

= German aircraft carrier Graf Zeppelin =

The German aircraft carrier Graf Zeppelin was the lead ship in a class of two carriers of the same name ordered by the Kriegsmarine . She was the only aircraft carrier launched by Germany and represented part of the Kriegsmarine 's attempt to create a well @-@ balanced oceangoing fleet , capable of projecting German naval power far beyond the narrow confines of the Baltic and North Seas . The carrier would have had a complement of 42 fighters and dive bombers .

Construction on Graf Zeppelin began on 28 December 1936 , when her keel was laid down at the Deutsche Werke shipyard in Kiel . Named in honor of Graf (Count) Ferdinand von Zeppelin , the ship was launched on 8 December 1938 , and was 85 % complete by the outbreak of World War II in September 1939 . Graf Zeppelin was not completed and was never operational due to shifting construction priorities necessitated by the war . She remained in the Baltic for the duration of the war ; with Germany 's defeat imminent , the ship 's custodian crew scuttled her just outside Stettin in March 1945 . The Soviet Union raised the ship in March 1946 , and she was ultimately sunk in weapons tests north of Poland 17 months later . The wreck was discovered by a Polish survey ship in July 2006 .

= = Design = =

Graf Zeppelin was 262 @.@ 5 meters (861 @.@ 2 ft) long overall ; she had a beam of 36 @.@ 2 m (118 @.@ 8 ft) and a maximum draft of 8 @.@ 5 m (27 @.@ 9 ft) . At full combat load , she would have displaced 33 @,@ 550 long tons (34 @,@ 088 @.@ 4 t) . The ship 's propulsion system consisted of four Brown , Boveri & Cie geared turbines with sixteen oil @-@ fired , ultra @-@ high @-@ pressure LaMont boilers . The power plant was rated at 200 @,@ 000 shaft horsepower (149 @,@ 140 @.@ 0 kW) and a top speed of 33 @.@ 8 knots (62 @.@ 6 km / h ; 38 @.@ 9 mph) . Graf Zeppelin had a projected cruising radius of 8 @,@ 000 nautical miles (14 @,@ 816 @.@ 0 km ; 9 @,@ 206 @.@ 2 mi) at a speed of 19 kn (35 @.@ 2 km / h ; 21 @.@ 9 mph) . She would have had a crew of 1760 officers and enlisted men , plus flight crews .

The ship 's primary offensive power would have been its aircraft complement . Graf Zeppelin would have carried 42 aircraft as designed : 12 navalized Junkers Ju 87 " Stuka " dive bombers , 10 Messerschmitt Bf 109 fighters , and 20 Fieseler Fi 167 torpedo bombers . Later during the construction process , the aerial complement was reworked to consist of thirty Ju 87s and twelve Bf 109s , and the Fi 167s were removed altogether . As designed , Graf Zeppelin was to be fitted with eight 15 cm SK C / 28 guns for defense against surface warships . This number was later increased to sixteen . Her anti @-@ aircraft battery consisted of ten 10 @.@ 5 cm SK C / 33 guns ? later increased to twelve ? twenty @-@ two 3 @.@ 7 cm SK C / 30 guns , and twenty @-@ eight 2 cm guns . The ship 's flight deck was protected with up to 45 millimeters (1 @.@ 8 in) of Wotan Weich steel armor . A 60 mm (2 @.@ 4 in) thick armored deck was located under the deck to protect the ship 's vitals from aerial attacks . Graf Zeppelin had a waterline armor belt that was 100 mm (3 @.@ 9 in) thick in the central area of the ship .

= = Construction and cancellation = =

On 16 November 1935 , the contract for Flugzeugträger A (Aircraft carrier A) ? later christened Graf Zeppelin ? was awarded to the Deutsche Werke shipyard in Kiel . Construction of the ship was delayed since Deutsche Werke was working at capacity , and the slipway needed for Graf Zeppelin was occupied by the new battleship Gneisenau , which was launched on 8 December 1936 . Work started on Graf Zeppelin on 28 December , when her keel was laid down . She was launched on 8 December 1938 , the 24th anniversary of the Battle of the Falkland Islands , and she was christened by Helene von Zeppelin , the daughter of the ship 's namesake . At the launching ceremony , Hermann Göring gave a speech . By the end of 1939 , she was 85 % complete , with a projected completion by the middle of 1940 . By September 1939 , one carrier @-@ borne wing , Trägergruppe 186 , had been formed by the Luftwaffe at Kiel Holtenau , composed of three

squadrons equipped with Bf 109s and Ju 87s .

