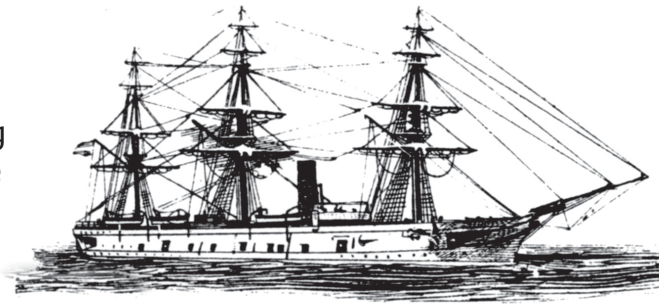


**PROTECTED CRUISER  
GELDERLAND**



INTRODUCTION

Six Holland-class “pantserdekschepen” (protected cruisers) were built in two groups of three ships. They succeeded the ship-rigged unprotected cruisers of the *Atjeh*-class also classified as “steam frigates”. Being faster but without sails they had a large endurance capable to negotiate the considerable distances in the East Indies Archipelago.



*Atjeh-class*



ARMoured CRUISERS

From the late 1850s navies began to substitute their wooden ships-of-the-line by ironclad warships. However, the frigates and sloops which carried out scouting, raiding, and merchant ship protection remained unarmoured. For several decades it proved difficult to design a ship with any substantial amount of protective armour and capable of the speed and range required of a ‘cruising warship’. The first attempt to design armoured cruisers like the British HMS *Shannon*, proved to be unsatisfactory. Generally these ships were too slow for their cruiser role. HMS *Shannon* was the last Royal Navy ironclad to be built with a propeller that could be hoisted to reduce drag when

The Dutch East Indies (or Netherlands East Indies)

*During the 19th century, Dutch possessions and hegemony were expanded, reaching their greatest territorial extent in the early 20th century. This colony which later formed modern-day Indonesia was one of the most valuable European colonies under the Dutch Empire’s rule, and contributed to Dutch global prominence in spice and cash crop trade in the 19th to early 20th century. The colonial social order was based on rigid racial and social structures with a Dutch elite living separate but linked to their native subjects. The term Indonesia came into use for the geographical location after 1880. In the early 20th century, local intellectuals began developing the concept of Indonesia as a nation state, and set the stage for an independence movement. (Wikipedia)*

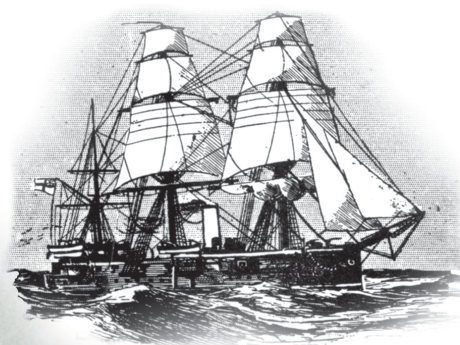


she was under sail and the first ship to have an armoured deck.

During the 1870s the increasing firepower of armour-piercing guns made armouring the hull of a ship more difficult as heavier armour plates were required. Even if the weight of armour dominated the design of the ship it was likely that the next generation of guns would be able to pierce it. The alternative was to leave the sides of the ship vulnerable but to armour a deck just below the waterline. Since this deck would only be struck very obliquely by shells it could be less thick than belt armour.

## DUTCH EAST INDIES TILL 1890

It can be maintained with some exaggeration that until the end of the First World War the Dutch East Indies existed by grace of the Royal Netherlands Navy. The East Indies meant trade competition but they were no longer a geopolitical threat to the British interests in Asia.



HMS Shannon

Great Britain had an interest in maintaining the existing colonial political relations. This to avoid that another European power would settle itself in the East Indies Archipelago. The British however were during a long time the only ones who could pose a threat to the Dutch Indies. Defence at sea against the British would be lost in advance. Besides that a British expeditionary invasion force would most certainly be too strong for the KNIL (the Royal Dutch Indies Army). Defence on land would only be significant in the interior of Java. Relations with Great Britain and France deteriorated seriously in 1830 because both countries advocated the separation of Belgium from the Kingdom of the Netherlands. This, combined with the experiences of the Java War (1825-1830) resulted in a new defence plan for Java. Later (1844) this was underpinned by a number of major central forts in Middle Java and at the main ports. The plan also provided for the evacuation of the Government from the vulnerable Buitenzorg and Batavia in case of an invasion.



The ship would be designed so that the engines, boilers and magazines were under the armoured deck but had sufficient displacement to warrant buoyancy even in the event of damage. Cruisers with armoured decks and no side armour became known as protected cruisers. They outnumbered the armoured cruisers in popularity in the 1880s and in to the 1890s. These ships were wanted for protection of overseas trade and especially for the French, British and Dutch to police their vast overseas empires.



*The landscape of Java, dominated by some volcanoes.*  
(Painting by Abraham Salm)



## HNLMS Gelderland

This remained the situation in the decades to come. In the meantime Britain steadily founded more colonies in Asia and Africa. The Dutch government feared that they would try to extend their possessions in the Indian Archipelago. This distrust became the main motivation for the Atjeh war in 1873. This war would drag on for more than 30 years. The Netherlands wanted to occupy this Sultanate which had been independent till then before the British would have the opportunity to do so.

Gradually the fear of British expansion faded. They were still considered the most likely enemy, followed by the Russians. The strategic principles of 1892 consisted of three main tasks for the navy.

Holland were virulently anti-British because of the Boer War. A graver conflict with Great Britain suddenly did not seem to be that unthinkable.

### NEW SHIPS

The Royal Netherlands Navy went some way towards the replacement of sail by steam in that period. The principal propeller driven ships being three frigates, five corvettes and five sloops with two more on the stocks. The problems of the Dutch navy were difficult to solve for these ships were better suited to the protection of the colonies than to the defence of the Netherlands itself.



*Instruction corvette Nautilus is drying sails. In the rear 'Pantserschip' Piet Hein.*



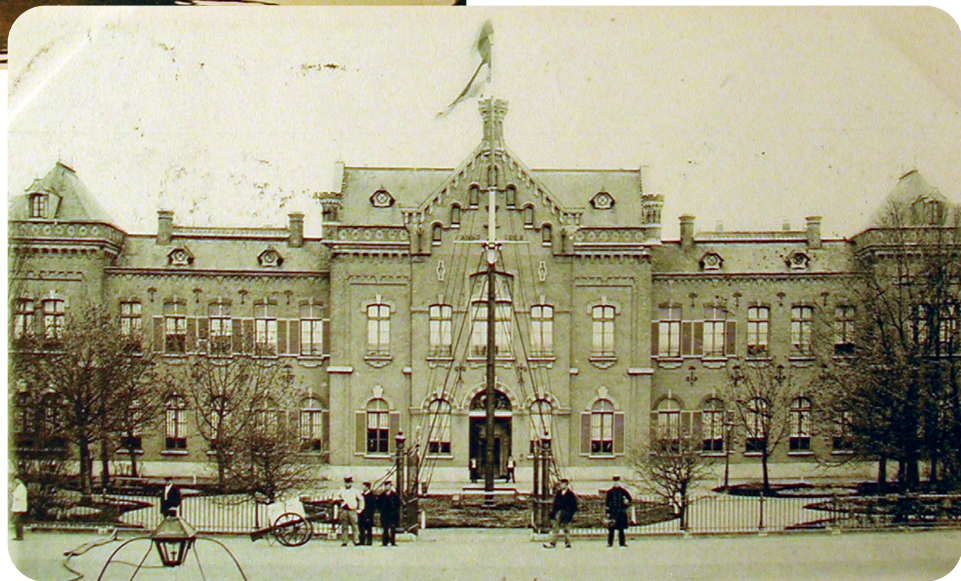
*Port of Den Helder, the Royal Netherlands Navy's main naval base.*

This would still be in force for the defence of the Dutch Indies at sea in 1942.

- (1) Act against violations of neutrality in the East Indies;
- (2) Carry out patrols in the seas surrounding Java;
- (3) Attack enemy landing fleets on the coast of Java.

