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# **Swedish Coastal Defense Ship Oscar II**

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### **Abstract**

Oscar II served in the Swedish Navy for almost 70 years in various roles – as flagship, unit of the Coastal Fleet, as cadets training ship, and finally as stationary training hulk. With the next generation of armored ships- the Sverige class – a substantial increase in firepower and speed was obtained, These ships carried four 28 cm guns and were powered by steam-turbines developing 20 000 hp. Meanwhile the gap between the Äran-class and the Sverige-class was filled by the solitary Oscar II with honor.

**Keywords:** Swedish navy, battleship, coastal defense ship, armament, history.

### Introduction

At the beginning of the 20<sup>th</sup> century Swedish defense-policy was undergoing radical changes. The parliaments of 1901 and 1902 voted for a transition to a military service system to replace the outdated allotment-system, and the secretary of the Navy F. W. von Otter signed the proposition for the most advanced reformations of the Swedish army and navy ever. These events overshadowed discussions on naval matters, and more en passant, funds for another coastal defense-ship – the Manligheten – were granted.

It was however considered important to investigate the future tasks and thus composition of the navy, and a commission was appointed 1901. This commission not only made a thorough investigation of the need for future ships, but also made a comprehensive analysis of the strategical foundations for the naval defense. The main tasks of the navy were considered to be a) to oppose invasion from the sea in collaboration with the army, b) to protect the capital and Karlskrona in collaboration with stationary coastal defensive fortifications, c) to protect the Swedish cost, and d) to prevent blockade of trade and secure Swedish mercantile shipping.

The experts of the commission were in disagreement on the question which type of armored ship to suggest. The naval arms race between Germany and Great Britain had begun, and both powers had built battleships in numbers armed with  $28-30.5\,\mathrm{cm}$  guns and speeds over 18 knots. It was obvious that Sweden could not build anything like this, but the close following of developments in foreign countries delayed the final report of the commission.

The commission proposed emphasis on speed rather than gun-caliber for future armored ships. The Swedish archipelago offered hidden bases for quick raids against an attacking enemy. Three alternatives for the next armored ship were suggested:

1. A ship of 4 800 tons armed with four 21 cm guns and a speed of 18 knots at a cost of 7 762 000 Sw kr.

- 2. A ship of 3 950 tons armed with two 21 cm guns and a speed of 17 knots at a cost of 6 225 800 Sw kr.
- 3. A ship of 4 218 tons armed with two 21 cm guns and a speed of 18 knots at a cost of  $6\,631\,000\,\mathrm{Sw}\,\mathrm{kr}$ .

The commission was unanimous on which alternative to suggest. Finally, with three members making reservations, the cheapest alternative was suggested. The secretary of the navy, who at the time was Louis Pallander of Vega, was of the opinion that speed was of essential importance, finally stuck for alternative 3. The Swedish parliament thus granted funds for the building of a new armored ship in the spring of 1903.

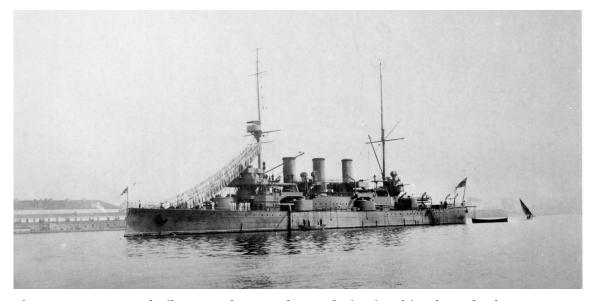


Fig. 1. «Oscar II» as built. Crews hammocks are drying in whips from the foremast

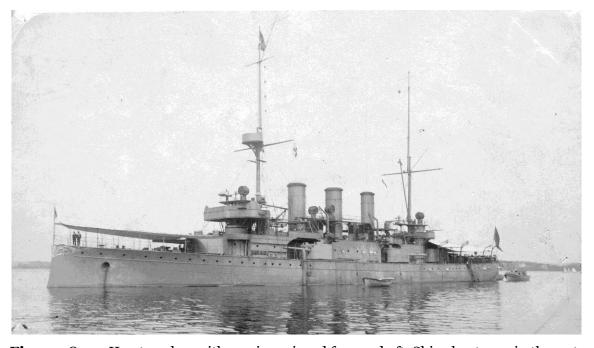


Fig. 2. «Oscar II» at anchor with awnings rigged fore and aft. Ships boats are in the water

