Salvaging Graf Spee's Secrets

Several glass plate negatives were recently discovered in the photographic archive at the Devonport Naval Heritage Centre and investigations by David J B Smith revealed the intriguing background to the twin-barrelled guns depicted in these images.

N THE confines of a bland ground level room at the Argentine Naval Arsenal, a large eagle-emblazoned ensign was stretched out across the tiled floor. The room was just so. Everything had its place and everything was in its place, with one exception. Lying prostrate on top of an old German Imperial Navy flag, impeccably dressed in his blue-black serge uniform, was the Kapitän zur See of arguably the most infamous German Panzerschiff of World War Two. A crumpled cigar sat in a well-used ashtray. Several letters and a pipe were neatly placed on a desk, along with an empty glass, still emitting an odour of Scotch. To all intents and purposes it looked much like 45-yearold Hans Wilhelm Langsdorff was sound asleep, but a Mauser automatic pistol lay next to his open right hand. The Captain of the marauding pocket battleship Admiral Graf Spee had apparently taken his own life, a neat bullet hole in his right temple indicating the cause of death.

One of the aforementioned letters was addressed to the German Ambassador in Buenos Aires. The first paragraph read:

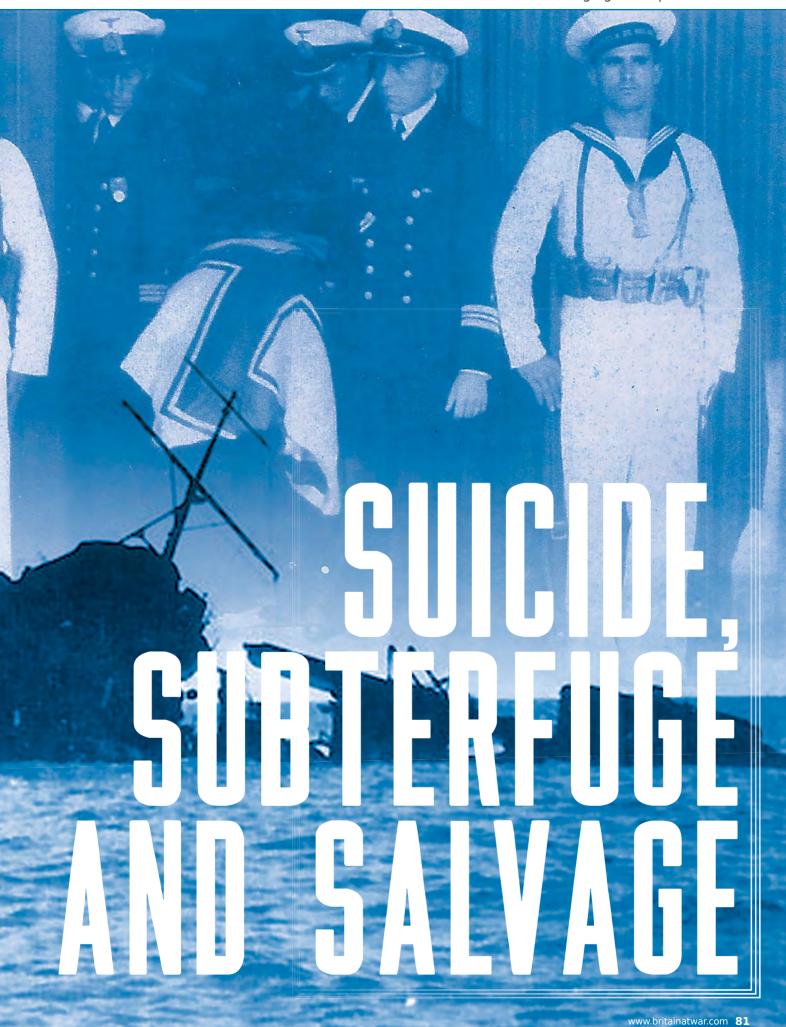
Your Excellency,

After a long struggle I reached the grave decision to scuttle the Admiral Graf Spee, in order to prevent her from falling into enemy hands. I am still convinced that under the circumstances this decision was the only one left, once I had taken my ship into the trap of Montevideo. For with the ammunition remaining, any attempt to fight my way back to open and deep water was bound to fail. And yet only in deep water could I have scuttled the ship, after having used the remaining ammunition, thus avoiding her falling to the enemy...