The six cruisers of the *Holland*-class were suitable for these tasks as well as for securing the shipping lanes to the homeland. By 1900 when these cruisers were commissioned the sentiments in

Most of the ships were built in the Netherlands. The important exception being seven of the early ironclads by Laird, Napier or La Seyne and some torpedo boats from Yarrow. Heavy guns were first from Armstrong but later Krupp BL. The speed of naval vessels increased annually. In 1889 the latest British and French cruisers achieved 20 knots. Just abandoning sail made these ship differ consirably from those of only one decade ago. The introduction of the triple-expansion machinery that used the steam thrice instead of twice as in the preceding



*The Royal Netherlands Naval College was founded in 28 August 1829. Since 1854 the campus is in Den Helder.*



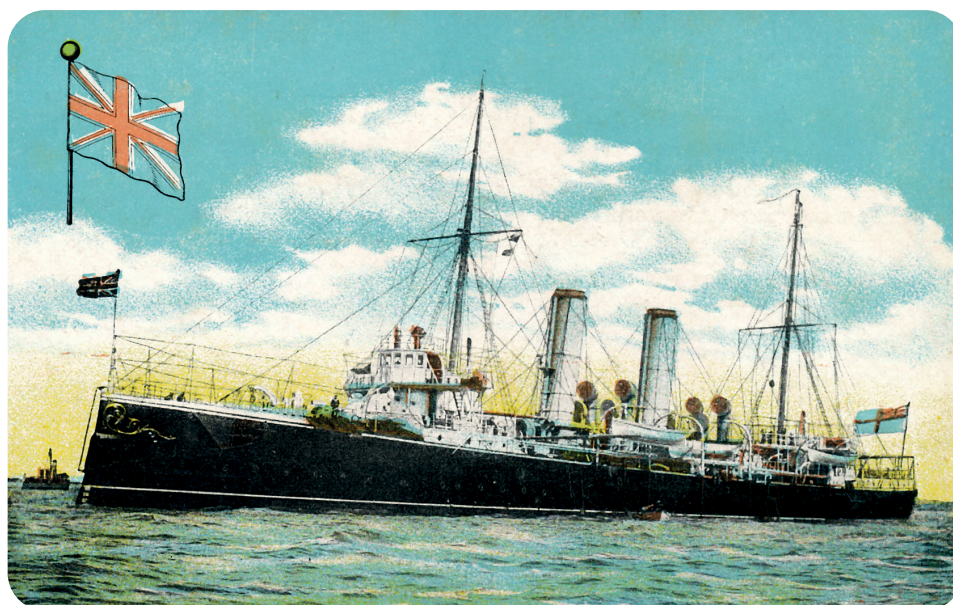
compound engines made large fuel savings possible. Of these newer cruisers HMS *Apollo* had been commissioned in 1892.

### BRITISH APOLLO CLASS

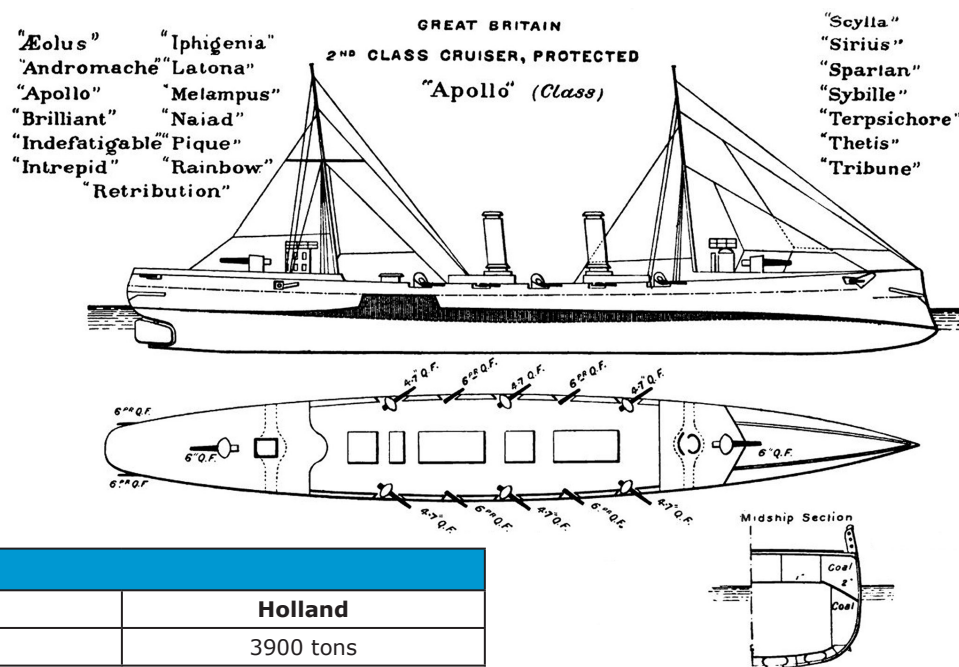
In 1890 new 2nd class cruisers were built for the Royal Navy under the Naval Defence Act of 1889. It was to increase the United Kingdom's naval strength. The government provided an extra £20 million over the following five years for no fewer than 70 ships, 42 of which were cruisers. The cruisers were divided in 17 first class (*Edgar* and *Astrea* class), 21 second class (*Apollo* class) and 4 third class (*Pearl* class).

The new *Apollo* class light cruisers were the largest class of cruisers ever built for the Royal Navy. The ships had a displacement of 3400 tons. They were generously hulled but quite modestly armed for their size. Armed with two 6 inch and six 4.7 inch guns they were criticized for lack of firepower. The ships were good steamers but proved to be poor sea boats because of the low freeboard amidships. The class would not see much service and were mainly relegated to reserve. In later British designs displacement was increased.

A committee in the Netherlands was ordered to select a design that would be suitable for the colonies as well as in home waters. The new ships should be capable of countering foreign hostilities and enforce



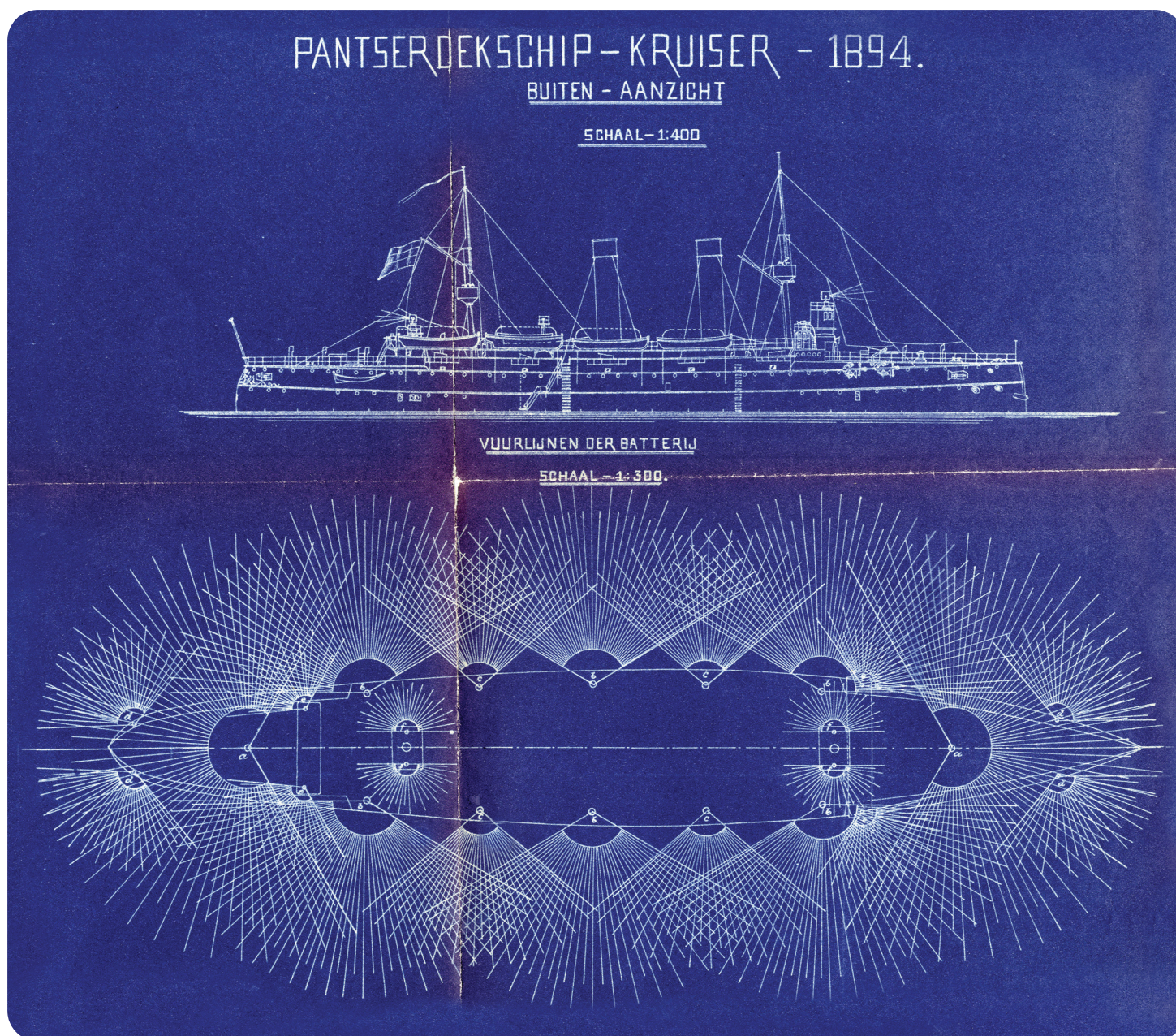
*Apollo* class. (Collection H. Visser)



Main data		
	Apollo	Holland
Displacement	3600 tons	3900 tons
Dimensions	91 x 13 x 5.3 meters	93.3 x 14.81 x 5.4 meters
Protection (mm)	armour deck: 51	armour deck: 50, command tower: 100
Engines (hp)	9,200	10,548
	2 shafts	2 shafts
Max. Speed (nm)	20	19.62
Bunker capacity	1,000 m <sup>3</sup>	1,000 m <sup>3</sup>
Complement	273	312
Armament	2 guns 15 cm, 6x 12 cm, 8x 5.7 cm and 1x 4.7 cm	2 guns 15 cm, 6x 12 cm, 4x 7.5 cm, 8x 3.7 cm and 4x 3,7 cm
	2 torpedo tubes and 3 torpedo cannons	1 torpedo launcher above the waterline

prestige for the colonial government. Opinions differed between a 'Pantserschip' (coastal battleship) or a 'Pantserdekschip' (protected cruiser). The latter was faster and lighter armoured. The British *Apollo* class design attracted attention. Because of the large number of ships built, the Dutch government considered the design to be successful. The idea of adapting and converting it to their own requirements arose. The adapted design turned out slightly larger than the British one.