All design work was carried out at the Naval administration and the final drawings were approved of May 22<sup>nd</sup>.LindholmensMekaniskaVerkstad in Gothenburg offered the best conditions for building the new ship at a price of 3 390 000 Sw kr., and contract was signed September 23<sup>rd</sup>. The name of the new ship had already been established – Oscar II. Not since 1824 when the ship of

the line Carl XIV Johan was baptized had the name of a still living monarch been used for a warship in the Swedish Navy.

Lindholmens Mekaniska Verkstad was a private yard with a long and successful relation to the Swedish Navy. Already 1875 the yard delivered the Blenda, lead-ship in a series of modern gunboats on the Rendel-principle. The yard had further delivered half of the Swedish Navy stock of armored ships: Svea 1886, Göta 1891, Njord 1899, Dristigheten 1901 and Äran 1902.

Work on Oscar II begun shortly after contract was signed. Launch was scheduled to June 6<sup>th</sup> and christening was to be performed by the king. A conflict had escalated between the management of the yard and the union-organized workers, which were half of the labour force. A lockout of the organized workers had been decided upon, but it was delayed until June 10<sup>th</sup> not to put the launch in danger. Meanwhile the Union-crisis between Sweden and Norway reached it's critical point, and the king had to inhibit his presence at the launching ceremony. The Queen had also prohibited the use of champagne in the baptizing ceremony. In spite of this, the ships launch went without mishap, and the ship had a long life ahead.

#### Hull

Displacement was 4 273 tons standard and with full load 4 495 tons. Weight-distribution was as follows: hull 1 025 tons (25.8 %), armour 987 tons (24.8 %), artillery and ammunition 594 tons (14.9 %),main machinery, boilers and auxiliary machinery 640 tons (16.1 %) equipment 648 tons (16.3 %), crew and supplies 86 tons (2.1 %). Included in full load displacement was also 500 tons of coal and 15 tons of water.

Hull dimensions were 95.6 m (lwl)/97.9 (oa) x 15.2 m x 5.3 m. Maximum draught over propellers was 5.56 m. She had, as was common, a pronounced rambow and a cruiser-stern. The design of the hull was very well balanced with the main artillery along the centerline and secondary armament in twin towers - two on each side at the ends of the superstructure. She was the only coastal defense ship in the Swedish Navy with three funnels.

## **Machinery**

Two four-cylinder vertical triple-expansion engines, manufactured by Motala Mekaniskaverkstad – a company closely tied to Lindholmens Mekaniska Verkstad – designed to develop 9 000 hp, were installed. Ten watertubeboilers of the Yarrow-type provided steam to the engines were distributed in three boiler-rooms. Steampressure was 16.5 kg/square meter and bunker consisted of 500 tons of coal. Electrical power was supplied from four generators, propelled by steam engines, developing 112 kW. She had two three-bladed propellers. Radius of action was 1 100 nm at 17.8 knots and 3 550 nm at 11 knots.

#### Armament

Main artillery consisted of two 21 cm guns M/98. This gun fired 1 round/min at a maximal distance of 11 000 m. Secondary armament was eight 15.2 cm guns M/03 in four twin turrets. This was the same type of gun and turret subsequently used in the armored cruiser Fylgia. The barrels in the turrets were individually elevated. The guns fired 6-7 rounds/min, and maximal range was 12 000 m. Main and secondary armament guns were manufactured by Bofors. Ten 57 mm guns M/89 B were mounted – five on each side on level with the bridge – and further three 37 mm M/98 B were carried for mounting in the sloops for landing-party purposes. The 57 mm guns were manufactured by Finspång. Two 45.7 cm torpedo-tubes were mounted below the waterline and angled 90 degrees from the centerline. Four 90 mm searchlights manufactured by Schuckert– two on each side between the funnels, one on the roof of the bridge and one on the after wheelhouse -were mounted.

