

= Alaska @-@ class cruiser =

The Alaska class was a class of six large cruisers ordered before World War II for the United States Navy . They were officially classed as large cruisers (CB) , but others have regarded them as battlecruisers . They were all named after territories or insular areas of the United States , signifying their intermediate status between larger battleships and smaller heavy / light cruisers . Of the six planned , two were completed , the third 's construction was suspended on 16 April 1947 , and the last three were canceled . Alaska and Guam served with the U.S. Navy for the last year of World War II as bombardment ships and fast carrier escorts . They were decommissioned in 1947 after spending only 32 and 29 months in service , respectively .

The idea for a large cruiser class originated in the early 1930s when the U.S. Navy sought to counter Deutschland @-@ class " pocket battleships " being launched by Germany . Planning for ships that eventually evolved into the Alaska class began in the late 1930s after the deployment of Germany 's Scharnhorst @-@ class battleships and rumors that Japan was constructing a new battlecruiser class . To serve as " cruiser @-@ killers " capable of seeking out and destroying these post @-@ Treaty heavy cruisers , the class was given large guns of a new and expensive design , limited armor protection against 12 @-@ inch shells , and machinery capable of speeds of about 31 ? 33 knots (36 ? 38 mph , 58 ? 61 km / h) .

= = Background = =

Heavy cruiser development steadied between World War I and World War II thanks to the terms of the Washington Naval Treaty and successor treaties and conferences , where the United States , Britain , Japan , France , and Italy agreed to limit heavy cruisers to 10 @,@ 000 tons displacement with 8 @-@ inch main armament . Up until the Alaska class , US cruisers designed between the wars followed this pattern .

The initial impetus for the Alaska design came from the deployments of Germany 's so @-@ called pocket battleships in the early 1930s . Though no actions were immediately taken , these thoughts were revived in the late 1930s when intelligence reports indicated Japan was planning or building " super cruisers " that would be much more powerful than the current US heavy cruisers . The navy responded in 1938 when the General Board asked the Bureau of Construction and Repair to conduct a " comprehensive study of all types of naval vessels for consideration for a new and expanded building program " . The US President at the time , Franklin Delano Roosevelt , may have taken a lead role in the development of the class with his desire to have a counter to raiding abilities of Japanese cruisers and German pocket battleships . While these claims are difficult to verify , they have led to the speculation that their design was " politically motivated " . These were the most powerful cruisers ever built .

= = = Design = = =

One historian described the design process of the Alaska class as " torturous " due to the numerous changes and modifications made to the ship 's layouts by numerous departments and individuals . Indeed , there were at least nine different layouts , ranging from 6 @,@ 000 @-@ ton Atlanta @-@ class anti @-@ aircraft cruisers to " overgrown " heavy cruisers and a 38 @,@ 000 @-@ ton mini @-@ battleship that would have been armed with twelve 12 @-@ inch and sixteen 5 @-@ inch guns . The General Board , in an attempt to keep the displacement under 25 @,@ 000 tons , allowed the designs to offer only limited underwater protection . As a result , the Alaska class , when built , were vulnerable to torpedoes and shells that fell short of the ship . The final design was a scaled @-@ up Baltimore @-@ class class that had the same machinery as the Essex @-@ class aircraft carriers . This ship combined a main armament of nine 12 @-@ inch guns with protection against 10 @-@ inch gunfire into a hull that was capable of 33 knots (61 km / h ; 38 mph) .

The Alaskas were officially funded in September 1940 along with a plethora of other ships as a part of the Two @-@ Ocean Navy Act . Their role had been altered slightly : in addition to their surface

@-@ to @-@ surface role , they were planned to protect carrier groups . Because of their bigger guns , greater size and increased speed , they would be more valuable in this role than heavy cruisers , and would provide insurance against reports that Japan was building super cruisers more powerful than U.S. heavy cruisers .

= = = Possible conversion to aircraft carriers = = =

Yet another drastic change was considered during the " carrier panic " in late 1941 , when the Navy realized that they needed more aircraft carriers as quickly as possible . Many hulls currently under construction were considered for conversion into carriers . At different times , they considered some or all of the Cleveland @-@ class light cruisers , the Baltimore @-@ class heavy cruisers , the Alaska @-@ class , and even one of the Iowa @-@ class battleships ; in the end , they chose the Clevelands , resulting in the conversion of nine ships under construction at the New York Shipbuilding Corporation shipyard as the light aircraft carriers comprising the Independence @-@ class .