## THE HOLLAND CLASS

Contrary to the *Apollo* class, the ships were good sea boats, fast and with beautiful lines. By the turn of the century the ships were the fastest ships of the Royal Netherlands Navy. They were also the first larger ships without sailing rig. A point of criticism in those days. The crew would be unable to practice sailing and therefore not trained to learn good seamanship.

Although the ships were well armed, in the East Indies they were considered to be the underdog in a possible engagement, with units of major sea powers in the East

(Britain, Russia or the USA). In coastal areas of the Archipelago they proved to be large for safe manoeuvring in shallow water.

The impression is given that the ships were heavily armed. But in most navies 15 cm guns were secondary and not the main armament. For the Netherlands navy it was the first time the 15 cm calibre was used as main armament.

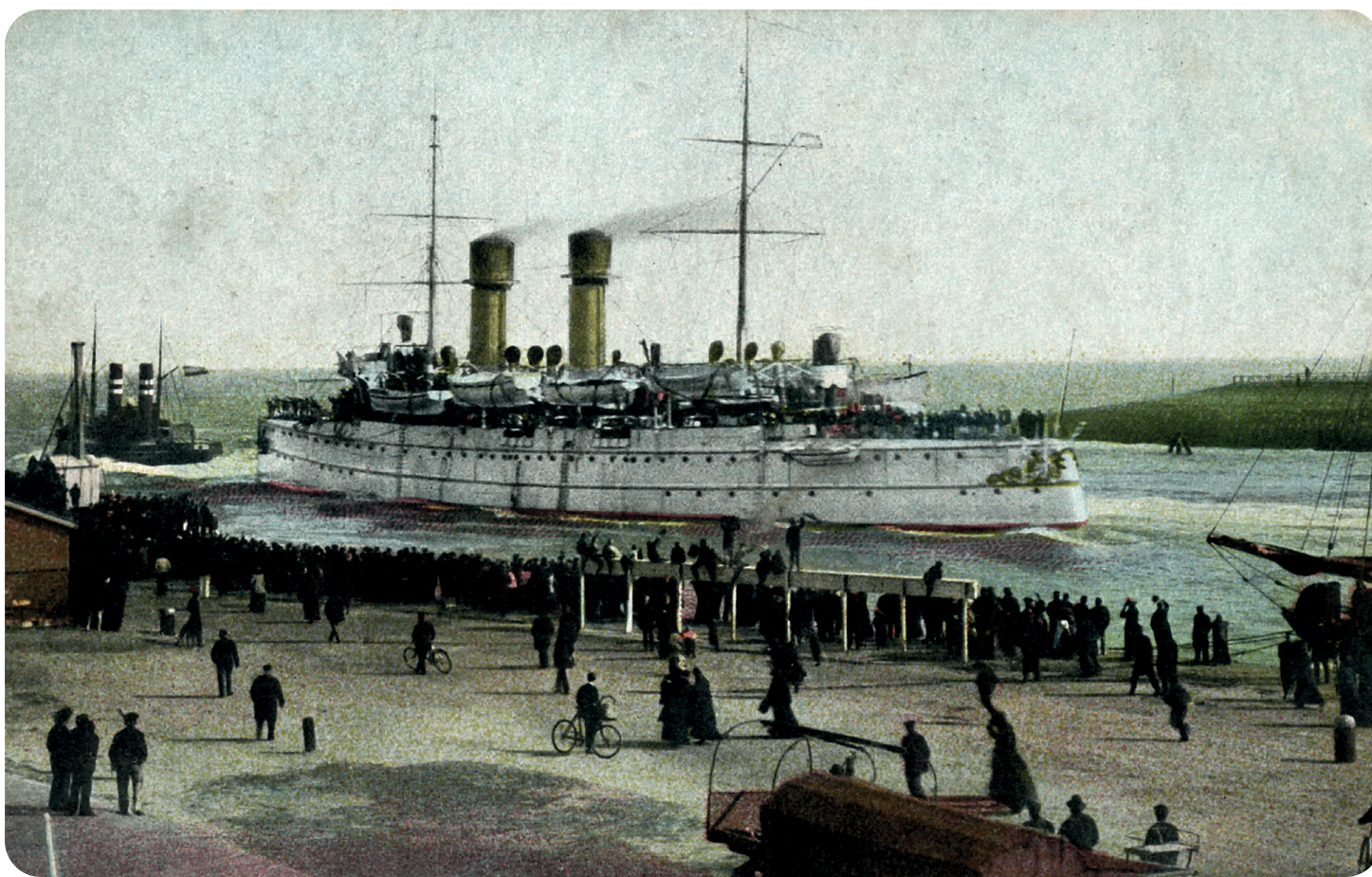
As secondary armament ships carried a battery of three 12 cm guns on either side.

*The arcs of fire of the new ships.*

The weight of the shells was only half the weight of the 15 cm ones.

The final design was a given balance between tonnage and available budget. Resulting in a ship that could be deployed for many tasks worldwide, to defend or represent the Kingdom of the Netherlands.

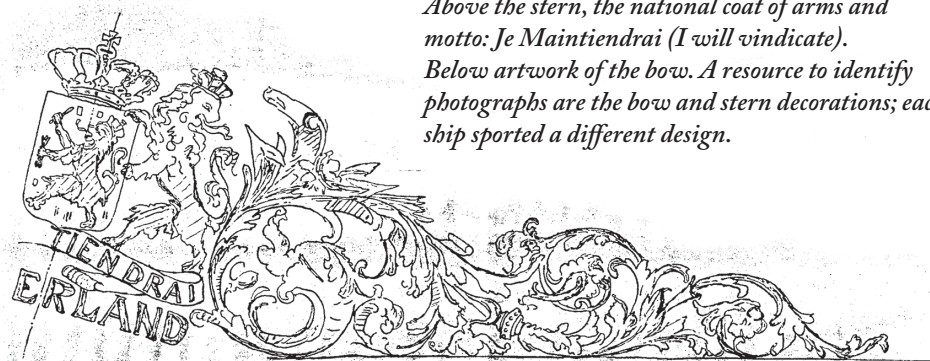




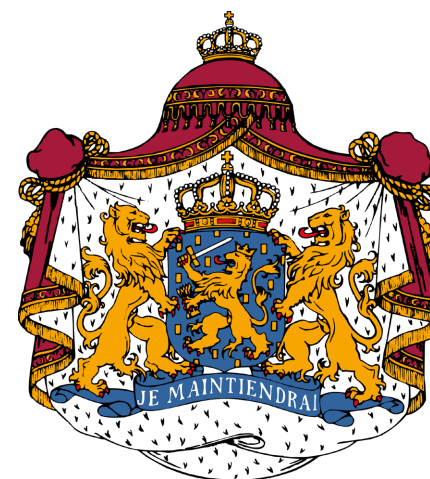
*HNLMS Gelderland leaving Den Helder. The white hull with buff funnels, indicates employment overseas. (Warships for North Sea duties had black hulls)*

*(Collection H. Visser)*

*Hull decorations for Gelderland. Above the stern, the national coat of arms and motto: Je Maintiendrai (I will vindicate). Below artwork of the bow. A resource to identify photographs are the bow and stern decorations; each ship sported a different design.*



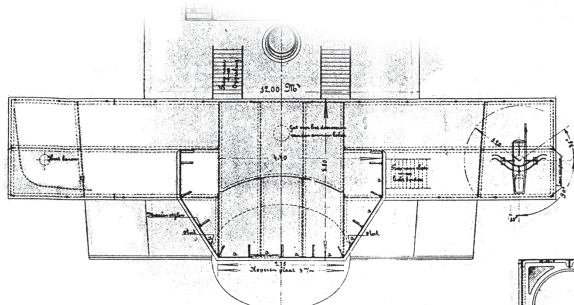
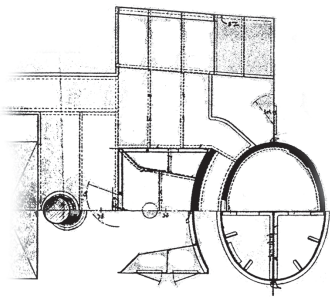
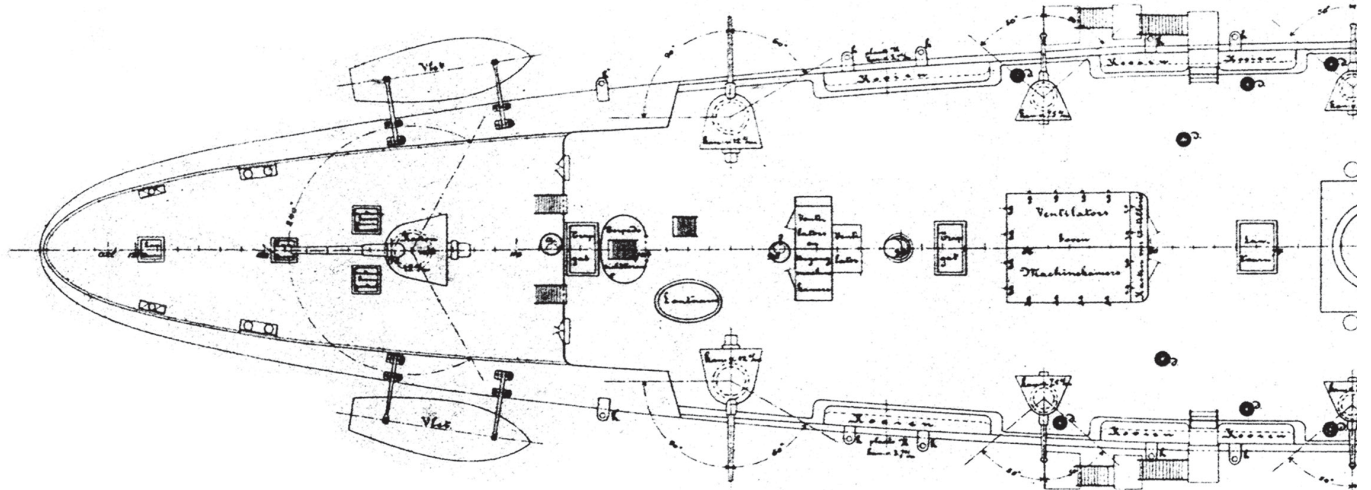
*SS „Gelderland“  
Versiering voor en achterschip*