#### Armor

All armor was supplied from Schneider &Co., Creusot, except armor for the gun-turrets, which was supplied by Krupp in Essen. The strake in the waterline was 150mm thick amidships, successively diminishing, first to 125 mm, and finally 100 mm at the ends. Total length of side armour was 67 m and the strakes were 1.8 m high. Above the waterline armor was a citadel, 23 m long and with a thickness of 100 mm. This citadel encapsulated the ammunition hoists for the secondary armament and the 57 mm guns as well as the funnel uptakes. The barbettes for the main

artillery were protected by 175 mm and the revolving turret 125-60 mm armor. The main deck had 22 mm armored plate over 22 mm steel plates amidships. The forward conning tower was protected by 157 mm and the aft by 100 mm. Bridge and upper deck was protected by 57-10mm armored plating.

Complement was 326 men and lodgings for an extra nine officers in the staff for the commander of the Coastal fleet was provided.



Fig. 3. The after 21 cm gunturret. The barrels of the after 57 mm guns are also visible

# **Trials**

A strike at the yard as a consequence of the management's lockout of union members delayed fitting out and trials. First official trial took part December 15<sup>th</sup> 1906. As specified by contract the machinery should develop 9 000 ihp at a mean draught of 5.05 m at a speed of 18 knots during at least three hours and a maximal coal-consumption of 0.95 kg good coal per hour and horsepower. Trials were carried out on a distance between Vinga lighthouse and the small skerry Pölsan, a distance of 6.02 nm. The trials had to be aborted after 2 hour and 50 minutes due to excessive vibrations in the starboard engine. Average speed during the trials so far was 18,14 knots and coal-consumption 0.95 kg per hour and hp. Another delivery-trials was performed April 3<sup>rd</sup> 1907. Apart from not reaching the contracted speed of 18 knots (17.95 due to inexperienced stokers) the trials were successful.

More trials were carried out during the spring of 1907. Several nuisances were noted due to practical experiences. When the forward main turret fired aft, the hatches on the forward secondary armament turrets had to be closed. When the forward secondary armament turrets were fired with barrels elevated to maximum it was considered unhealthy to dwell in the forward conning tower due to inhalation of toxic fumes from the propellant gases. When the after secondary turrets fired aft it was also considered dangerous to reside in the aft conning tower, which was intended for the Commander's staff. The hoisting of shells to the secondary armament turrets was unsatisfactory and delayed rate of fire. The nuisances were pointed at and rectified before delivery was accepted.

#### Career until World War I

When delivered to the navy in the spring of 1907, she was employed as flagship in the Coastal fleet. King Oscar II was a devoted sailor and naval officer, and spent much time on board with his wife. In the summer of 1907 the 1<sup>st</sup> division of the Coastal Fleet, consisting of armored ships Oscar II, Tapperheten and Thor along with torpedo-cruiser Örnen paid a visit to England under command of rear-admiral Olsen. Ports visited were Cowes and Portsmouth. After the visit Oscar II returned to Marstrand on the western coast of Sweden, where the king wrote his signature on the aft main artillery tower. This was the last time the king saw the ship that was named after him. Oscar II died December 8<sup>th</sup> 1907.

In the spring of 1908 a squadron consisting of Oscar II, armored cruiser Fylgia and destroyer Magne was equipped to bring home prince Wilhelms future wife Grand Duchess Maria Pavlovna to Sweden. The squadron was commanded by commander Gustaf Dyrssen and left Stockholm late April 29<sup>th</sup>, and was escorted to Reval by no less than 16 Russian destroyers. Prince William and his Maria Pavlovna were married in St, Petersburg, and after the ceremony the couple returned back to Stockholm on board the Oscar II.

In the spring of 1909 the Coastal Fleet exercised in the Stockholm archipelago. The same summer the Russian tsar made a visit to Sweden, and was met by units from the Coastal Fleet. On board Oscar II under command of rear-admiral Wilhem Dyrssen the Russian yachts Standert and Polyarnya Zvezda were escorted to the Swedish capital. A few weeks later Oscar II in company with coastal defence ships Manligheten and Tapperheten, and the torpedo-cruiser Claes Uggla visited the southern city of Trelleborg. King Gustaf V was on board Oscar II, and the purpose of the visit was the solemn inauguration of the ferry-service between Trelleborg and Sassnitz on July 6<sup>th</sup>. Oscar II then paid a visit to Sassnitz where the King met the German Kaiser on board the Hohenzollern, and cordial visits were exchanged.

