

From: Wlamb
Sent: Mon, 12 Feb 2024 22:26:28 +0100
To: rtw3contest@gmail.com
Subject: Category 2 Submission (Wlamb) - Heavy Cruiser (R 1930)-version of 1900
design
Attachments: CA - Hansa-class, original 1900 specs.png, CA - Hansa-class, Guns (legal).png, CA - Hansa-class, Additional Armament (legal).png, CA - Hansa-Class, SMS Frauenlob, Stars'n'Stories.png, Hansa (R 1930).30d, Hansa.30d

Dear Rule the Waves,

I submit for your consideration, as a category two competitor, the Hansa(R 1930)-class heavy cruiser, or poor admiral's battlecruiser, which was the mainstay of my early Imperial German Navy in my autumn play-through. The original highly-successful 1900s design is included for reference in this mail as well. While not an aesthetically pleasing cruiser, the Hansa-class traded beauty for very high utility.

DESIGN CONCEPT

Laid down as the first of 7 hulls in 1900, the SMS Hansa and her sister ships were designed to ensure Imperial victory in the early 20th century's conflicts against the superior British, French and Russian navies.

The Hansa-class cruisers were large cruisers displacing 14000 tonnes - almost 2-3 times the displacement of contemporary French and English heavy cruisers - and well-armored. Coal-fired VTEs allowed the cruisers an initial high speed of 20 knots in 1903. With an armament of 10x 8" turreted primaries, 12x 6" casemated secondaries, and 14x 3" tertaries a lone Hansa-class would often outgun contemporary cruisers more than 2:1. This allowed the Hansa-classes to act as early concept battle cruisers, engaging lone battleships, standing alone against small groups of enemy cruisers and chasing off anything too fast to be hunted down.

In battle Hansa-class cruisers were designed to use superior speed to close with the enemy battle lines, often causing the opposing side to retreat, then using their speed and firepower to stay with, overwhelm and destroy enemy ships with relative ease, taking little damage in return. If engaged by anything dangerous, there was little a Hansa-class cruiser could not run away from or beat up while trying - leading to some handy victorious retreats.

Three ships of the class were rebuilt (the (5) iteration) as experimental light-carriers from 1922 the Hansa (R 1922a). They carried 24 airplanes each and participated in several fleet actions. The Hansas were not good carriers. They were too slow and vulnerable with insufficient air wings and under inept leadership they found little actual application.

A 1927 reconstruction of the remaining Hansa-class hulls as large, fast sea plane carriers (the (6) iteration) carrying 24 search planes and 4 catapults was considered, but the project was scrapped with the outbreak of another war.

DESIGN IMPORTANCE

The superiority of German cruiser designs during the early wars allowed the German navy to focus on and dominate cruiser actions and other small battles causing massive attrition to the numerically superior navies of western Europe, while avoiding larger ship engagements where the German heavy line would be outgunned. The operational and tactical deployment of Hansa-cruisers was central to several major naval victories against England, France, Russia and Italy, leading to great colonial gains for the German Empire between 1900 and 1920.

Hansa-class ships participated in every major fleet engagement of my Imperial navy between 1903 and 1922, serving as lynch pins in smaller engagements and participating as main battle-line combatants in several larger battles. In the 1920ies they were reduced to secondary roles. All Hansa-class cruisers took 5 battle stars except for the under-performing SMS Hansa with only 4 battle stars from actions in the Battle of Horns Reef, the Dogger Bank Battles of the 1900s and the 1908 decisive win for the Imperial Navy in the Battle of the North Sea where 6 of 7 Hansas were present.

The toughness of the Hansa-class also saw it used as a line breaker, with the two heavy-cruiser - the "Hansa" - divisions charging and splitting the British battle group in the 1908 Battle of the North Sea isolating the damaged pre-dreadnoughts of the Royal Navy and keeping the British cruisers and destroyers at bay while offering supporting fire to the German battleships engaging and sinking 8 pre-dreadnoughts for 1 in return. The Hansa-class cruisers SMS Senn and SMS Sichel participated in the chase of the retreating Royal navy ships. While this was an efficient tactic and particularly useful in cruiser engagements it was very dangerous in fleet battles where heavier ships were present, with 5 of 6 Hansas ending up badly damaged and only just making it back to Bremerhaven at the edge of flooding.