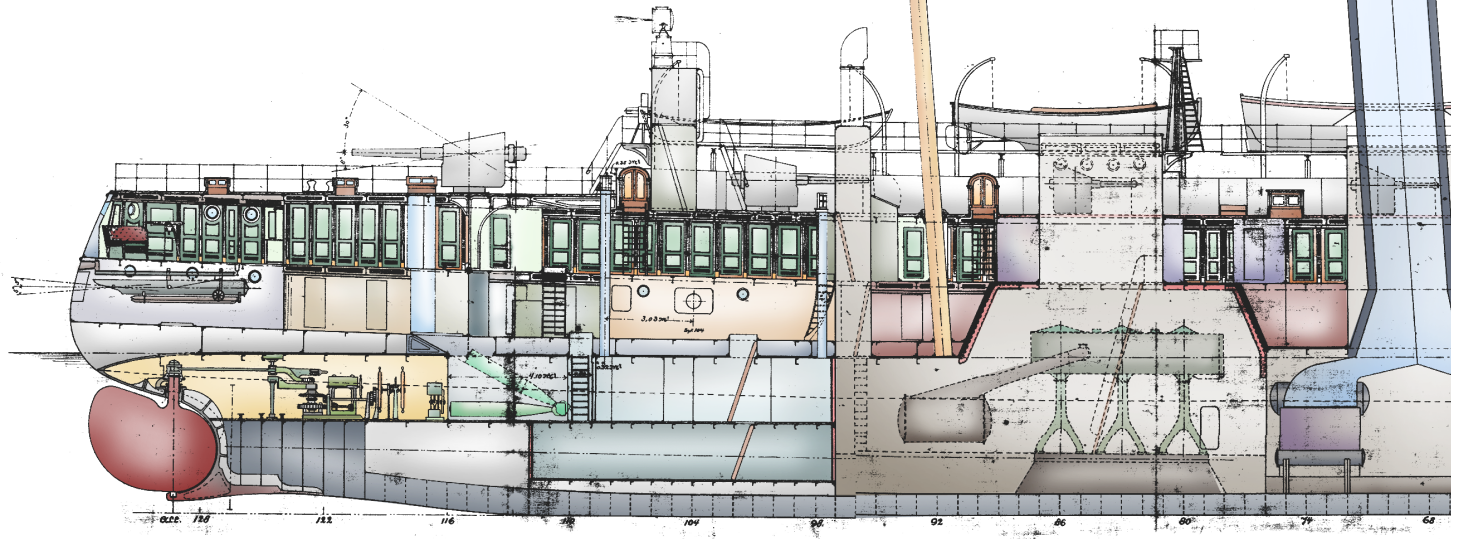
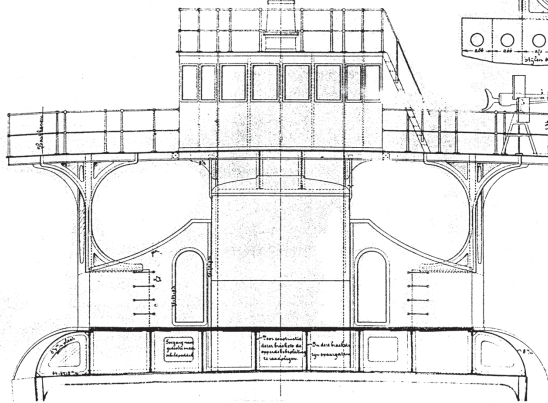
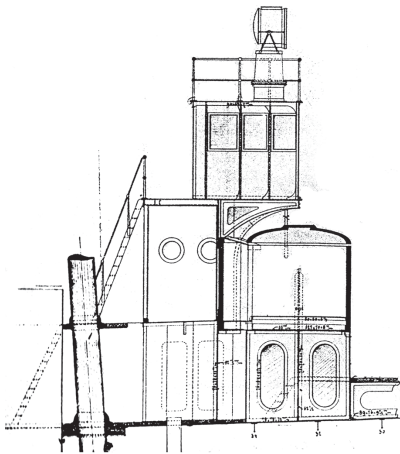
*The Greater Coat of Arms of the Realm (or “Groot Rijkswapen”), is the personal coat of arms of the monarch of the Netherlands (currently King Willem-Alexander). The government of the Netherlands uses a smaller version without the mantle (cloak) or the pavilion or sometimes even only uses the shield and crown. (Wikipedia)*



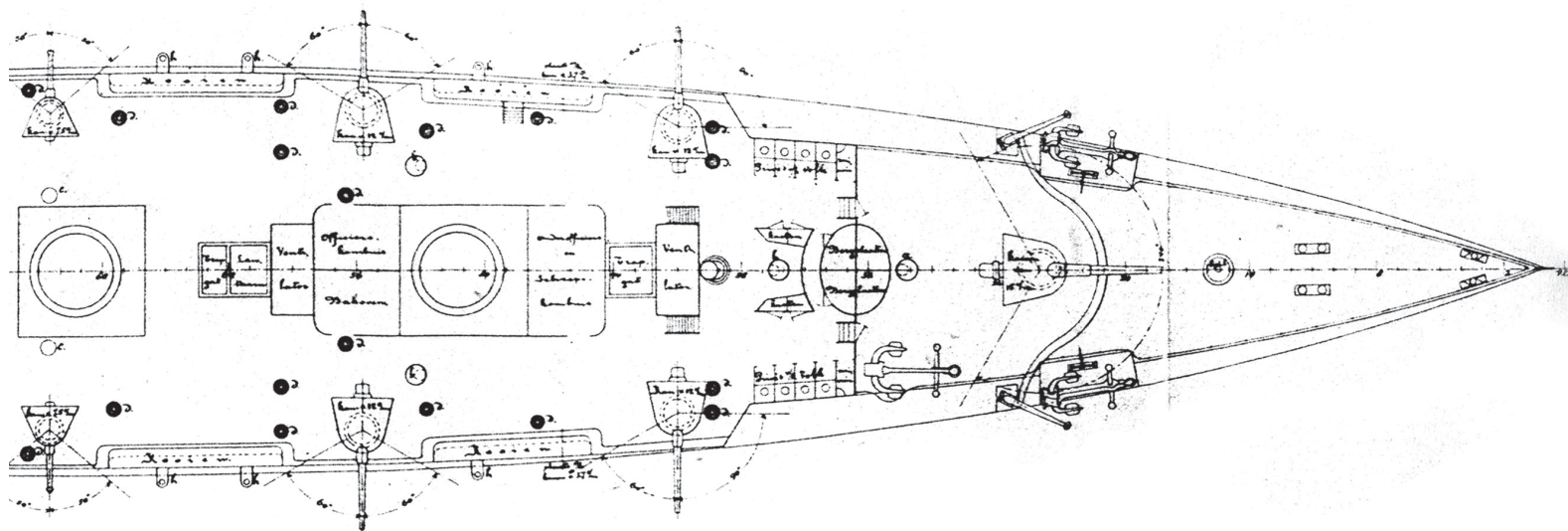
*The gundek*



*HRH Princess Juliana visiting. The second batch had a somewhat larger square wheelhouse.*







With a maximum bunker capacity of 800 to 900 tonnes their triple expansion engines had on paper at least the impressive range of 8.000 nautical miles at a speed of 10 knots. This turned out to be significant less.