During the winter 1909-1910 Oscar II made it's first foreign cruise and visited ports in the Mediterranean under command of commander F Peyron. In August 1911 Oscar II and destroyer Ragnar brought the Swedish Royal couple from their summer residence Solliden on the island Öland to Stettin. Later that autumn Oscar II made another cruise to foreign countries. This time ports in Denmark, Germany, Holland, England and the French Atlantic coast were visited.

In the summer of 1912 the Swedish Royal couple went to Viborg in the Bay of Finland on board Oscar II. The Swedish squadron consisted also of coastal defense ship Manligheten, cruiser Fylgia and destroyer Sigurd and it was commanded by rear-admiral Wilhelm Dyrssen. The purpose of the cruise was to visit the Russian tsar and his family, and on board was also the Swedish foreign minister count Ehrensvärd. The Swedish squadron was met by four Russian destroyers and escorted to anchor along the Russian Royal Yachts Standert, Polyarnya Zvezda, Alexandra and Tsarevna. Present was also the Russian armored cruiser Bayan. The following day Oscar II brought the Swedish Royal couple back to Stockholm and then went to Karlskrona for a brief overhaul.

In the autumn of 1912 the political tension in Europe caused by the Balkan-crisis led to a partial mobilization of the Swedish fleet. The Coastal fleet under command of rear-admiral Wilhelm Dyrssen gathered inKarlskrona. It consisted of – apart from the flagship Oscar II – coastal defence ships Manligheten, Dristigheten, Svea, Thule and Göta, armored cruiser Fylgia, torpedocruisers Örnen and Psilander, destroyers Wale, Vidar, Magne and Mode and 13 1st-class torpedoboats. The fleet should operate in the southern Baltic with Karlskrona as main naval base. When mobilization was completed, the unit was inspected by the King and crown-prince Gustaf Adolf, and exercises were carried out during the winter. When international tension cooled off on the Balkan, the Swedish coastal fleet dissolved.

Between June 1<sup>st</sup> and 3<sup>rd</sup>1913 king Gustaf V paid a visit to king Kristian of Denmark. He was brought to Copenhagen on board Oscar II. One month later, the Swedish coastal fleet, counting 31 ships in number, led by flagship Oscar II, went to Sandhamn outside Stockholm to welcome the Italian royal couple. They were brought to Stockholm on board the yacht Trinacria escorted by armored cruiser Amalfi.

During the winter 1913-1914 Oscar II was rear-admiral Wilhelm Dyrssen's flagship in the Coastal fleet, and exercised in the archipelago surrounding Stockholm. On July 25<sup>th</sup>, Oscar II together with coastal defense ships Dristigheten and Manligheten and destroyers Munin, Hugin, Sigurd and Ragnar escorted a French squadron carrying president Poincaré to Stockholm. The French squadron consisted of battleships France and Jean Bart, which cast anchor on the Trälhavet

in the archipelago. President Poincaré transferred to the cruiser Lavoisier which took him to Stockholm where he was met by King Gustaf V and rowed ashore on board the oared yacht Wasaorden.

Apart from the brief tension between Norway and Sweden in 1905, resulting in the dissolution of the former union, the Swedish coastal fleet had not been even close to battle-conditions. Oscar II:s first ten years as flagship had passed mainly in representational duties. During the visit of the French president, tension in Europe raised and called for a sudden termination of the visit. The Swedish fleet was put in highest alert, and Oscar II served as flagship for the Coastal fleet until relieved from this duty by the newly commissioned coastal battleship Sverige. 1916 rear admiral Wilhelm Dyrssen was succeeded by rear admiral C. A. Ehrensvärd as commander of the Coastal fleet.

#### World war I

When war broke out, the Swedish Fleet was immediately mobilized. Main naval bases were Stockholm and Karlskrona, but along the entire coastline of Sweden, local forces — not seldom composed of outdated ships — were stationed. Vital tasks for the naval forces were monitoring our long coast and the protection of shipping. Of course the main burden for performing these tasks was put upon smaller units, notably the destroyers and torpedo-boats.