FADING STARS

The Hansa-class went through 4(5/6) iterations and participated in actions in the Baltic, North Sea, Skagarak and Norwegian Sea, Mediterranean, Red Sea, Atlantic and Indian Oceans and the Caribbean, but the introduction into active service of the superior Bremen-class heavy cruisers and Goeben-class battle cruisers in 1912 and 1911 respectively, saw the Hansas much reduced in importance. However, they still remained useful as organized convoy raiders (fx the "Here's Johnny!"-night battle off Cape San Pietro in 1914 involving SMS Arcona and SMS Frauenlob), as lone colonial raiders or as command centers on colonial stations during peaceful years. While stable service platforms, the engines of the Hansa-class proved very temperamental, often seeing significant performance reduction after only a few years of service, causing the class to require constant rebuilding to remain effective.

The 1930-version of Hansa-class, here being presented to you though the lens of the 1943 German navy, was the last iteration with only SMS Hansa and SMS Frauenlob upgraded as a matter of principle. The upgrade was not considered a success with the limitations of the hull being too much for the battle space of the 30ies. The class was eventually decommissioned after the war of 1932 against Russia and France, with the SMS Frauenlob put into reserve as a museum ship in Hamburg (North Sea) in 1937. It is the last ship of the class still in (inactive) service with my Imperial navy in 1943.

LOSSES

Considering the aggressive use, role and importance of the Hansa-class in the German naval history of the early 20th century and their numerous brushes with disaster, it may be a surprise that no Hansa-class hulls were lost in open combat.

Only the rebuilt CVL SMS Blücher failed to return to port in February 1932 after hitting a mine in the North Sea following a failed French convoy-raid near Helgoland.

ANECDOTES

Though armed with several torpedo tubes, there are no recorded incident in Imperial naval history of a Hansa-class successfully damaging a target with a torpedo... much to the consternation of the admiral in charge.

If scratching the paint and causing the 3rd sub-lieutenant to spill his tea counts as damage, the SMS Frauenlob takes a point for shooting a dud torpedo at the pre-dreadnought HMS Ramillies in 1908. Captain of the Sea Kipitzky was issued a caution on this occasion for improper moustache grooming - though unofficial sources noted, that this was probably mostly due his inept attempt at reproducing the death of the Ramillies, a ship for which the admiral holds a particular fondness.

BUGS

I apologize, that the tertiaries of the design are all over the place. This a common error on my ships, and a bug I hope you will fix soon... in the meantime we will blame the ship's museum curator.

His input on ship design has been taken on board and will be thrown over the side as soon as the museum ship reaches international waters.

Ship history for CA Frauenlob

* June 1902 Laid down in Germany as CA Frauenlob.

* August 1904 Commissioned

* August 1904 Kapitän z See Kipitzky takes command

* October 1907 Took part in Battle of Horns Reef against British navy.

In action.

Heavy damage. Gunfire.(DD Ettrick, DD Foyle, CL Constance, CA Euryalus, CA Cordelia, CL Phoenix, CA Cressy, CA Good Hope,).

Scored 10 main battery hits on DD Ettrick, DD Desperate, CA Cressy,

* August 1908 Took part in Battle of North Sea against British navy.

In action.

Light damage. Gunfire.(CA Bacchante, B Redoubtable, CA Niobe,).

Scored 33 main battery hits on CA Izumi, B Ramillies, CL Phoenix, CL Phaeton, B Redoubtable,

* September 1912 To dockyard for rebuild

* September 1913 Rebuild completed

* September 1913 Kapitän z See Fehling takes command

* April 1914 Moves to The Mediterranean

* May 1914 Took part in Raider battle in The Mediterranean against Italian navy.

Not in action.

No damage.

* May 1914 Took part in Raider battle in The Mediterranean against Italian navy.

Not in action.

No damage.

* August 1914 Took part in Battle of Calabria against Italian navy.

In action.

Light damage. Gunfire.(CA Giuseppe Garibaldi,).

Scored 3 main battery hits on DD Giuseppe Missori, DD Giuseppe Cesare Abba,

* September 1914 Took part in Battle of Cape San Pietro against Italian navy.

In action.

No damage.

Scored 70 main battery hits on TR Merchant 14, TR Merchant 18, TR Merchant 15, TR Merchant 12, TR Merchant 11, TR Merchant 10, TR Merchant 5, TR Merchant 8, AMC Camoscio, TR Merchant 7, TR Merchant 6, TR Merchant 4, TR Merchant 13, TR Merchant 17, AMC Gazzella,

* November 1914 Moves to Northern Europe

* November 1916 Moves to The Mediterranean

* December 1916 Moves to Indian Ocean

* May 1918 Kapitän z See Fischer takes command

* June 1922 To dockyard for rebuild

* July 1923 Rebuild completed

* August 1923 Moves to The Mediterranean

* September 1923 Moves to Indian Ocean

* December 1925 Took part in Battle of Red Sea against French navy.