The *Zeeland* reached 19.5 knots during trials, with a normal displacement of 3.958 tonnes. (Normal displacement had been the current term internationally since 1890. This was calculated for a ship that

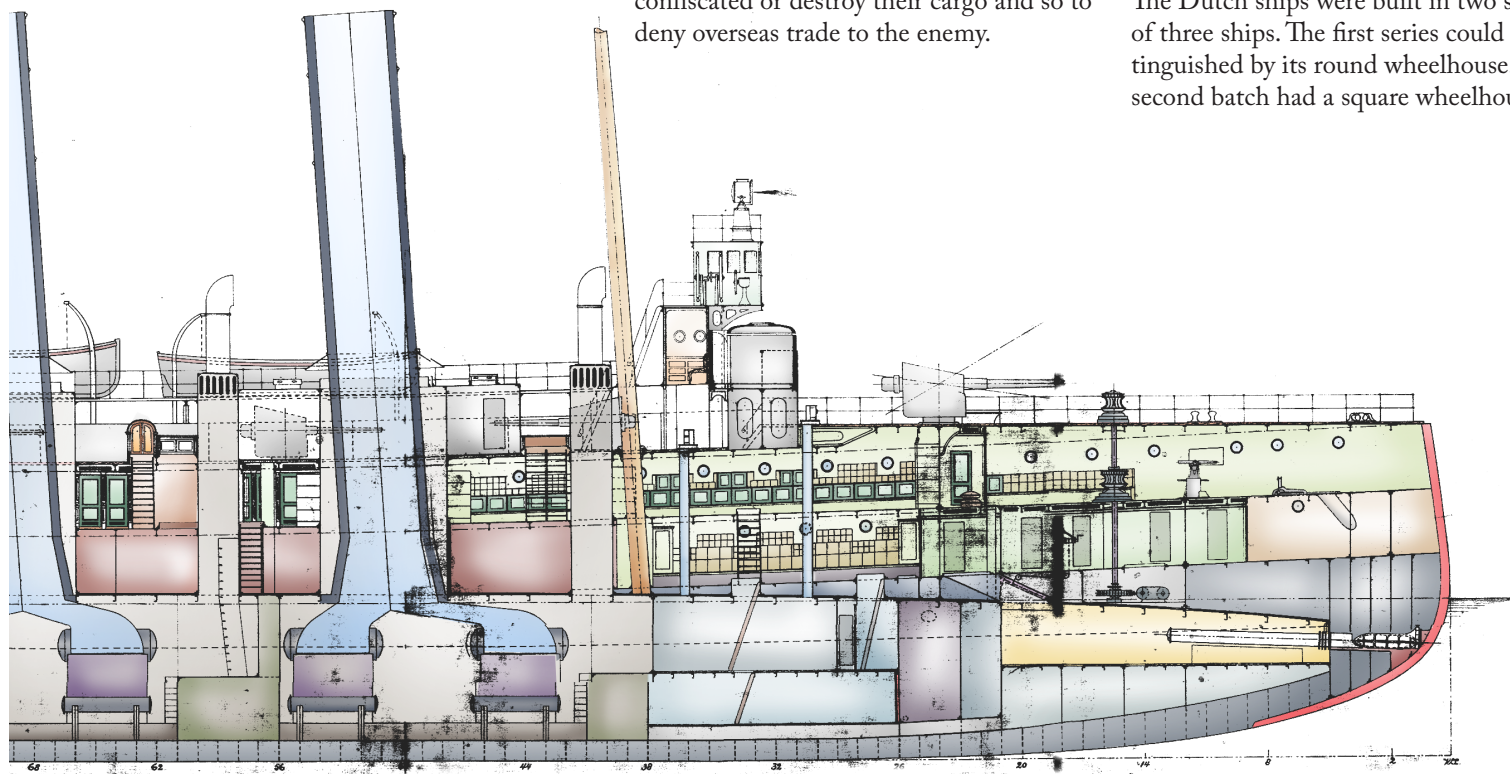
was approximately half loaded) Full load displacement for HNIMS *Zeeland* would be 4.409 tonnes.

Different types of warships had been developed during the 19th century. Torpedo vessels had joined the fleet. The battleships inherited the tasks of the former ships of the line. The cruisers operated on the flanks like the former frigates. The protected cruisers were intended to patrol the sea lines of communications to intercept merchantmen, confiscated or destroy their cargo and so to deny overseas trade to the enemy.

The smaller cruisers had three tasks:  
1- command torpedo boats,  
2- reconnoitre for the battle fleet  
3- intercept merchant vessels.

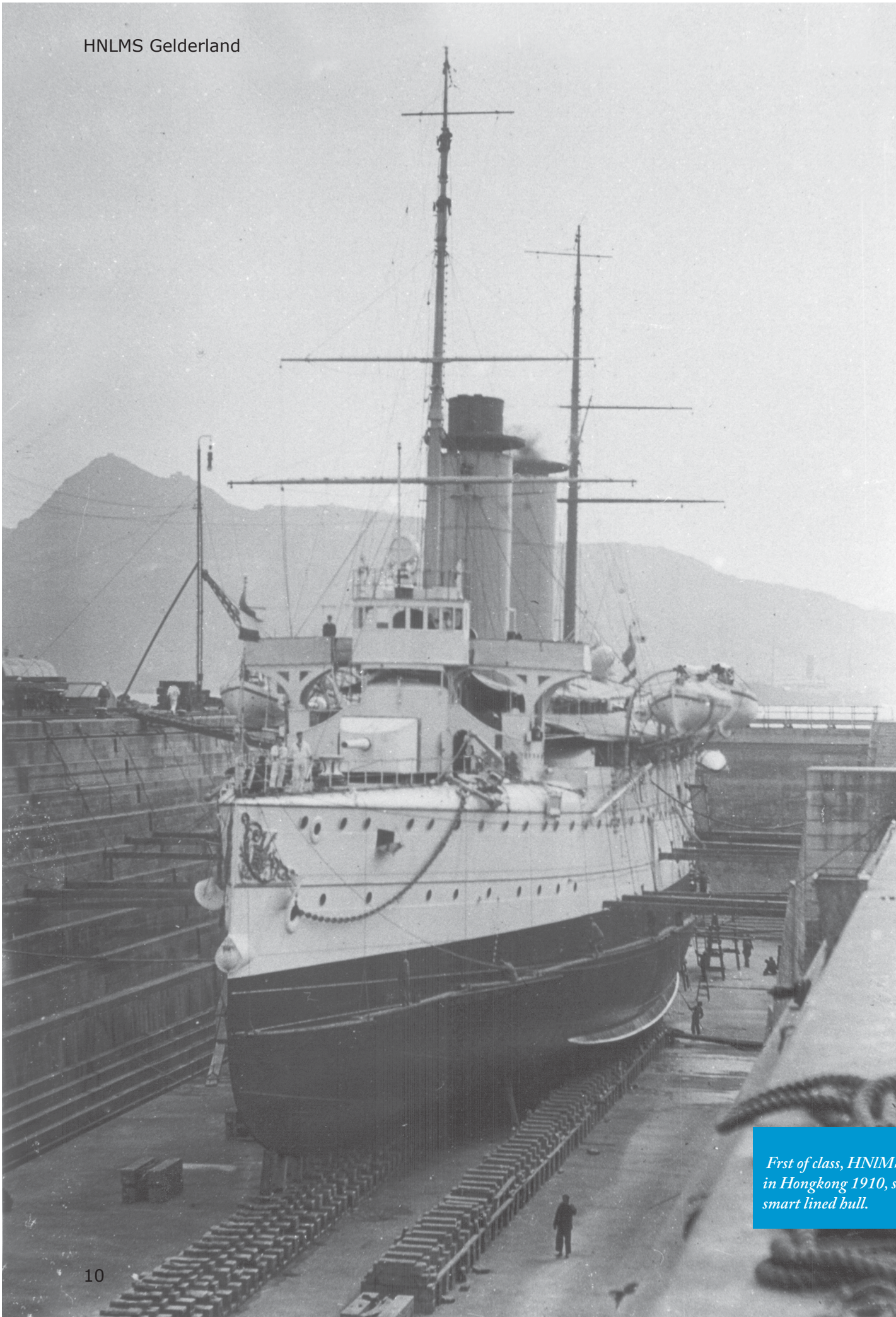
About the turn of the century these three tasks were expertly combined in the latest generation of German light cruisers. One can blame the Netherlands navy for acquiring a too specialized British design that was less suitable to command torpedo boats.

The Dutch ships were built in two series of three ships. The first series could be distinguished by its round wheelhouse. (The second batch had a square wheelhouse.)





HNLMS Gelderland



*First of class, HNIMS Holland  
in Hongkong 1910, showing her  
smart lined hull.*



## FIRST BATCH

### *Holland*

Named after the western part of the Netherlands, the provinces of North- and South Holland.

Built at the 'Rijkswerf' in Amsterdam. The ship differed from the others in having steam pipes aft of the funnels. Commissioned 1 July 1898. On 15 September 1898 the ship participated in the Fleet Review in Hollands Diep (NL) in celebration of the accession of Queen Wilhelmina. HNLMS *Holland* departed for the East Indies on 7 January 1899 and appointed flagship of the East Indies squadron (Java-division) on 16 March 1899.

On 23 June 1900 she was sent to Hong Kong and Shanghai to protect Netherlands interests during the Boxer-Rebellion. She participated on 21 June 1902 in the Fleet Review during the celebrations for the Coronation of Edward VII, King of Great-Britain. In 1916 she was stationed in the West Indies. Retuned in 1917 and sold to the breakers in 1920.

### *Zeeland*

Named after the province Zeeland in the south-west of the Netherlands.