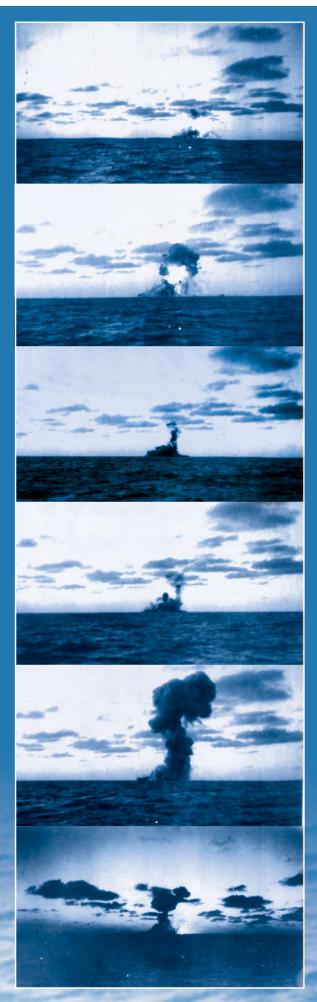
Just a week prior to Langsdorff's death, Admiral Graf Spee had been roaming the high seas with near impunity and proved extremely successful in its commerce raiding role. Between 26 September and 13 December 1939 Graf Spee stopped and sank nine Allied merchant vessels, totalling 50,089 tonnes. Langsdorff would allow the merchant crew time to disembark into lifeboats, the vessels were then searched for anything of intelligence value and scuttled or sunk by gunfire, the hapless crews transferred to one of the supply vessels that followed Graf Spee. >>

**MAIN IMAGE: Graf Spee's** wreck, taken 2 Feb 1940 by Richard D. Sampson, USS Helena. (US NAVAL HISTORY AND HERITAGE COMMAND (USNHHC))

TOP RIGHT: Langsdorff's coffin and honour guard. (DAVID I.B. SMITH)



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#### Wounded Battleship

On the morning of 13 December 1939, funnel smoke from the Panzerschiff was spotted by warships of Royal Navy Force 'G', comprising ships from the South American Cruiser Squadron, HMS Exeter, HMNZS Achilles and HMS *Aiax* and one of the first great sea battles of the Second World War ensued, becoming known as the Battle of River Plate. Langsdorff was encouraged to fight by the notion that his pocket battleship possessed superior firepower to the combined might of three lesser Royal Navy warships.

Graf Spee engaged headlong with Force 'G', bringing to bear her arsenal of 28cm guns mounted in two triple turrets, capable of firing 300kg projectiles over 36 nautical miles. Heavy and prolonged exchanges of gunfire ensued. Although damaged, Graf Spee made smoke and escaped. the wounded battleship headed for the port of Montevideo in neutral Uruguay with Langsdorff intending to effect repairs, refuel, and bury 36 members of his crew. On arrival at Montevideo harbour, Graf Spee glided into wind, applied astern propulsion, and stopped dead in the water, letting go her anchor at 00:10 on 14 December.

As Graf Spee sat riding at anchor, Langsdorff intently studied the damage reports and requested 15 days in harbour. To extend the 24 hours already granted, Langsdorff petitioned the Foreign Relations

Minister of the Uruguayan Republic, via Otto Langman, German minister at Montevideo. However, Uruguay was a neutral country and adhered to articles of the 13th Hague Convention, which laid out the rights and duties of neutral countries in wartime stating that an extension to stay in a neutral harbour may be increased above the statutory 24 hours in exceptional circumstances only. A vessel of a belligerent power could have its time in harbour increased to effect repairs that would make the vessel navigable and safe for sea, but it was declared in no uncertain terms that *Graf Spee* was not allowed to increase her armed force. To that end Graf Spee was granted 72 hours, after which she would be required to sail from Montevideo on 17 December and be clear of territorial waters by 20:00 or be interned.

#### Telephone Talk With Hitler

Langsdorff knew three days was not enough time to get his Panzerschiff safe and seaworthy. He reported back to German Naval Headquarters and informed them of his predicament. In dispatch No. 5 of the Admiralty report on the River Plate action, the British Naval Attaché at Buenos Aires, Captain H.W.U. McCall, said: 'It is known that Langsdorff had a telephone talk with Hitler after his arrival in Buenos Aires and rumour of some reliability says that it was of a most violent nature.' He was allegedly told to either sail and fight, or scuttle Graf Spee and not

LEFT: **Graf Spee** explosion sequence. (DAVID J.B. SMITH)



RIGHT: funeral of 36 of his crew in (DAVID J.B. SMITH)

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FAR LEFT: Langsdorff's burial.