A conversion of the Alaska cruisers to carriers was " particularly attractive " because of the many similarities between the design of the Essex @-@ class aircraft carriers and the Alaska class , including the same machinery . However , when Alaska cruisers were compared to the Essex carriers , converted cruisers would have had a shorter flight deck (so they could carry only 90 % of the aircraft) , would have been 11 feet (3 @. @ 4 m) lower in the water , and could travel 8 @, @ 000 nautical miles (15 @, @ 000 km) less at 15 knots (28 km / h ; 17 mph) . In addition , the large cruiser design did not include the massive underwater protections found in normal carriers due to the armor weight devoted to counter shell fire . Lastly , an Alaska conversion could not satisfy the navy 's goal of having new aircraft carriers quickly , as the work needed to modify the ships into carriers would entail long delays . With this in mind , all planning to convert the Alaskas was abandoned on 7 January 1942 .

= = Construction = =

Of the six Alaska @-@ class cruisers that were planned , only three were laid down . The first two , Alaska and Guam , were completed . Construction of Hawaii , the third , was suspended on 16 April 1947 when she was 84 % complete . The last three , Philippines , Puerto Rico , and Samoa , were delayed since all available materials and slipways were allocated to higher priority ships , such as aircraft carriers , destroyers , and submarines . Construction had still not begun when steel shortages and a realization that these " cruiser @-@ killers " had no more cruisers to hunt ? as the fleets of Japanese cruisers had already been defeated by aircraft and submarines ? made the ships " white elephants " . As a result , construction of the last three members of the class never began , and they were officially canceled on 24 June 1943 .

= = Service history = =

Alaska and Guam served with the U.S. Navy during the last year of World War II . Similar to the Iowa @-@ class fast battleships , their speed made them useful as shore bombardment ships and fast carrier escorts . Both protected Franklin when she was on her way to be repaired in Guam after being hit by two Japanese bombs . Afterward , Alaska supported the landings on Okinawa , while Guam went to San Pedro Bay to become the leader of a new task force , Cruiser Task Force 95 . Guam , joined by Alaska , four light cruisers , and nine destroyers , led the task force into the East China and Yellow Seas to conduct raids upon shipping ; however , they only encountered Chinese junks . By the end of the war , the two had become celebrated within the fleet as excellent carrier escorts . During the war , both ships were part of Cruiser Division 16 commanded by Rear Admiral Francis S. Low , USN .

After the war , both ships served as part of Task Force 71 , the designation for the U.S. Seventh Fleet 's North China Naval Force . Its mission was to support the allied occupation of the Korean

peninsula . This included executing various show @-@ the @-@ flag operations along the western coast of Korea as well as in the Gulf of Chihli . These naval demonstrations preceded Operation Campus , the amphibious landing of U.S. Army ground forces at Jinsen , Korea , on 8 September 1945 . Subsequently , both ships returned to the United States in mid @-@ December 1945 , and they were decommissioned and " mothballed " in 1947 @.@ after having spent 32 months (Alaska) and 29 months (Guam) in service .

In 1958 , the Bureau of Ships prepared two feasibility studies to explore whether Alaska and Guam could be suitably converted into guided @-@ missile cruisers . The first study involved removing all of the guns in favor of four different missile systems . At \$ 160 million , the cost of this proposed removal was seen as prohibitive , so a second study was initiated . The study left the forward batteries (the two 12 @-@ inch triple turrets and three of the 5 @-@ inch dual turrets) unchanged , and added a reduced version of the first plan on the stern of the ship . Even though the proposals would have cost approximately half as much as the first study 's plan (\$ 82 million) , it was still seen as too expensive . As a result , both ships were stricken from the Naval Vessel Register on 1 June 1960 . Alaska was sold for scrap on 30 June 1960 , and Guam on 24 May 1961 .

The still @-@ incomplete Hawaii was considered for a conversion to be the Navy 's first guided @-@ missile cruiser ; this thought lasted until 26 February 1952 , when a different conversion to a " large command ship " was contemplated . In anticipation of the conversion , her classification was changed to CBC @-@ 1 . This would have made her a " larger sister " to Northampton , but a year and a half later (9 October 1954) she was re @-@ designated CB @-@ 3 . Hawaii was stricken from the Naval Vessel Register on 9 June 1958 and was sold for scrap in 1959 .

= = " Large cruisers " or " battlecruisers " = =

Early in its development , the class used the US battlecruiser designation CC , which had been planned for the Lexington class . However , the designation was changed to CB to reflect their new status , " large cruiser " , and the practice of referring to them as battlecruisers was officially discouraged . The U.S. Navy then named the individual vessels after U.S. territories , rather than states (as was the tradition with battleships) or cities (for which cruisers were named) , to symbolize the belief that these ships were supposed to play an intermediate role between heavy cruisers and fully @-@ fledged battleships .