Built at Koninklijke Maatschappij 'De Schelde' in Flushing. Commissioned 20 March 1897. HNLMS *Zeeland* was the flagship during a Fleet Review in Hollands Diep on 15 September 1898. When Edward VII was crowned in 1902 the ship visited Singapore for the festivities. She took part in the Boni-expedition in 1905 when a Task Force restored power in Boni, Dutch East Indies. Just before the outbreak of World War I the ship made a cruise to the Baltic Sea with H.R.H. Prince Hendrik embarked. Shortly after the outbreak of WW I the ship was directed to the East Indies. In 1917 the ship would be the first foreign naval ship to pass through the recently opened Panama Canal. Decommissioned 1 June 1924 and sold to the firm Rijndijk in Hendrik-Ido-Ambacht for scrap.



*Stern of Holland. Note the doors for the torpedo cannon and the artwork.*

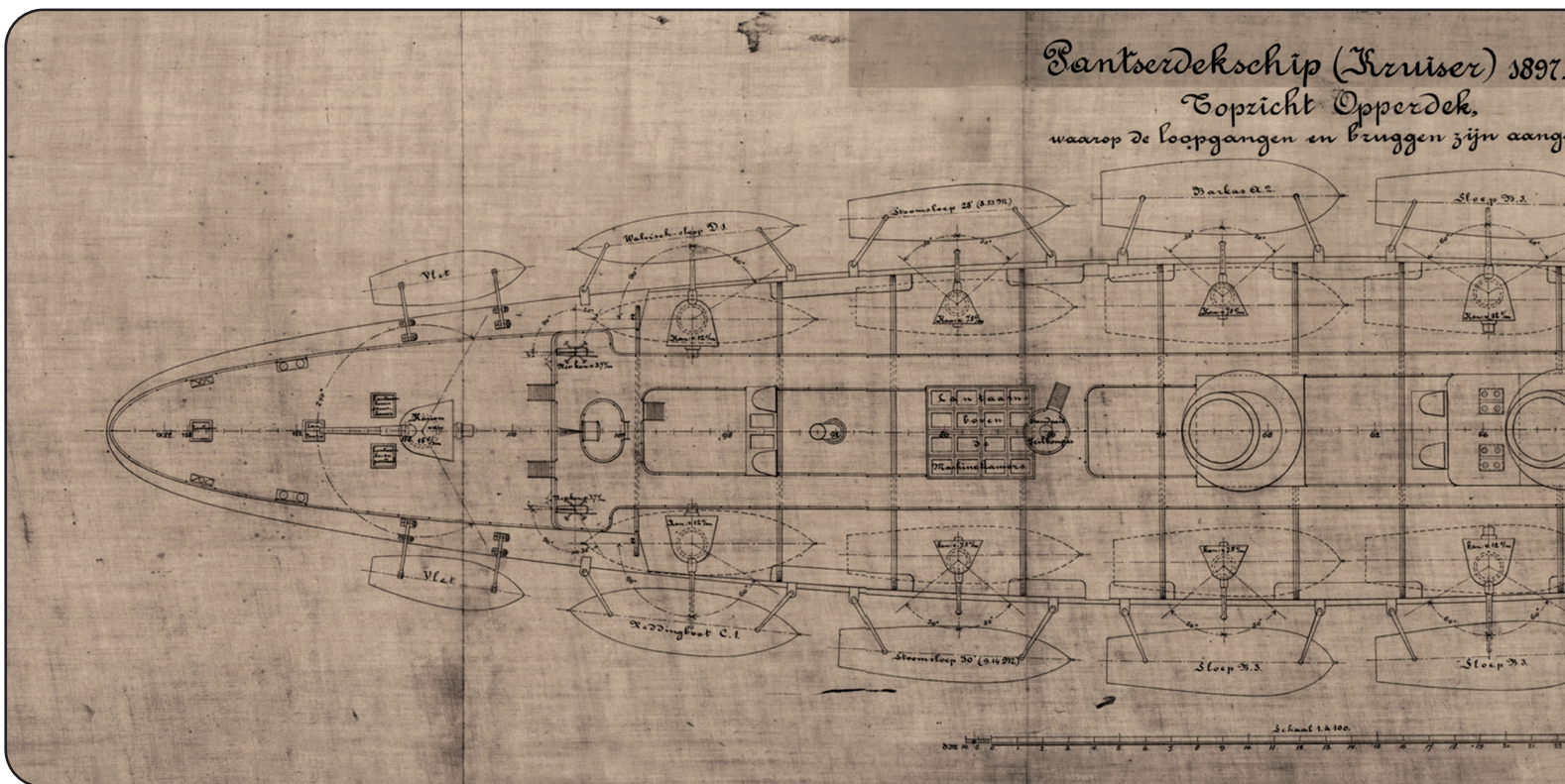
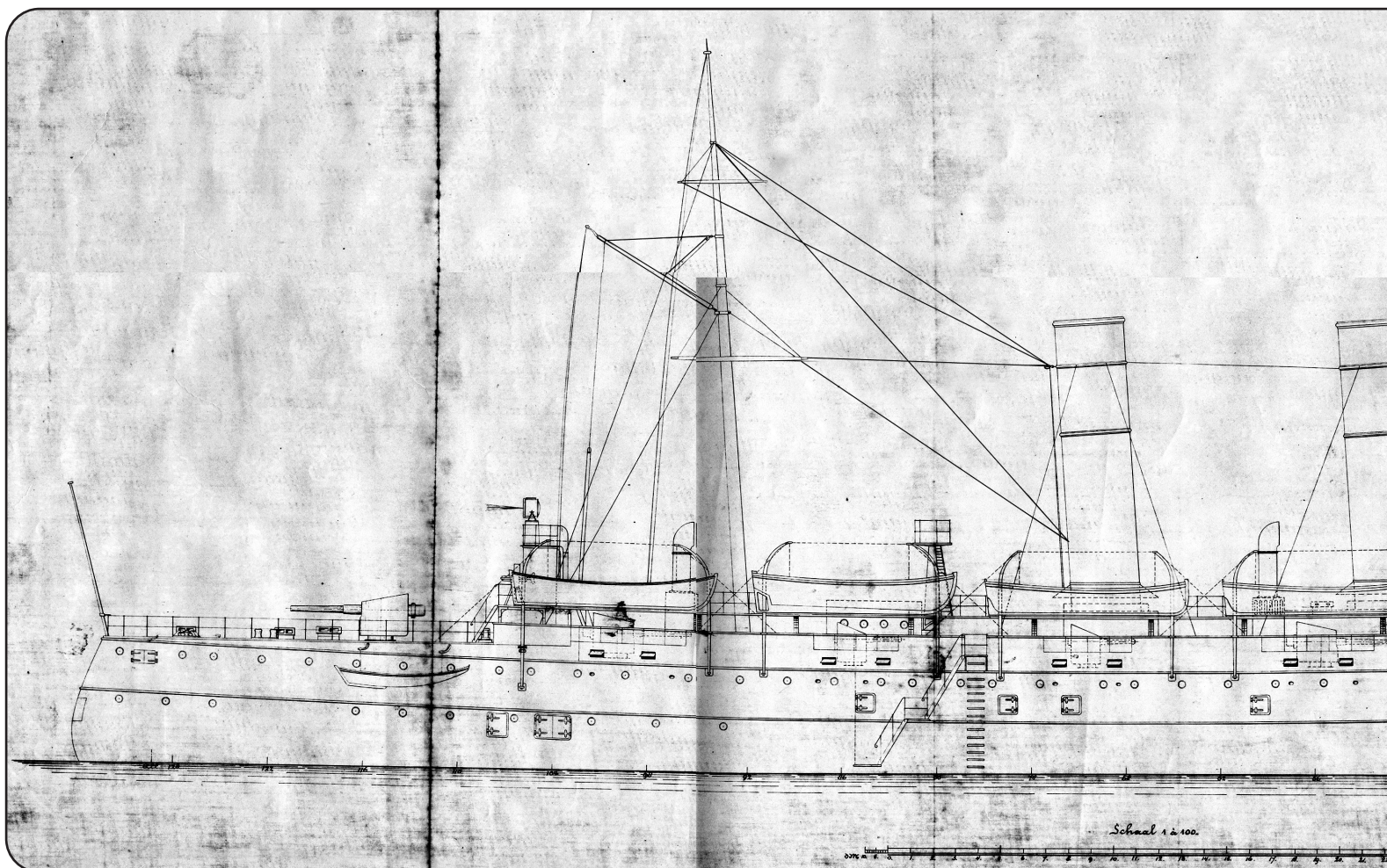
### *Friesland*

Named after the northern province of Friesland.

