L / 38 dual @-@ purpose guns in six twin turrets . Two were placed on the centerline superfiring over the main battery turrets , fore and aft , and the remaining four turrets were placed on the corners of the superstructure . The light anti @-@ aircraft battery consisted of 56 quad @-@ mounted 40 mm (1 @.@ 6 in) Bofors guns and 34 single @-@ mounted 20 mm (0 @.@ 79 in) Oerlikon guns . A pair of Mk 34 gun directors aided gunlaying for the main battery , while two Mk 37 directors controlled the 5 @-@ inch guns and a Mk 57 director aided the 40 mm guns . The main armored belt was 9 in (229 mm) thick , while the gun turrets had 12 @.@ 8 in (325 mm) thick faces . The main armored deck was 4 in (102 mm) thick .

= = Construction , conversion proposals and eventual fate = =

Along with the five Montana @-@ class battleships and the final three Alaska @-@ class cruisers , the construction of Hawaii was suspended in May 1942 before work began . This freed materials and facilities so that they could be used to build additional ships which could be completed faster and were needed in the war zones , like anti @-@ submarine escorts . Over 4 @,@ 000 long tons (4 @,@ 100 t) of steel plates and shapes which had been destined for Hawaii was redirected to other ships in July 1942 . However , Hawaii was added back onto the construction queue on 25 May 1943 , unlike CB @-@ 4 through CB @-@ 6 , which were canceled on 24 June 1943 . Her keel was

laid on 20 December 1943 , and she was finally launched on 3 November 1945 , about two years after Guam . The ship was sponsored by Mary P. Farrington , the wife of the delegate from the Territory of Hawaii to the United States House of Representatives , Joseph Farrington . After her launch , little , if any , work was done before construction was halted in either February or April 1947 due to the reduction in defense expenditures after World War II ; the ship was 82 % complete when work was halted . The turrets for the main battery had been fitted and the superstructure was mostly finished , although the former were removed when the ship was moved into the reserve fleet at the Philadelphia Naval Shipyard .

== Guided missile cruiser designs ==

Similar to the incomplete battleship Kentucky , Hawaii was considered for a conversion to be a test platform for the development of guided missiles in September 1946 . Designated CB (SW) , the cruisers ' gun armament would have consisted of sixteen 3 inch / 70 caliber guns in eight dual mounts . Most missiles would have been mounted toward the bow , while two " missile launching pits " would be located near the stern . For this task , no armor would have been needed , and previously installed armor was to be taken off the ship when required . These plans never came to fruition , so Hawaii remained in the Reserve Fleet , still incomplete .

Two years later , in 1948 , a similar conversion plan was put forth . This plan , designated Project SCB 26A , proposed that Hawaii be converted into a Ballistic Guided Missile Ship . This plan called for Hawaii to be completed with 12 vertical launchers for U.S.-made V-2 short range ballistic missiles and 6 launchers for the SSM N-2 Triton surface to air cruise missile . Triton was an attempt to give the Navy a reliable cruise missile that it could launch off of its ships . The design process began with an approval from the U.S. Navy in September 1946 . After " formulating performance objectives and possible design baselines " , the designers settled on attempting to fit a 36 ,000 pound (16 ,000 kg) ramjet powered cruise missile onto solid fuel rocket boosters that could carry the missile 2 ,000 nautical miles (3 ,700 km ; 2 ,300 mi) at Mach 1.6 ? 2.5 in 1950 . After lowering the ambitious goals to more realistic levels in 1955 , a fully operational version was expected by 1965 , but with tests for the SSM N-9 / RGM-15 Regulus II planned for that year and the up and coming UGM-27 Polaris submarine launched cruise missile , the project was terminated in 1957 . One source has a variation of this scheme , with the developmental XPM (Experimental Prototype Missile) from Operation Bumblebee replacing the Triton launchers . XPM eventually led to the RIM-8 Talos surface to air missile .

Hawaii would have also been able to launch the JB-2 " Loon " cruise missile from a hydraulic catapult installed on her forward flight deck ; lastly , an aircraft crane and twin aircraft catapults were to be added on the stern of the ship . Interestingly the conversion , as envisioned , would have looked similar to a completed Graf Zeppelin class aircraft carrier . The conversion was authorized in the same year (1948) and was scheduled to be completed in 1950 ; the ship 's classification was changed to CBG-3 to reflect the planned overhaul . However , the conversion was canceled in 1949 , along with any other plans for surface ships equipped with ballistic missiles , due to the volatility of the rocket fuels and the shortcomings with guidance systems that were available .

== Large command ship ==

Yet another conversion of Hawaii , this time to a " large command ship " , was contemplated from August 1951 . In this role , she would have been similar to Northampton , but larger . This conversion would have boasted expansive flag facilities and fully capable radar and communication systems for commanding carrier task forces , though there would have been no facilities for amphibious operations . Armament would have consisted of sixteen 5 " / 54 caliber guns in single mounts ; this gun size was specified because 3 " / 50 caliber guns were believed to be too light . Two radars would have been mounted : an AN / SPS-2 on top of a forward tower , and an AN /

SPS @-@ 8 on the aft superstructure . In addition , an SC @-@ 2 was to be mounted on top of a short tower aft of the stack (though forward of the SPS @-@ 8) ; this would have been used for " troposphere scatter communications " .

Two Mk37 / 25 fire @-@ control directors were planned , both fore and aft of the superstructure . The conversion plans were authorized , and her classification was changed to CBC @-@ 1 to reflect this on 26 February 1952 . Money to begin the project was included in the 1952 budget , but the only work done on the ship was the removal of the 12 " turrets , as it was intended that experience from Northampton should be analyzed before a full conversion . However , when it was seen that a smaller and cheaper ship ? like the light carrier Wright ? could do the same duty , the Hawaii project was canceled in 1953 . She reverted to her original designation of CB @-@ 3 on 9 September 1954 .

= = = Polaris study = = =

In February 1957 , a study entitled " Polaris Study ? CB @-@ 3 " was published , proposing that Hawaii be stripped of all her guns in favor of twenty Polaris missiles , mounted in the hull vertically in roughly the same location as the third main turret would have been located , two Talos surface @-@ to @-@ air missile (SAM) launchers , one each fore and aft , two Tartar SAMs mounted on either side of the superstructure , and a single ASROC anti @-@ submarine weapon mounted where the second main turret would have been placed . Nothing further was done with the study .

= = = Disposal = = =

On 9 June 1958 , Hawaii was struck from the Naval Vessel Register and the ship was sold to the Boston Metals Company of Baltimore on 15 April 1959 . The still @-@ incomplete Hawaii was towed to Baltimore , arriving there on 6 January 1960 , and was subsequently broken up for scrap .