The Alaska class certainly resembled contemporary US battleships (particularly the North Carolina class , South Dakota class , and Iowa class) in appearance , including the familiar 2 @-@ A @-@ 1 main battery and massive columnar mast , and displaced twice that of the newest heavy cruisers (the Baltimore class) . In weight , the ships were only 5 @,@ 000 tons less than the London Treaty battleship standard displacement limit of 35 @,@ 000 long tons (36 @,@ 000 t) , also longer than several treaty battleships such as the King George V and North Carolina @-@ classes .

In design and armor the Alaska class are regarded as " large cruisers " rather than battlecruisers . Their design was scaled up from the treaty cruisers limited by the Washington , London and Second London naval treaties . In common with U.S. heavy cruisers , they had aircraft hangars and a single large rudder . Their armor lacked the underwater protection systems found on full @-@ fledged battleships and even intermediate capital ships like the French Dunkerque and German Scharnhorst classes . This left the Alaskas virtually defenseless against torpedoes , as well as vulnerable to shells falling slightly short and continuing underwater to hit the hull . While the Alaskas had more side armor than other contemporary U.S. cruisers , their protection was only marginally capable of stopping 12 " fire ; they were vulnerable to battleship fire (14 ? 16 " fire) at any range .

In addition , despite being much larger than the Baltimore class , the numbers of secondary and anti @-@ aircraft batteries of the Alaskas were similar . Whereas the Alaska class carried twelve 5 " / 38 caliber in six twin turrets , fifty @-@ six 40 mm , and thirty @-@ four 20 mm guns , the Baltimore class carried the same number of 5 " / 38s , eight fewer 40 mm , and ten fewer 20 mm . , considerably fewer than new U.S. battleships that had ten (save for South Dakota (BB @-@ 57)) 5 " / 38 twin mounts while older refitted U.S. battleships had eight . Author Richard Worth remarked that when they were finally completed , launched , and commissioned , they had the " size of a

battleship but the capabilities of a cruiser ". The Alaska class was similarly expensive to build and maintain as contemporary battleships yet far less capable due to armor deficiencies , while only able to put up an anti @-@ aircraft defense comparable to the much cheaper Baltimore cruisers .

Despite these cruiser @-@ like characteristics , and the U.S. Navy 's insistence on their status as cruisers , the Alaska class has been frequently described as battlecruisers . The official navy magazine All Hands said " The Guam and her sister ship Alaska are the first American battle cruisers ever to be completed as such . " Some modern historians take the view that this is a more accurate designation because they believe that the ships were " in all senses of the word , battlecruisers " , with all the vulnerabilities of the type . The traditional Anglo @-@ American battlecruiser concept had always sacrificed protection for the sake of speed and armament ? they were not intended to stand up against the guns they themselves carried . The Alaska 's percentage of armor tonnage , 28 @.@ 4 % , was slightly less than that of fast battleships ; the British King George V @-@ class , the American Iowa class , and the battlecruiser / fast battleship HMS Hood all had armor percentages between 32 and 33 % , whereas the Lexington @-@ class battlecruiser design had a nearly identical armor percentage of 28 @.@ 5 % . In fact , older battlecruisers , such as the Invincible (19 @.@ 9 %) , had a significantly lower percentage . Armament @-@ wise , they had much larger guns than contemporary heavy cruisers ; while the Baltimore class only carried nine 8 " / 55 caliber Marks 12 and 15 guns , the Alaska class carried nine 12 " / 50 caliber guns that were as good as , if not superior to , the old 14 " / 50 caliber gun used on the U.S. Navy 's pre @-@ treaty battleships .

= = Armament = =

= = Main battery = =

As built , the Alaska class had nine 12 " / 50 caliber Mark 8 guns mounted in three triple (3 @-@ gun) turrets , with two turrets forward and one aft , a configuration known as " 2 @-@ A @-@ 1 " . The previous 12 " gun manufactured for the U.S. Navy was the Mark 7 version , which had been designed for and installed in the 1912 Wyoming @-@ class battleships . The Mark 8 was of considerably higher quality ; in fact , it " was by far the most powerful weapon of its caliber ever placed in service . " Designed in 1939 , it weighed 121 @,@ 856 pounds (55 @,@ 273 kg) , including the breech , and could sustain an average rate of fire of 2 @.@ 4 ? 3 rounds a minute . It could throw a 1 @,@ 140 @-@ pound (520 kg) Mark 18 armor @-@ piercing shell 38 @,@ 573 yards (35 @,@ 271 m) at an elevation of 45 ° , and had a 344 @-@ shot barrel life (about 54 more than the much larger but similar 16 " / 50 caliber Mark 7 gun found in the Iowa battleships .) . The Alaska 's Mark 8 guns were the heaviest main battery of any cruiser of World War II , and as capable as the old 14 " / 50 caliber gun used on the U.S. Navy 's pre @-@ treaty battleships .