LEFT & BELOW: Langsdorff's coffin. (DAVID J.B. SMITH)

let anything fall into enemy hands. Internment was not an option.

After the one-way telephone conversation, Langsdorff's mind was made up. To compound his situation, stocks of ammunition were much depleted. Ultimately, Graf Spee's fate was sealed and over the next 48 hours, the crew worked tirelessly, preparing her for scuttling by rigging explosives. Any secret equipment, instrumentation and documentation were rendered useless or destroyed. Over this period the majority of her crew were disembarked, the men transferred to the sympathetic German Bremen-Lloyd Line steamship Tacoma, also anchored in the harbour.

At 17:10 on Sunday 17 December, the pocket battleship weighed anchor and transited the channel leading out of the harbour, followed by *Tacoma* 15 minutes later. *Graf Spee's* starboard anchor was made ready for letting go.

Initially, the battleship was heading in a south-easterly direction. Only one of her four sets of diesel engines was operational, the remaining engines were disabled on sailing and after being started were deliberately not injected with lubrication. Total engine seizure swiftly followed.

### Ploughing Into Soft Mud

As she made headway, many of her portholes were opened and working parts of her smaller weapons were ditched overboard along with all small arms from the armoury. After a few cables she turned westward towards the mouth of the channel leading to Buenos Aires where Langsdorff first stopped *Graf Spee*. The majority of the skeleton crew disembarked for the last time, climbing down a pilot ladder into waiting boats. Once the small craft were clear to starboard, revolutions were rung on the telegraph

and the vessel moved off. Only 11 men, including Langsdorff, remained on board.

The Panzerschiff was around six nautical miles south-west of Montevideo when at 20:15 Langsdorff gave the helmsmen an order to alter course west. As the vessel left the deep channel and entered shallow water, the order to stop the remaining engine was passed. Graf Spee glided to a halt, her stem ploughing into the soft mud causing her to come to a stop with a shudder. Out of respect for neutral Uruguay, and so as not to block busy commercial shipping lanes, Langsdorff deliberately ran his ship aground clear of the deep water channel. The battleship's starboard anchor was let go to prevent the powerless vessel from drifting back into the shipping lanes and was specifically chosen because it could not be seen from the shore. Final checks were carried >>



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**Graf Spee's** only salvaged twin-barrelled L65 C33 10.5cm anti-aircraft gun. **Photographs** all taken at Devonport **Naval Dockyard** England - 14 July **1942.** (COURTESY OF THE DEVONPORT the swastika-adorned Kreigsmarine ensign was lowered. The remaining crewmen climbed down and boarded the waiting Captain's launch. Kapitän zur See Langsdorff was the last man to disembark Admiral Graf Spee.

The carefully placed explosive charges were linked to a selection of different detonation timers, all individually powered by 12-volt batteries. These timers had been liberated from several of the merchant vessels stopped and sunk by Graf Spee. The charges were strategically placed in specific areas to cause maximum damage; next to the torpedo warheads and in ammunition magazines forward and aft. At 20:54 the skyline erupted in a series of brilliant flashes. The sound of the seemingly silent explosion far out at sea only took a matter of seconds to travel across the water and hit the shoreside spectators. The charges placed at the stern of the vessel

ripped her stern clean off, causing her to settle, stern first. The charges in the forward 28cm magazine failed to detonate. This caused the ship to settle aft on the seabed, with a 30° list to starboard.

#### Clandestine Salvage **Operation**

The destruction of the battleship kickstarted a chain of events requiring quick thinking, subterfuge and a degree of luck on the part of British Naval Intelligence and the Director of the Signal Department (DSD). The Admiralty were anxious to discover all they could about the battleship and a clandestine salvage operation was mounted, documented as 'Case 6160'. This would eventually see a specific item from Graf Spee's revolutionary weapons systems salvaged, analysed and unceremoniously left on a cluttered jetty at Devonport.





Prior to Graf Spee embarking on her wartime activities, every member of her ship's company was presented with a photograph of the ship and shortly after her arrival at Montevideo, one of these was obtained by a Royal Navy officer in the port and sent to the Naval Intelligence Division (NID). Carefully examined, a fitting on the masthead could not be identified and was not present in other photographs of the vessel. It was not known for sure in 1939 if Graf Spee carried Radio Detecting and Finding equipment (RDF), the precursor to Radio Detection and Ranging (RADAR) but news of the scuttling was telegraphed around the world with photographs published by various US news agencies

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and coming to the attention of NID. Several photographs showed a mattress-shaped antenna mounted on a rotating foretop rangefinder. The Admiralty wanted to know what this device was and also wanted samples of the armoured plating and details of the construction and thickness of her electrically welded hull. For the Admiralty, getting people from Britain to survey the wreck became a priority.