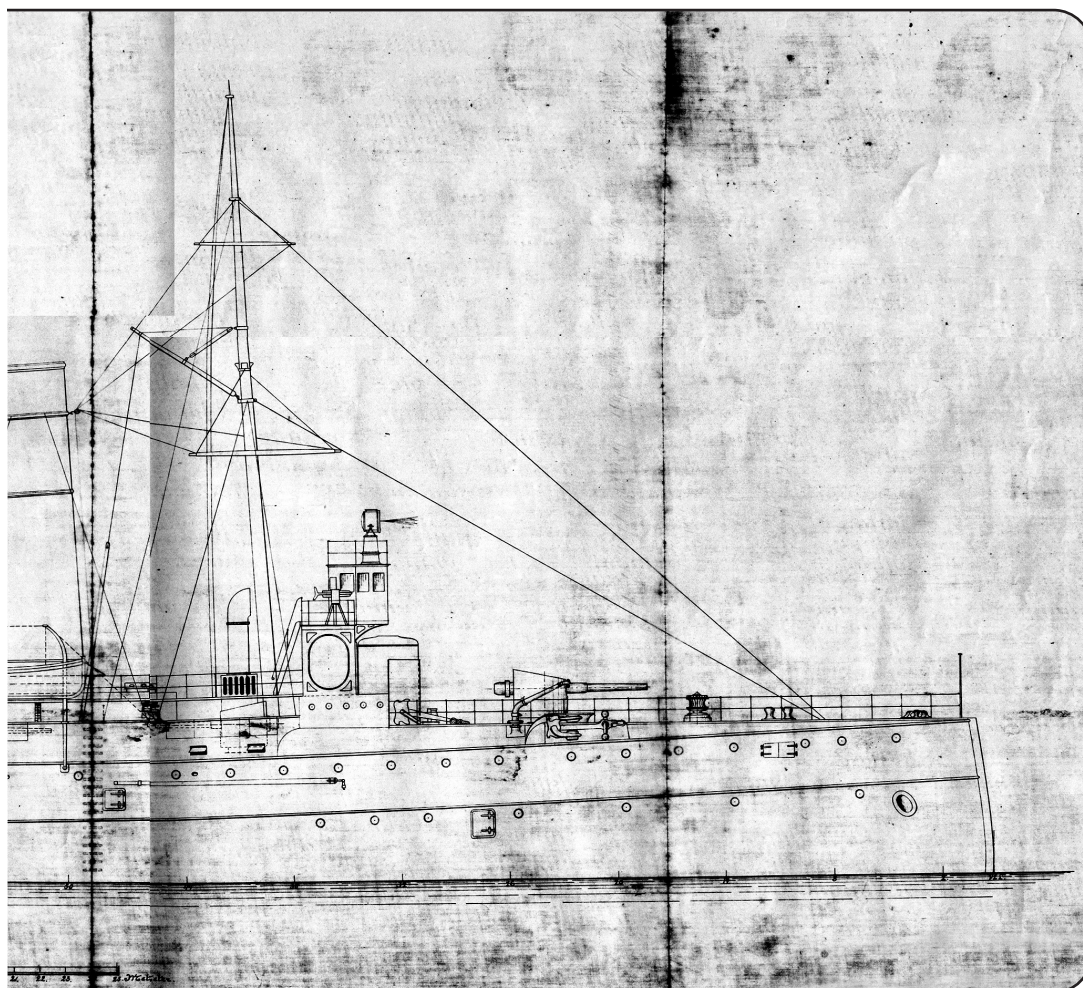
Built at 'Nederlandsche Stoomboot Maatschappij' (NSBM) in Rotterdam. Commissioned 4 November 1896. The ship sailed for the West Indies on 30 April 1898. She was stationed in the Caribbean during the Spanish-American War. Returned on 5 September 1898 and

participated in the Fleet Review. From 1899 to 1900, during the Boer War, the *Friesland* patrolled off the South African coast. On 12 July 1906 the ship carried out an expedition into arctic waters visiting Spitsbergen to place a new memorial stone at Smeerenburg. In 1908 *Friesland*, together with *Gelderland* and *Jacob van Heemskerck*, saw action against Venezuela. Decommissioned 1 February 1911 and two years later sold for scrap.





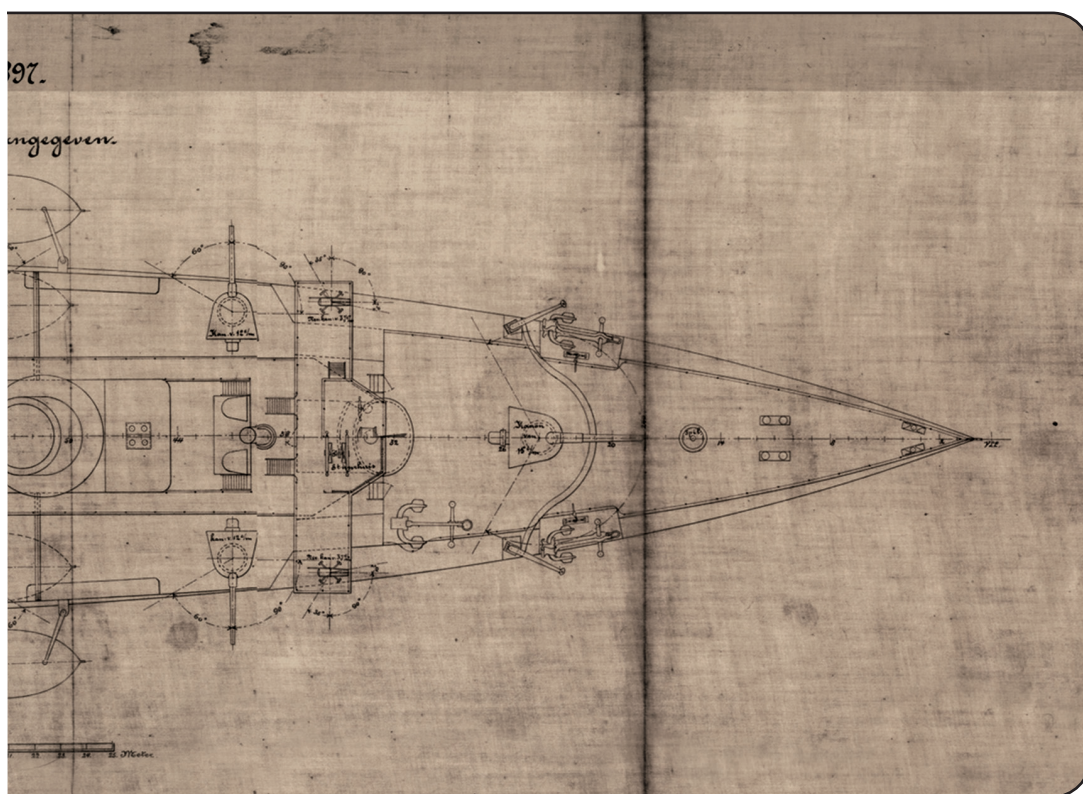




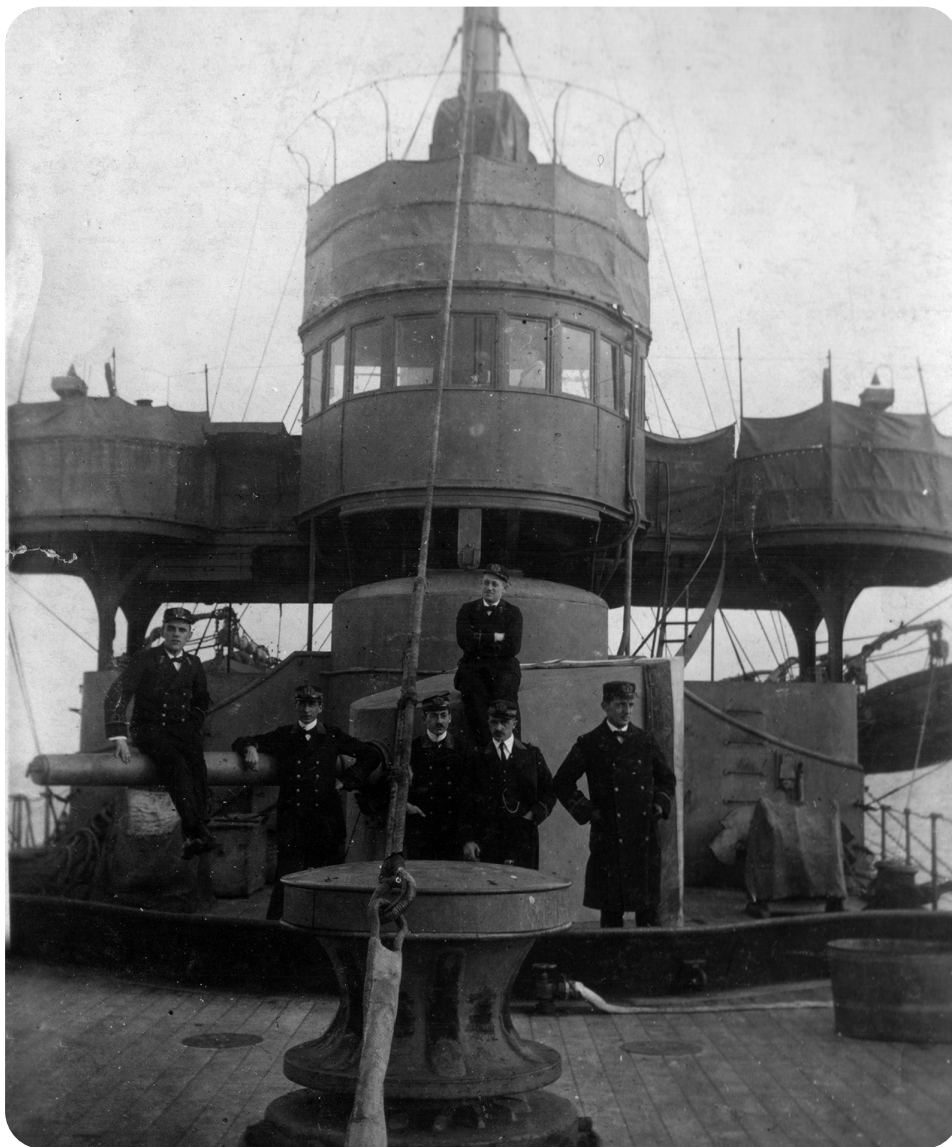
*Left: General plan and topview of the ship.*

*Above & below:  
Boat stowage on Friesland. The pictures  
were taken just before commission.*

*(Collection H. Kleinbout)*







*Some officers posing in front of the bridge of Zeeland. The ship has already been painted grey. (Collection Jt. Mulder)*

## SECOND BATCH

The drawings for this series were modified leading to a slightly increased displacement. In the second batch the ships had installed 12 Yarrow type water pipe boilers. The gun shields offered better protection through heavier armour. The torpedo tubes were relocated to below the waterline on the port side. The tube hole was closed by a hatch.