In action.

No damage.

Scored 19 main battery hits on CL Cosmao,

* August 1926 To dockyard for rebuild

* October 1927 Rebuild completed

* October 1927 Kapitän z See Ruppelt takes command

* August 1928 Moves to The Caribbean

* September 1928 Moves to North American West Coast

* October 1928 Moves to Central Pacific

* July 1930 To dockyard for rebuild

* November 1930 Rebuild completed

* December 1930 Moves to The Caribbean

* January 1931 Moves to North American West Coast

* February 1931 Moves to Central Pacific

* January 1932 To Trade protection

* March 1933 Moves to South Pacific

* October 1936 Moves to North American West Coast

* November 1936 Moves to The Caribbean

* December 1936 Moves to Northern Europe

* January 1937 To Reserve fleet

* August 1937 Kapitän z See Döhler takes command

Med Venlig Hilsen / Best Regards,

- Jon Martin

Ship design - 1943

Turret arcs **Top/mle arcs** **30 + -**

Ship type	CA - Heavy cruiser	<input type="button" value="Clear all values"/>
Class name	Hansa	<input type="button" value="Suggest name"/> <input type="button" value="Pick"/>
Developed from		
Displacement	14000 <input type="button" value="Build at yard"/> Local yard [91.000]	<input type="checkbox"/> Aluminum superstructure
Freeboard	Normal <input type="button" value="Range"/> Hull and fittings	Weight Cost
Speed	20 <input type="button" value="Range"/> Medium	
Horsepower	22.679	Machinery weight 920 3.418
Engine priority	Normal <input type="button" value="Propulsion"/> Coal + VTE	<input type="checkbox"/> Unit machinery
Belt	6 <input type="button" value="Magazine box"/> 1.549	
Belt coverage	Normal <input type="checkbox"/> Inclined belt	
Belt extended	3 <input type="button" value="weight"/> 236	
Upper belt	4 <input type="button" value="weight"/> 476	
Deck	1.5 <input type="button" value="weight"/> 1.106	
Deck extended	1 <input type="button" value="weight"/> 196	
Conning tower	4.5 <input type="button" value="weight"/> 90	
Turrets	6 <input type="button" value="Total armour"/> 3.653 10.959	
Turret top	2 <input type="button" value="Armament"/> 2.589 13.736	
Secondary guns	2.5 <input type="button" value="TPS weight"/> 0 0	
Armour scheme	Sloped deck <input type="checkbox"/> 31% 0	
	22% Armament	
Torpedo defence	0 <input type="button" value="Accommodation space"/> 677	
Accommodation	Spacious <input type="checkbox"/> Colonial service	
Complement	876 <input type="button" value="Incidental costs"/> 2.933	
	Total 11.717 43.553	
	Weight remaining 2.283	
	Time, monthly cost 24 1.815	

RX:237 Y:304 X:98 Y:126

Colonial service

Bulged

Additional deck armour

Guns **Additional armament** **Graphics**

Main guns

Calibre	8	Quality	1	Gun data
Position	A - Forward	2	329	
	Y - Alt	2	329	
	D - Port forward wing	1	190	
	E - Starboard forward wing	1	190	
	H - Port midships wing	1	183	
	I - Starboard midships wing	1	183	
	S - Port alt wing	1	190	
	T - Starboard alt wing	1	190	

Rounds per gun 185 564

Fire control Central rangefinder 3 48 225

Increased elevation DP

Cross deck fire Autoloader

Turret era Dreadnought 0 Asymmetric secondary mounts Auto place

Secondary guns

Calibre	6	Number	12	Quality	0
Guns / turret	Casemat	<input type="button" value="weight"/> 615	<input type="checkbox"/> Autoloader		
Rounds per gun	191	<input type="button" value="weight"/> 305	<input type="checkbox"/> Director		

D - Port forward wing, casemate
F - Port wing, casemate
G - Starboard wing, casemate
H - Port secondary, casemate
J - Port wing, casemate
S - Port alt wing, casemate
T - Starboard alt wing, casemate
K - Starboard wing, casemate