The turrets were very similar to those of the Iowa @-@ class battleships , but differed in several ways ; for example , the Alaska class had a two @-@ stage powder hoist instead of the Iowa class 's one @-@ stage hoist . These differences made operating the guns safer and increased the rate of fire . In addition , a " projectile rammer " was added to Alaska and Guam . This machine transferred shells from storage on the ship to the rotating ring that fed the guns . However , this feature proved unsatisfactory , and it was not planned for Hawaii or any subsequent ships .

Because Alaska and Guam were the only two ships to mount these guns , only ten turrets were made during the war (three for each ship including Hawaii and one spare) . They cost \$ 1 @,@ 550 @,@ 000 each and were the most expensive heavy guns purchased by the U.S. Navy in World War II .

= = Secondary battery = =

The secondary battery of the Alaska class was composed of twelve dual @-@ purpose (anti @-@ air and anti @-@ ship) 5 " / 38 caliber guns in twin mounts , with four offset on each side of the

superstructure (two on each beam) and two centerline turrets fore and aft . The 5 " / 38 was originally intended for use on only destroyers built in the 1930s , but by 1934 and into World War II it was being installed on almost all of the U.S. ' s major warships , including aircraft carriers , battleships , and heavy and light cruisers .

= = = Anti @-@ aircraft battery = = =

For anti @-@ aircraft armament , the Alaska @-@ class ships carried 56 × 40 mm guns and 34 × 20 mm guns . These numbers are comparable to 48 × 40 mm and 24 × 20 mm on the smaller Baltimore @-@ class heavy cruisers and 80 × 40 mm and 49 × 20 mm on the larger Iowa battleships .

Arguably the most efficient light anti @-@ aircraft gun of World War II , the 40 mm Bofors was used on nearly every major warship in the U.S. and UK fleets during World War II from about 1943 to 1945 . Although they were a descendant of German and Swedish designs , the Bofors mounts used by the United States Navy during World War II had been heavily " Americanized " to U.S. Navy standards . This new standard resulted in a gun system set to English standards (now known as the Standard System) with interchangeable ammunition , simplifying the logistics situation for World War II . When coupled with hydraulic couple drives to reduce salt contamination and the Mark 51 director for improved accuracy , the 40 mm Bofors became a fearsome adversary , accounting for roughly half of all Japanese aircraft shot down between 1 October 1944 and 1 February 1945 .

The Oerlikon 20 mm anti @-@ aircraft gun was one of the most extensively used anti @-@ aircraft guns of World War II ; the U.S. alone manufactured a total of 124 @,@ 735 of these guns . When activated in 1941 , they replaced the 0 @.@ 50 " M2 Browning machine gun on a one @-@ for @-@ one basis . The Oerlikon gun remained the primary anti @-@ aircraft weapon of the United States Navy until the introduction of the 40 mm Bofors in 1943 .

= = Ships = =

USS Alaska (CB @-@ 1) was commissioned on 17 June 1944 . She served in the Pacific , screening aircraft carriers , providing shore bombardment at Okinawa , and going on raiding missions in the East China Sea . She was decommissioned on 17 February 1947 after less than three years of service and was scrapped in 1960 .

USS Guam (CB @-@ 2) was commissioned on 17 September 1944 . She served in the Pacific with Alaska on almost all of the same operations . Along with Alaska , she was decommissioned on 17 February 1947 and was scrapped in 1961 .

USS Hawaii (CB @-@ 3) was intended as a third ship of the class , but she was never completed . Numerous plans to utilize her as a guided @-@ missile cruiser or a large command ship in the years after the war were fruitless , and she was scrapped .

USS Philippines (CB @-@ 4) , Puerto Rico (CB @-@ 5) , and Samoa (CB @-@ 6) were planned as the fourth , fifth , and sixth ships of the class , respectively . All were going to be built at Camden , New Jersey , but they were canceled before construction could begin .

= = Endnotes = =