### ***Utrecht***

Named after the smallest province of the Netherlands.

Built at 'Rijkswerf' in Amsterdam. The ship could be distinguished by her short exhaust pipes behind the funnels. Commissioned 14 July 1898. When in 1901 tensions rose between the North- and South-Americas the *Utrecht* was employed to the West Indies to enforce the neutrality of the Netherlands. In 1909 the ship went to New York to participate in the Hudson/Fulton celebrations. Another trip was made to Buenos Aires in 1910 for the celebration of 100 years of Argentinian independence. Decommissioned 1 March 1913.

### ***Noordbrabant***

Named after the southern province in the Netherlands.

Built at Koninklijke Maatschappij 'De Schelde' in Flushing. The ship had no pipes near the funnels and the crow's nest was much higher positioned. Commissioned 17 January 1899. In May 1900 the ship paid a visit to Christiania (nowadays Oslo). In June a visit to Germany was made. The Emperor of Germany visited the ship in Kiel. In February 1901 she was directed to the Netherlands-Indies. The same year she represented Government in Melbourne at the inauguration of the Australian Parliament. On 31 May 1910 the ship ran onto an uncharted rock off Lombok with a speed of 15 knots, resulting in severe leakage in the bow compartment. Repairs were made in Surabaya. After disarmament in 1920, she initially destined to accommodate juveniles placed at disposal of justice. But in 1926 she was put into use as a floating barracks at Flushing. A few days after the German invasion she was set on fire by her crew (17 May 1940). The wreck was salvaged and sold for scrap.

### ***Gelderland***

Named after the a province in the east of Netherlands

The ship could be distinguished by her typical air shafts between the funnels. These were larger than those on the other ships. (See following chapters)



*Gelderland passing 'Koningin Regentes'.*





A postcard depicting the ship departing port. (Note the experimental smoke hoods.) On the right the ensign, equal to the national flag, and a crest derived from the coat of arms of the province Gelderland. Those days ships of the Royal Netherlands Navy did not carry a crest. This custom was taken over from the Royal Navy in World War Two. (Collection H. Visser)

### Technical data Gelderland

Shipyard:	Maatschappij voor Scheeps- en Werktuigbouw Fijenoord N.V. in Rotterdam
Laid down:	1 november 1897
Launched:	28 september 1898
Commissioned:	15 juli 1900
Length oa:	94,70 m
Beam:	14,82 m
Draught:	5,4 m
Displacement normal:	3.970 tons
Engine:	2x triple expansion steam engines, 12x Yarrow boilers
Propulsion:	9.867 ihp, 2 shafts
Max speed:	20 knots
Bunkers:	930 tons coal
Endurance:	4,500 n.m., at 10 knots
Armour:	50mm deck-, 13mm gunshield- and 100mm conning tower
Complement:	325
Initial armament:	2x 15cm, 6x 12cm, 6x 7,5cm and 8x 3,7cm cannon, 2x 7,5cm mortars, 2x torpedo tubes, 2x torpedo guns

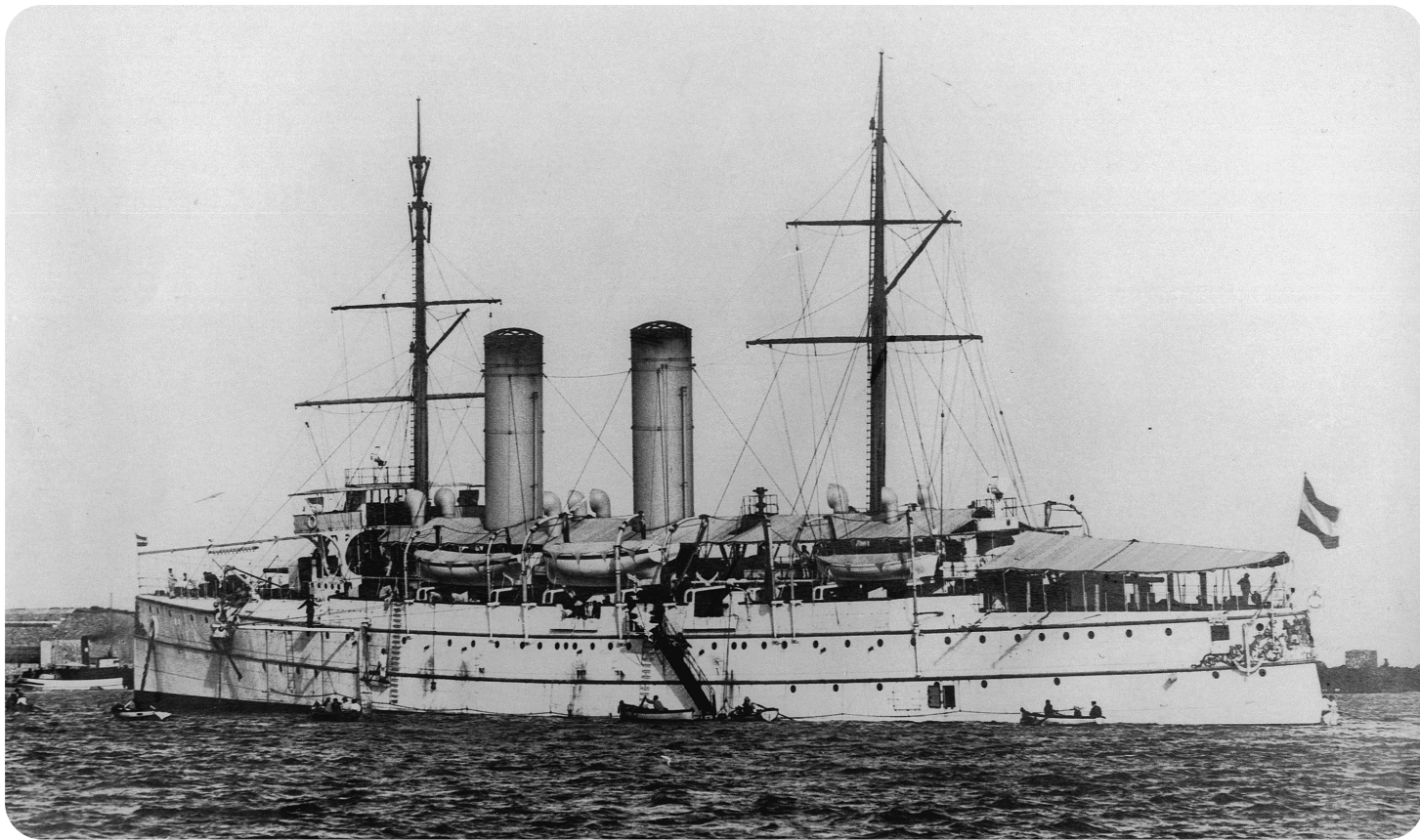
*Note: The armament has been changed several times.*

### Gelderland



The protected cruiser was named after the province with the same name. Historically, the province (area) dates from States of the Holy Roman-Catholic Realm and takes its name from the nearby German city of Geldern. Gelderland is the largest province of the Netherlands.





Ships of this class had a good reputation as sea boats. Even in adverse weather conditions and with a deck cargo they would remain true. The high freeboard made for a dry ship.

Jane's Fighting Ships stated in 1905: 'These ships are said to contain some of the best workmanship ever put into 4000-ton cruisers, both in construction and internal arrangements. They are good sea boats and fast except in a seaway, when, being short, their speed falls off at once. Coal consumption usually heavy.'

The relatively sturdy shape of the hull mentioned here was typical of all Dutch naval vessels from the turn of the century. It was caused by the length of the slipway of the 'Rijkswerf' in Amsterdam which was 100 metres. The location of that yard behind the 'Oosterdoksluis' (the Eastern Dock Lock) for years also determined the beam of the ships with its 15 metres width of passage. Finally draught was limited by the 'Westervaarwater' at Surabaya which was five metres.

The Dutch protected cruisers with their white hulls, buff funnels and gilded decorations were appealing to shiplovers. Even later, in navy grey, they would attract attention in every port due to their balanced design.

*At anchor, until 1931 the jack was of the same design as the ensign.  
Note the semaphore in top of the foremast.*