# The New Owner of Graf Spee\_

It is thought Langsdorff attempted to scuttle *Graf Spee* in international waters so she could be salvaged legitimately by Germany. On 19 January 1940 a report filed by C.G. Jarratt, Head of the Military Branch, said '...the wreck would still be German property even if *Uruguayan jurisdiction were* 



admitted over the waters in which it lies'. From the outset there was a possibility that even if the German government could not logistically salvage the wreck, they may have attempted to sell her to a salvage company in Uruguay under the proviso that German experts would oversee the process and ensure the 'disappearance' of any remaining military secrets.

Luckily for the British, a real mistrust and hatred for the Nazi regime existed in Uruguay, making a British purchase of the wreck eminently possible. The eventual transaction was very much the brainchild of the British Minister to Uruguay, Mr Millington-Drake who was fortuitously acquainted with a Uruguayan businessman called Senor Don Julio Vega-Helguera and under the impression that the textile exporter Vega was trustworthy. This may have been far from the truth. British intelligence in Montevideo had discovered that 32-year-old Vega was known to be a thoroughly untrustworthy character, dabbling in anything that would show a reasonable profit. He did, however, have the ear of many Uruguayan ministers and could arrange practically anything although he was also a very close friend of the German Minister in Uruguay.

Julio Vega successfully negotiated unconditional rights to the wreck of *Graf Spee* and on 23 February 1940 purchased the entire sunken vessel for a princely sum equivalent to £14,000. Unknown to the Germans and Uruguayan government, the purchase had been instigated and paid for by the British government. As far as the salvage company and





outside world knew, Vega was the new owner of *Graf Spee*. Secretly, he became a go-between with the British government and Uruguayan salvage company commissioned to carry out the work. On his final bill to the Admiralty he wrote: *Thave done this for love of the good cause which England is defending and out of personal friendship for the British Minister, Mr Millington-Drake*.'

#### Pro-Nazi

The salvage company of choice was Regusci and Voulminot, the biggest and most capable engineering firm in Uruguay. Senor Voulminot was of French extraction and his company refused categorically to carry out any repair work on *Graf Spee* after she first entered Montevideo although Voulminot's company did supply

воттом: Graf Spee's No.2 10.5cm/65 twin anti-aircraft gun mount (port side, amidships) which would eventually end up in **Devonport. Here** photographed on board her wreck on 2 February 1940 by Richard D. Sampson of the USS Helena. (USNHHC)



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**ABOVE: Graf Spee's** Seetakt radar antenna and 15cm broadside guns. (USNHHC)

**TOP RIGHT:** The Ship's starboard (No.1) 10.5cm/65 AA mount, partially collapsed smokestack (R) with a siren on its upper face, and 20mm cannon mount (centre) on the searchlight platform. Taken by Richard Sampson.

**FAR RIGHT:** Graf Spee at anchor in Montevideo.

anchored off

materials for emergency repairs to Exeter as she lay in the Falkland Islands after The Battle of River Plate.

Once the wreck was sold, it was guarded by the Uruguayan navy and only permitted people allowed to approach or board the ship and because scientists at the Air Ministry were in the process of developing RDF it was decided to send an expert to survey the wreck. Consequently, Scientific Officer Mr Labouchere Bainbridge-Bell, one of the inventors of RADAR, was sent to Uruguay. In order to keep the real reason for his visit secret, and not to offend or embarrass the Uruguayan government, Bainbridge-Bell was to pose as a



salvage expert. It was suggested, as a ruse, that Great Britain was interested in purchasing the wreck for its scrap

*Graf Spee* was listing heavily to starboard when Bainbridge-Bell finally arrived, and he had to use all his strength climbing the tilting foremast to inspect the object of NID's interest. Although the Germans had attempted to do a thorough job in sabotaging the vessel, the scientist recognised components required for an RDF system; definite proof that Germany had developed an early RADAR-type capability. Over the duration of his first visit, Bainbridge-Bell removed several items of interest for further analysis and placed them on the sloping deck, wedged against fittings to prevent them rolling overboard. On his return to the location where he had left the items he was aghast to find they had disappeared. Asking what had happened to them, he was told they had slid over the side! This was the moment Bainbridge-Bell realised that his escort was, in fact, pro-Nazi but he continued to study the wreck over the course of several visits, eventually salvaged many items and making numerous

notes and sketches

of Graf Spee's RADAR system and its components when compiling his report. In his suitcases Bainbridge-Bell also brought back various pieces of the new RADAR outfit, all of this valuable intelligence backed up by photographs and diagrams of Graf Spee's internal RADAR office.