Oscar II served as flagship for the Coastal fleet until autumn 1917, when she was relieved from this duty by the recently commissioned Sverige.

During the first years of the war, much effort was put upon artillery-practise and damage control. In August 1915 a new method of firedirection was tested on board Oscar II. Indirect fire towards the small skerry Gråkobb east of Utö was successfully carried out from 4 000 m at a speed of 4 knots. Also the ability to sustain maximal speed over a prolonged time was tested using different types of coal – American, Welch and from Newcastle.

In February 1918 the Swedish government decided to bring home Swedish citizens from Finland where a civil war had broken out. Gunboat Svensksund and two hired hiredsmall passenger-ships (Heimdal, 1566 brt and Vineta, 719 brt, both belonging to Rederi AB Svea) along with icebreaker Isbrytaren II, made three journeys to Mäntyluoto and back to Sweden, bringing home 1474 persons, most of them Swedes.

The Swedish government decided on February 18<sup>th</sup> to send armed forces for protection of the inhabitants of Åland. 125 naval infantrymen were sent the same day on Isbrytaren II and Heimdall. More troops were required in order to have control over the situation on the island, and thus the Swedish government decided on February 23<sup>rd</sup> to send another 500 army soldiers. They were transported by steamers Södra Sverige, 733 brt, Luleå, 627 brt and Sundsvall, 299 brt – all operated by Rederi AB Svea – and protected by gunboat Svensksund. The recently commissioned armored ship Sverige along with Oscar II were also sent to Eckerö on Åland. Disturbances continued between red and white, and on March 5<sup>th</sup> the German battleships Westfalen and Rheinland under command of rear-admiral Meurer with 1 200 men troop to support the white appeared. The Germans and Swedes agreed to "share" the island during evacuation, and on March 10<sup>th</sup> this had been carried out successfully enough. Rear-admiral Meurer left on board the Westfalen, and armored ship Sverige left for Sweden carrying back one company of soldiers. Oscar II was left with the remaining Swedish soldiers until April 23<sup>rd</sup>, when they left for home-waters.

# Modernizations

Oscar II underwent several modernization during her life-time. The first occurred already 1910-11, when she – along with the rest of the coastal defense ships –received a tripod-mast carrying a fighting top. During World war I two of the 57 mm guns were replaced by anti-aircraft guns of the same caliber, M/89 B. In 1916 the superstructure between the bridges, which extended over the secondary artillery turrets, was reduced. The forward conning tower was stripped bare by moving the bridgework and fore-mast backwards, and in 1929 the mainmast was shortened.

When risk for war increased in the late 30-ies, Oscar II was taken care of at Karlskrona Naval Yard. She received a new fire-control system including a new fighting-top with director. This equipment had been left over when Sverige underwent a similar modernization. All 57 mm guns were replaced by anti-aircraft guns – four 57 mm M/38, two 25 mm M/32 and two twin 8 mm M/36. All ten boilers were replaced and oil-firing was introduced on the two foremost. A gyro-

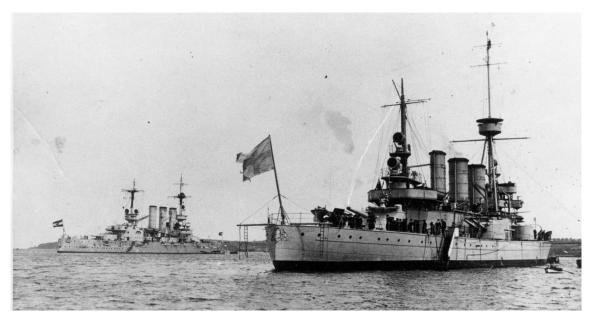
compass, paravans for minesweeping, sonar and modern search-lightswere also added to increase her fighting value. The torpedo-tubes, located below the armored deck were built out and the space was rearranged for fire-direction. When ready for service the displacement had increased to 4 400 tons, 4 850 tons full load at a maximum depth of 5.7 m.