Meanwhile , the German conquest of Norway in April 1940 further eroded any chance of completing Graf Zeppelin . Now responsible for defending Norway 's long coastline and numerous port facilities , the Kriegsmarine urgently needed large numbers of coastal guns and anti aircraft batteries . During a naval conference with Hitler on 28 April 1940 , Admiral Erich Raeder proposed halting all work on Graf Zeppelin , arguing that even if she was commissioned by the end of 1940 , final installation of her guns would need another ten months or more (her original fire control system had been sold to the Soviet Union under an earlier trade agreement) . Hitler consented to the stop work order , allowing Raeder to have Graf Zeppelin 's 15 cm guns removed and transferred to Norway . The carrier 's heavy flak armament of twelve 10 cm 5 cm guns had already been diverted elsewhere .

In July 1940 , Graf Zeppelin was towed from Kiel to Gotenhafen (Gdynia) and remained there for nearly a year . While there , she was used as a storage depot for Germany 's hardwood supply . Just before Germany invaded the Soviet Union in June 1941 , the carrier was again moved , this time to Stettin , to safeguard her from Soviet air attacks . By November , the German army had pushed deep enough into Russian territory to remove any further threat of air attack and Graf Zeppelin was returned to Gotenhafen . There , she was used as a store ship for timber .

By the time Raeder met with Hitler for a detailed discussion of naval strategy in April 1942 , the usefulness of aircraft carriers in modern naval warfare had been amply demonstrated . British carriers had crippled the Italian fleet at Taranto in November 1940 , critically damaged the German battleship Bismarck in May 1941 and prevented battleship Tirpitz from attacking two convoys bound for Russia in March 1942 . In addition , a Japanese carrier raid on Pearl Harbor had devastated the American battle fleet in December 1941 . Raeder , anxious to secure air protection for the Kriegsmarine 's heavier surface units , informed Hitler that Graf Zeppelin could be finished in about a year , with another six months required for sea trials and flight training . On 13 May 1942 , with Hitler 's authorization , the German Naval Supreme Command ordered work resumed on the carrier .

But daunting technical problems remained . Raeder wanted newer planes , specifically designed for carrier use . Reichsmarschall Hermann Göring , head of the Luftwaffe , replied that the already overburdened German aircraft industry could not possibly complete the design , testing and mass production of such aircraft before 1946 . Instead , he proposed converting existing aircraft (again the Junkers Ju 87 and Messerschmitt Bf 109) as a temporary solution until newer types could be developed . Training of carrier pilots at Travemünde would also resume .

The converted carrier aircraft were heavier versions of their land based predecessors and this required a host of changes to Graf Zeppelin 's original design : the existing catapults needed modernization ; stronger winches were necessary for the arresting gear ; the flight deck , elevators and hangar floors also required reinforcement . Changes in naval technology dictated other alterations as well : installation of air search radar sets and antennas ; upgraded radio equipment ; an armored fighter director cabin mounted on the main mast (which in turn meant a heavier , sturdier mast to accommodate the cabin 's added weight) ; extra armoring for the bridge and fire control center ; a new curved funnel cap to shield the fighter director cabin from smoke ; replacing the single 20mm AA guns with quadruple Flakvierling 38 guns (with a corresponding increase in ammunition supply) to improve overall AA defense ; and additional bulges on either side of the hull to preserve the ship 's stability under all this added weight .

The German naval staff hoped all these changes could be accomplished by April 1943 , with the carrier 's first sea trials taking place in August that year . Towards that end , Chief Engineer Wilhelm Haderer was reassigned to oversee Graf Zeppelin 's completion . Haderer planned on getting the two inner shafts and their respective propulsion systems operational first , giving the ship an initial speed of 25 ? 26 knots , fast enough for sea trials to commence and for conducting air training exercises . By the winter of 1943 ? 1944 she was expected to be combat ready .

On the night of 27 ? 28 August 1942 , while still moored at Gotenhafen , Graf Zeppelin was the target of the only Allied air attack aimed at her during the war . Three Royal Air Force Avro Lancaster heavy bombers from 106 Squadron were dispatched against the German aircraft carrier ,

each one carrying a single " Capital Ship " bomb , a 5 @,@ 600 lb (2 @,@ 540 kg) device with a shaped charge warhead intended for armored targets . One pilot , who was unable to see the carrier due to haze , dropped his bomb instead on the estimated position of the German battleship Gneisenau . Another believed he had scored a direct hit on Graf Zeppelin , but there is no known record of the ship suffering any damage from a bomb strike that night .