It is not known if Bainbridge-Bell's discoveries altered or advanced British development of RADAR in any way, but it proved the German Navy was more advanced than the British had first thought. The Royal Navy would have no gun-laying RADAR capability until 1941 and it was the experimental Seetakt (Seetaktisch) FuMO 22 fitted to her foretop rangefinder cupola that enabled Graf Spee to locate and accurately fire on Royal Navy warships in 1939.

#### Construction and Armament

Keeping up the pretence of actually salvaging metal from the wreck, NID instructed representatives from a real British salvage firm, Messrs. Thomas W. Ward and Co., to travel to Uruguay and survey Graf Spee for scrap. The two representatives from





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the company, Mr F.A. Smith and Mr S.J. Dyal, arrived in Buenos Aires on 5 April 1940. Unfortunately, Smith had died just before arrival from a burst ulcer, with Dyall managing to gain access to the wreck on 6 April. Many of his visits were severely hampered by bad weather, making the wreck difficult to board and unsafe to investigate. Mr Dyal's initial report was cabled to the Director of Naval Intelligence (DNI) on 9 April 1940. Dyal had found the wreck lying in 9 metres of water and listing 10° to starboard, all decks under water and the ship partially buried to a depth of 3 metres in mud. Approximately 300 of her portholes were wide open and she continued to sink further.

Next to arrive in the country were two men from the Admiralty, also said to be representing T.W. Ward and Co. However, they were in fact sent undercover. Mr M K Purvis and Lt C P Kilroy travelled from Britain to New York on board the soon-to-be ill-fated Cunard cruise liner RMS Lancastria and then on to Montevideo. Purvis was from the Royal Corps of Naval Constructors (RCNC), representing the Director of Naval Construction (DNC) and the Director of Naval Ordnance (DNO). The fastidious notes made by Purvis allow the salvage story of Graf Spee to be recounted today. Kilroy, meanwhile, was torpedo officer on the staff of RAML and was sent out to investigate aspects of Graf Spee's degaussing, anti-mining, fire control and torpedo capabilities. Over a period of several days Purvis and Kilroy visited the wreck many times, investigating her construction and

To facilitate the removal of parts, an ex-Royal Navy seaman was

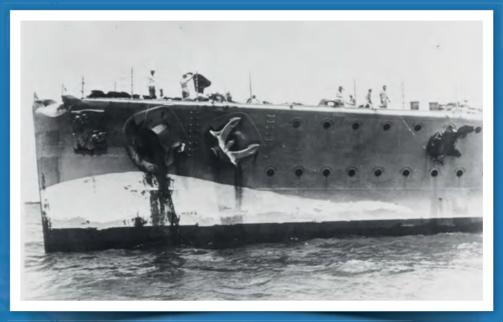
employed locally by Millington-Drake. Mr Deakin, who was living in the country, was appointed charge-hand overseeing a small team removing items which interested the Admiralty, including: two whole pieces of armour plate from the top of the main gun turrets; two pieces of side armour from the conning tower; a set of twin 4cm guns; a stabilised director complete with base; six instruments from the lower control position; a set of twin 10.5cm guns with mounting; one 15cm gun with mounting; sundry small samples and instruments; samples of plates; samples of welding; and one or more of the 28cm gun barrels from the forward turret, the barrels estimated at 50 tons each. The list was pretty exhaustive, although it is not known if all requested items were actually recovered.