Tertiary guns

Calibre	3	Number	14	Quality	1
Guns / turret	Casemat	<input type="button" value="weight"/> 56	<input type="checkbox"/> Autoloader		
Rounds per gun	220	<input type="button" value="weight"/> 55	<input type="checkbox"/> DP		

Turret era Dreadnought 0 Asymmetric tertiary mounts Add mount graphic Clear tertiary graphics

Medium and light anti aircraft guns

Calibre	Light AA guns	Medium AA guns	AA directors	Weight	Cost
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

HAA factor: 0

Topside load and capacity 32 of 141

Save and finish

Ship design - 1943

Turret arcs **Top/mle arcs** **30 + -**

Ship type	CA - Heavy cruiser	<input type="button" value="Clear all values"/>
Class name	Hansa	<input type="button" value="Suggest name"/> <input type="button" value="Pick"/>
Developed from		
Displacement	14500 <input type="button" value="Build at yard"/> Local yard [91.000]	<input type="checkbox"/> Aluminum superstructure
Freeboard	Normal <input type="button" value="Range"/> Hull and fittings	Weight Cost
Speed	20 <input type="button" value="Range"/> Medium	
Horsepower	34.319	Machinery weight 1.336 8.362
Engine priority	Normal <input type="button" value="Propulsion"/> Coal + Turbine	<input type="checkbox"/> Unit machinery
Belt	6 <input type="button" value="Magazine box"/> 0	
Belt coverage	Normal <input type="checkbox"/> Inclined belt	
Belt extended	3 <input type="button" value="weight"/> 0	
Upper belt	5.5 <input type="button" value="weight"/> 0	
Deck	1.5 <input type="button" value="weight"/> 0	
Deck extended	1 <input type="button" value="weight"/> 0	
Conning tower	4.5 <input type="button" value="weight"/> 0	
Turrets	6 <input type="button" value="Total armour"/> 3.998 11.957	
Turret top	2 <input type="button" value="Armament"/> 3.128 20.277	
Secondary guns	3.5 <input type="button" value="TPS weight"/> 0 0	
Armour scheme	Sloped deck <input type="checkbox"/> 26% 0	
	22% Armament	
Torpedo defence	0 <input type="button" value="Accommodation space"/> 781	
Accommodation	Spacious <input type="checkbox"/> Colonial service	
Complement	1.014 <input type="button" value="Rebuild cost"/> 120	
	Total 14535 53.089	
	Weight remaining -35	
	Time, monthly cost 3 410	

RX:256 Y:37 X:105 Y:7

Colonial service

Bulged

Additional deck armour

Guns **Additional armament** **Graphics**

Main guns

Calibre	8	Quality	0	Gun data
Position	A - Forward	2	329	
	Y - Alt	2	329	
	D - Port forward wing	1	190	
	E - Starboard forward wing	1	190	
	H - Port midships wing	1	183	
	I - Starboard midships wing	1	183	
	S - Port alt wing	1	190	
	T - Starboard alt wing	1	190	

Rounds per gun 175 517

Fire control Advanced director 3 96 2.250

Increased elevation DP

Cross deck fire Autoloader

Turret era Dreadnought 0 Asymmetric secondary mounts Auto place

Secondary guns

Calibre	6	Number	12	Quality	1
Guns / turret	Casemat	<input type="button" value="weight"/> 799	<input type="checkbox"/> Autoloader		
Rounds per gun	191	<input type="button" value="weight"/> 330	<input type="checkbox"/> Director		

D - Port forward wing, casemate
F - Port wing, casemate
G - Starboard wing, casemate
H - Port secondary, casemate
J - Port wing, casemate
S - Port alt wing, casemate
T - Starboard alt wing, casemate
K - Starboard wing, casemate

Tertiary guns

Calibre	4	Number	12	Quality	0
Guns / turret	Casemat	<input type="button" value="weight"/> 120	<input type="checkbox"/> Autoloader		
Rounds per gun	230	<input type="button" value="weight"/> 137	<input type="checkbox"/> DP		

Turret era Dreadnought 0 Asymmetric tertiary mounts Add mount graphic Clear tertiary graphics

Medium and light anti aircraft guns

Calibre	Light AA guns	Medium AA guns	AA directors	Weight	Cost
0	10	11	22	0	0
0	10	32	64	0	0
0	1	26	52	0	0

HAA factor: 20

Topside load and capacity 135 of 142

Save and finish

Design report for CA Hansa

Note: Ship is slightly overweight.
Note: This ship can not install your best radar.