On 5 December 1942 , Graf Zeppelin was towed back to Kiel and placed in a floating drydock . It seemed she might well see completion after all , but by late January 1943 Hitler had become so disenchanted with the Kriegsmarine , especially with what he perceived as the poor performance of its surface fleet , that he ordered all of its larger ships taken out of service and scrapped . Raeder was shortly relieved of command and replaced with the Commander of Submarines Karl Dönitz . Though Admiral Dönitz eventually persuaded Hitler to void most of the order , work on all new surface ships and even those nearing completion was halted , including Graf Zeppelin . On 30 January 1943 , all major work on the ship ceased , though some limited , temporary work continued until March .

In April 1943 Graf Zeppelin was again towed eastward , first to Gotenhafen , then to the roadstead at Swinemünde and finally berthed at a back @-@ water wharf in the Parnitz River , two miles (3 km) from Stettin , where she had been briefly docked in 1941 . There she languished for the next two years with only a 40 @-@ man custodial crew in attendance . When Red Army forces neared the city in April 1945 , the ship 's Kingston valves were opened , flooding her lower spaces and settling her firmly into the mud in shallow water . A ten @-@ man engineering squad then rigged the vessel 's interior with demolition and depth charges in order to hole the hull and destroy vital machinery . At 6pm on 25 April 1945 , just as the Soviets entered Stettin , commander Wolfgang Kähler radioed the squad to detonate the explosives . Smoke billowing from the carrier 's funnel confirmed the charges had gone off , rendering the ship useless to her new owners for many months to come .

= = Fate after the war = =

The carrier 's history and fate after Germany 's surrender was unknown outside the Soviet Union for decades after the war . The Soviets could not repair the ship in the length of time specified by the terms of the Allied Tripartite Commission , so she was designated a " Category C " ship . This classification required that she would be destroyed or sunk in deep water by 15 August 1946 . Instead , the Soviets decided to salvage the damaged ship and it was refloated in March 1946 . A number of speculations from Western historians about the ship 's fate arose in the decades after the end of the war . According to German historian Erich Gröner , after the Soviets raised the scuttled ship , they towed her to Leningrad . While en route , she reportedly struck a mine off Finland during a storm . After arriving in Leningrad , Graf Zeppelin was broken up for scrap in 1948 ? 1949 . Naval historians Robert Gardiner and Roger Chesneau state that the ship was towed out of Stettin in September 1947 , but she never arrived in Leningrad ; they speculated that a mine sank the ship while she was under tow .

According to Soviet records , on 19 March 1947 , the Council of Ministers decreed the destruction of former German ships . The first ship to be sunk , Lützow , was sunk off Swinemunde on 22 July 1947 . On 14 August Graf Zeppelin was towed into the harbor , and two days later to its final resting place . It was subjected to five series of controlled explosions of 180 mm (7 @.@ 1 in) shells and FAB series bombs . The first test imitated a FAB @-@ 1000 detonation in the exhaust funnel and lesser bombs below the flight deck . The second in the series was a single FAB @-@ 1000 explosion above the flight deck . The third , the fourth and the fifth series imitated penetration of FAB @-@ 100 , FAB @-@ 250 and FAB @-@ 500 bombs at flight deck , hangar deck and gun battery deck levels . These bombs were placed in cutouts in their target decks to imitate the effects of dive bombing . Graf Zeppelin remained afloat , and Admiral Yury Rall ordered a torpedo strike . A torpedo fired from an Elco PT boat exploded in the anti @-@ torpedo bulge but did not penetrate the belt armor . A torpedo fired by the destroyer Slavny penetrated the unprotected hull section below the bow elevator ; Graf Zeppelin sank 25 minutes later .

= = = Discovery in 2006 = = =

The exact position of the wreck was unknown for decades . On 12 July 2006 , the research vessel RV St. Barbara , a ship belonging to the Polish oil company Petrobaltic , found a 265 meter long (869 ft) wreck 55 km (34 mi) north of Władysławowo , which they thought was most likely Graf Zeppelin . The wreck rests at a depth of more than 80 m (260 ft) below the surface . After the wreck was located , the Polish Navy began a two day survey of the wreckage to confirm its identity . Using remote controlled underwater robots , they concluded that they were " 99 % certain " it was Graf Zeppelin .