#### 'A Ship We Should Not Imitate

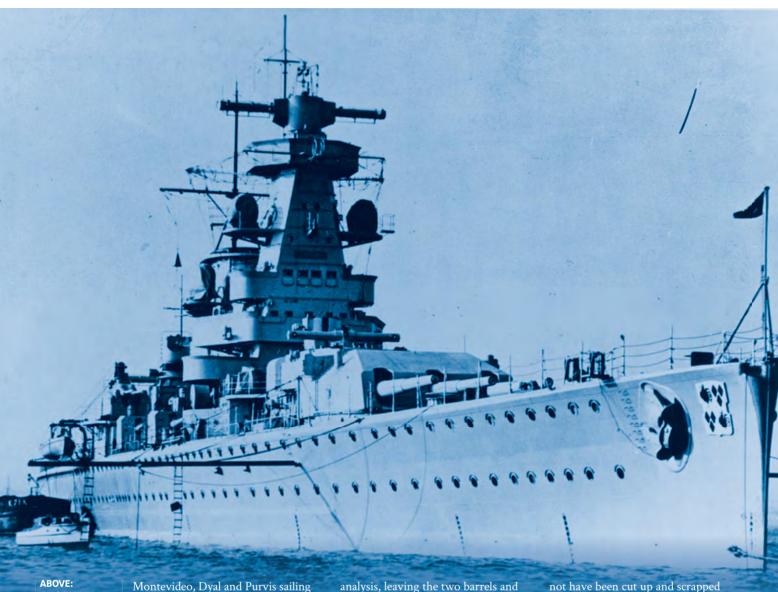
The removal of items was a very dangerous affair, the wreck continually shifting and a likelihood of further explosions. Nevertheless, a key item on the Admiralty's list was one of the six twin-barrelled L65 C33 10.5cm anti-aircraft guns, but the forward starboard gun was submerged. The only salvageable unit being the port forward mounting. This weapon had been put out of action by Exeter when a shell had entered the gun magazine feed. Deakin and his team removed the securing bolts, a crane was provided by Voulminot and the larger items, including this 20-ton gun, were removed, boxed, and kept at Voulminot's yard for onward transit. Purvis, Kilroy and Dyal took hundreds of photographs and compiled detailed reports prior to departing

**ABOVE:** Another shot of the Graf Spee in Montevideo harbour. (USNHHC)

**BELOW:** Spee's port bow, taken in Montevideo harbour following the Battle of the River Plate. Note the ship's badge mounted just forward of her anchors and hawse pipes, false bow wave 'moustache' camouflage, and shell damage in the upper hull side (right).



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**ABOVE: Graf Spee** moored in harbour, circa 1936-1937. Note the ship's coat of arms. (USNHHC)

**RIGHT: Graf Spee's** port bow while in Montevideo, Crew are working over the side to repair damage from an eightinch shell fired by the British heavy cruiser Exeter. The notation 'The "Moustache' refers to the false bow wave painted her bows. The original photo came from Rear **Admiral Samuel Eliot Morison's World War II** history project working files.

for Great Britain on 2 May 1940, on board the Dunster Grange, with Kilroy remaining behind to supervise continued removal and secure storage of items from Graf Spee.

Merchant vessels regularly transited between Montevideo and Great Britain, carrying meat, grain and other essential supplies and Graf Spee's port anti-aircraft gun was duly loaded on board the Houlder Line steamship, Princesa, bound for Liverpool from Montevideo via Free Town, South Africa, as part of convoy SL34. The convoy had to cross the dangerous expanse of the Atlantic, a prolific hunting ground for German U-boats. During the crossing, two vessels, Barbara Marie and Willowbank, were sunk by U-46.

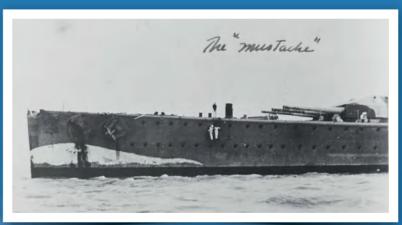
Princesa was detached from the convoy on 16 June 1940 and made her way towards Plymouth Sound to berth at No.7 Wharf, Devonport Dockyard. Her special cargo was unloaded and inspected with the armoured plating of the antiaircraft gun taken away for further

analysis, leaving the two barrels and the weapon's splinter box framework along with all internal workings. As time passed, the Graf Spee gun was moved to a jetty at the bow end of No.8 Dry Dock. Here, in July 1942, these photographs were taken.

For years, Graf Spee's gun remained forlorn and ignored but had the historic importance of this weapon been identified earlier, the only existing twin-barrelled heavy antiaircraft gun from Graf Spee may

not have been cut up and scrapped in the 1970s. These photographs are probably the only remaining record proving that a gun from the Panzerschiff Admiral Graf Spee was actually landed on British soil

The general conclusion of the inspection and salvage of Graf Spee, written by M.K. Purvis in his report to the Admiralty read: 'The River Plate action and the ensuing inspection of the wreck of "Graf Spee" show this type of ship to be one that we should not imitate...' 🖸



(USNHHC)