

= Jade @-@ class aircraft carrier =

The Jade class comprised a pair of passenger ships intended to be converted into auxiliary aircraft carriers by Nazi Germany 's Kriegsmarine during World War II . The two ships were launched as Gneisenau and Potsdam in 1935 and operated in peace time by Norddeutscher Lloyd . After the outbreak of war , the ships were requisitioned by the Kriegsmarine as transports , and in May 1942 , plans were drawn up to convert them into aircraft carriers . The ships were not identical , but were similar enough in size to allow identical outfitting .

Gneisenau and Potsdam were to be renamed Jade and Elbe , respectively . Once converted , the ships were intended to operate twelve Ju @-@ 87 Stuka dive bombers and twelve Bf @-@ 109 fighters . Work on Jade was not started and the conversion project was abandoned in November 1942 . She returned to service as a troopship , only to be sunk by a mine in the western Baltic . Elbe actually began the conversion process in December 1942 , but only her passenger fittings were removed by the time work was halted in February 1943 . She was converted into a barracks ship in Gotenhafen and seized by Great Britain after the end of the war . She remained in use until 1976 , when she was broken up for scrap

= = Conversion = =

Following the loss of the battleship Bismarck in May 1941 , during which British aircraft carriers proved instrumental , and the near torpedoing of her sister ship Tirpitz by carrier @-@ launched aircraft in March 1942 , the Kriegsmarine became convinced of the necessity of acquiring aircraft carriers . Work on the purpose @-@ built carrier Graf Zeppelin , which had been halted in April 1940 , was resumed in March 1942 . The Kriegsmarine also decided to convert a number of vessels into auxiliary aircraft carriers . Several passenger ships , including Gneisenau , Potsdam , and Europa were selected for conversion , along with the incomplete heavy cruiser Seydlitz . Gneisenau and Potsdam had been built in the mid @-@ 1930s and operated by Norddeutscher Lloyd on its East Asia Service until the outbreak of war , when they were requisitioned by the Kriegsmarine as troopships .

The ships were found to have insufficient stability when converted into aircraft carriers . This was to have been remedied by the addition of side bulges and fixed ballast . The ballast was to have consisted of " concrete armor , " a layer of concrete fitted to the sides of the hulls below the waterline . Conversion work on Gneisenau , which was to be renamed Jade , never began . The project was abandoned on 25 November 1942 . The design for Potsdam , which was assigned the name Elbe , was reworked to correct the stability problems . The bulges and concrete armor were discarded and a second outer skin was substituted . Work began on the ship in December 1942 ; only the ship 's passenger fittings were removed by the time work was halted on 2 February 1943 . This was due to the resignation of Admiral Erich Raeder , the commander in chief of the Kriegsmarine , the previous month . Raeder had resigned in protest of Adolf Hitler 's order that all surface ships be decommissioned and scrapped in the aftermath of the Battle of the Barents Sea .

Gneisenau was returned to troopship duties after the project was abandoned , but at 12 : 02 on 2 May 1943 , she was sunk by a mine off Gedser . Potsdam was converted into a barracks ship in Gotenhafen , where she spent the remainder of the war . Following the German defeat , the ship was seized by the British on 20 June 1946 as a war prize , who commissioned her as a troop transport under the name Empire Fowey . She was sold to Pakistan , who operated her under the name Safina @-@ E @-@ Hujaj until she was broken up for scrap in 1976 .

= = = Characteristics = = =

Jade was 191 meters (627 ft) long at the waterline and 203 m (666 ft) long overall . Elbe was 189 m (620 ft) long at the waterline and 203 m overall . Both ships had a designed draft of 5 @. @ 1 m (17 ft) , and at full load , drew up to 8 @. @ 85 m (29 @. @ 0 ft) . Jade displaced 18 @, @ 160 metric tons (17 @, @ 870 long tons ; 20 @, @ 020 short tons) , while Elbe displaced 17 @, @ 527 t

(17 @, @ 250 long tons ; 19 @, @ 320 short tons) . The ships had steel @-@ built , welded hulls with twelve watertight compartments and a double bottom . Jade was to have been crewed by 79 officers and 804 enlisted men , including 134 Luftwaffe personnel ; Elbe 's crew arrangements are not known specifically , but would have consisted of approximately 900 officers and men .

Jade was powered by a pair of Deschimag geared steam turbines . The two turbines drove a three @-@ bladed screw each . Steam was provided by four single @-@ ended high @-@ pressure boilers . Elbe 's propulsion system consisted of two electric drive motors powered by two turbo @-@ generators . Each electric motor drove a four @-@ bladed screw . The two ships ' engines were rated at 26 @, @ 000 shaft horsepower (19 @, @ 000 kW) and a top speed of 21 knots (39 km / h ; 24 mph) , though in service the ships were limited to 19 knots (35 km / h ; 22 mph) . They had a maximum range of 9 @, @ 000 nautical miles (17 @, @ 000 km ; 10 @, @ 000 mi) at 19 knots .

As converted , the ships were to be armed with several anti @-@ aircraft guns . The heavy anti @-@ aircraft battery consisted of eight 10 @. @ 5 cm (4 @. @ 1 in) SK C / 33 guns in twin mountings . The mounts were the Dopp LC / 31 type , originally designed for earlier 8 @. @ 8 cm (3 @. @ 5 in) SK C / 31 guns . The LC / 31 mounting was triaxially @-@ stabilized and capable of elevating to 80 ° . This enabled the guns to engage targets up to a ceiling of 12 @, @ 500 m (41 @, @ 000 ft) . Against surface targets , the guns had a maximum range of 17 @, @ 700 m (58 @, @ 100 ft) . The guns fired fixed ammunition weighing 15 @. @ 1 kg (33 lb) ; the guns could fire HE and HE incendiary rounds , as well as illumination shells . The two guns were supplied with a total of 3 @, @ 200 rounds of ammunition .

Close @-@ range anti @-@ aircraft weaponry consisted of twelve 3 @. @ 7 cm (1 @. @ 5 in) SK C / 30 guns and twenty @-@ four to thirty @-@ two 2 cm (0 @. @ 79 in) Flak 38 guns . The 3 @. @ 7 cm gun was a single @-@ shot gun , with a rate of fire of around 30 rounds per minute . At its maximum elevation of 85 ° , the gun had a ceiling of 6 @, @ 800 m (22 @, @ 300 ft) . They were supplied with 20 @, @ 000 rounds of ammunition . The 2 cm gun was a magazine @-@ fed automatic weapon , firing at up to 500 rounds per minute . Twenty and forty @-@ round magazines were supplied for the guns ; The guns were supplied with 48 @, @ 000 rounds of ammunition .

Aircraft facilities were to have consisted of a 186 m (610 ft) long , 27 m (89 ft) wide flight deck . Aircraft were handled in a single hangar , which was 148 m (486 ft) long and 18 m (59 ft) wide . The hangar roof was protected by 20 mm (0 @. @ 79 in) of Krupp Wotan hart steel armor , while the sides were 10 to 15 mm (0 @. @ 39 to 0 @. @ 59 in) thick . The ships ' air complement was to have consisted of twelve Bf 109 fighters and twelve Ju 87 Stuka dive @-@ bombers . The Bf 109 fighters were a navalized version of the " E " model , designated as Bf 109T . Their wings were longer than the land @-@ based model to allow for shorter take @-@ off . The Ju 87s were to have been the " E " variant , which was a navalized version of the Ju 87D , and were modified for catapult launches and were equipped with arresting gear .