Ship design - 1943

Turret arcs **Top/mle arcs** **30 + -**

Ship type	CA - Heavy cruiser	<input type="button" value="Clear all values"/>
Class name	Hansa	<input type="button" value="Suggest name"/> <input type="button" value="Pick"/>
Developed from		
Displacement	14500 <input type="button" value="Build at yard"/> Local yard [91.000]	<input type="checkbox"/> Aluminum superstructure
Freeboard	Normal <input type="button" value="Range"/> Hull and fittings	Weight Cost
Speed	20 <input type="button" value="Range"/> Medium	
Horsepower	34.319	Machinery weight 1.336 8.362
Engine priority	Normal <input type="button" value="Propulsion"/> Coal + Turbine	<input type="checkbox"/> Unit machinery
Belt	6 <input type="button" value="Magazine box"/> 0	
Belt coverage	Normal <input type="checkbox"/> Inclined belt	
Belt extended	3 <input type="button" value="weight"/> 0	
Upper belt	5.5 <input type="button" value="weight"/> 0	
Deck	1.5 <input type="button" value="weight"/> 0	
Deck extended	1 <input type="button" value="weight"/> 0	
Conning tower	4.5 <input type="button" value="weight"/> 0	
Turrets	6 <input type="button" value="Total armour"/> 3.998 11.957	
Turret top	2 <input type="button" value="Armament"/> 3.128 20.277	
Secondary guns	3.5 <input type="button" value="TPS weight"/> 0 0	
Armour scheme	Sloped deck <input type="checkbox"/> 26% 0	
	22% Armament	
Torpedo defence	0 <input type="button" value="Accommodation space"/> 781	
Accommodation	Spacious <input type="checkbox"/> Colonial service	
Complement	1.014 <input type="button" value="Rebuild cost"/> 120	
	Total 14535 53.089	
	Weight remaining -35	
	Time, monthly cost 3 410	

RX:234 Y:292 X:97 Y:121

Colonial service

Bulged

Additional deck armour

Guns **Additional armament** **Graphics**

Main guns

Calibre	8	Quality	0	Gun data
Position	F - Port broadside mount no. 1	2	64	
	F - Port broadside mount no. 2	2	64	
	J - Port broadside mount no. 3	2	64	
	K - Starboard broadside mount no. 1	2	64	

Right installations

Mount	Type	Weight
Seaplane/helicopter hanger	Angled flight deck	
F - Flight deck	Helped	
Air capacity	1	67
Spot valve	1	Jet capable

Flight deck area

Mount	Weight
Right deck area	0
Hanger side armour	0

Catapults

Position	Weight
V - Centriline swivel mount	20

Design report for CA Hansa

Note: Ship is slightly overweight.
Note: This ship can not install your best radar.

Ship history for CA Frauenlob

June 1902 Laid down in Germany as CA Frauenlob.

August 1904 Commissioned

August 1904 Kapitän z See Kipitzky takes command

October 1907 Took part in Battle of Horns Reef against British navy.
In action
Heavy damage. Gunfire (DD Ettrick, DD Foyle, CL Constance, CA Ceylon, CA Cordelia, CL Phoenix, CA Cressy, CA Good Hope, Scored 10 main battery hits on DD Ettrick, DD Despatch, CA Cressy).

August 1908 Took part in Battle of North Sea against British navy.
In action
Light damage. Gunfire (CA Bacchante, B Redoubtable, CA Nobe.)
Scored 33 main battery hits on CA Izumi, B Rambler, CL Phoenix, CL Phaeton, B Redoubtable.

September 1912 To dockyard for rebuild

September 1913 Rebuild completed

September 1913 Kapitän z See Fehling takes command

April 1914 Moves to The Mediterranean

May 1914 Took part in Raider battle in The Mediterranean against Italian navy.
Not in action
No damage.

May 1914 Took part in Raider battle in The Mediterranean against Italian navy.
Not in action
No damage.

August 1914 Took part in Battle of Calabria against Italian navy.
In action

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**GERMAN HEAVY CRUISER
FRAUENLOB**
HANSA CLASS (1910)
Displacement, 14500 tons, 21 knots
KptzS Dohler (Average) commanding

★ ★ ★ ★

Armour :
6" Belt (amidships)
1½" Deck
6" Turrets
3½" Battery
4½" C.T.

1 aircraft