### The inter-war years

When World War I ended, only Sverige of a new class of coastal defense ships was delivered to the Swedish Navy. The remaining two units — Drottning Victoria and Gustaf V were delivered 1921 and 1922 respectively. Thus the strength of the navy had been substantially enforced, and the Coastal fleet had got a new flag-ship.

In September 1918 Oscar II went to Karlskrona Naval base and was decommissioned in need of thorough repairs. Apart from a short expedition during the winter 1923-24 she was due to meager defense spendings decommissioned until 1929. She was then recommissioned and attached to to the Naval War college. During the 1930-ies she made seven journeys bringing naval cadets to foreign waters. These are specified in table 1.

On June 26<sup>th</sup> 1930 Oscar II brought the crown-prince of Sweden, Gustaf Adolf, to Reykyavik on Iceland to take part in the celebration of 1000 year government- the Alltinget. Present at the occasion were also Danish royal yacht Dannebrog, Brittish battleship Rodney commanded by (then) captain Andrew Cunningham and a French cruiser. Captain Cunningham was guest on board Oscar II to witness his team being beaten by the oarsmen from the Swedish ship in a regatta.



**Fig. 4.** «Oscar II» visiting Kiel as cadets training ship 1929. At her port side is German battleship «Elsass»

### **World War II**

When World War II broke out, Oscar II was undergoing the above described modernization. On October 13<sup>th</sup>1938 it was decided to complete only the necessary work in order to get her in a state of readiness by April 1<sup>st</sup> 1939. Work was not, however, completed by this date, and the manager of the yard estimated completion at October 30<sup>th</sup>. This was caused by delay in the delivery of new cogwheel arches to the 21 cm artillery from AB Bofors. Even by paying the workers overtime Oscar II was not ready to join the Naval detachment in Karlkrona until mid-November 1939. She spent most of the war-years in this detachment apart from some months in the Stockholm detachment 1941 and during the summers 1942 and 1943, when she was assigned to the Naval war college.

## The final years

After World war II Oscar II made her last journey as a training ship for petty officers. She made a cruise along the Swedish coast, from Strömstad on the western coast to Haparanda in the Gulf of Bothnia. In January 1947, a brief visit to Larvik in Norway was undertaken, and when returning to Gothenburg on January 29<sup>th</sup>, orders were given immediately to proceed to Copenhagen in order to bring home the bodies of the Swedish crown prince Gustaf Adolf and his adjutant, both which had died in an aircraft accident at Kastrup airport.



**Fig. 5.** «Oscar II» in March 1936. Mainmast is shortened, AA guns are mounted on turret roofs and at radio directionfinder antenna is seen on the roof of the fighting-top



**Fig. 6.** «Oscar II» in Gothenburg 15 July 1946. A rangefinder is seen on her fighting top, life-floats are attached to the superstructure and the radio direction finder antenna has been moved to forward of the searchlight platform (photo is courtesy Curt S. Ohlsson)

Oscar II was decommissioned and stricken from the list February 24<sup>th</sup> 1950. She was however brought to Berga Naval school 1952 and was used as a training hulk for damage-control and fire-fighting. She was used in this role until September 11<sup>th</sup> 1974, when she was sold for 850 000 S Kr to Skrot – Avfallsprodukter AB in Gothenburg for breaking up.

#### References

Holmkvist, 1972 – Holmkvist Å. (1972). Flottans beredskap 1938-1940. Allmänna Förlaget. Insulander P. och Ohlsson, 2001 – Insulander P. och Ohlsson C. S. (2001). Pansarskepp. CB Marinlitteratur.

Kungl Sjökrigsskolan, 1942 – Kungl Sjökrigsskolan 1867-1942. Ed. G. Hafström. J.O. Öberg & Son, 1942.

Kungl, 1967 – Kungl. Sjökrigsskolan 100 år. Ed. J. Stefenson. P.A. Norstedt & Söner, 1967. Lindholmen, 1947 – Lindholmen 1845-1945. En minnesskrift. Oscar Isacsons Tryckeri AB, 1947.

Von Eckermann, 1907 – Von Eckermann A. (1907). Årsberättelse i skeppsbyggeri och maskinväsende 1907. Tidskrift i Sjöväsendet.

Von Hofsten, Rosenius, 2009 – Von Hofsten G., Rosenius F. (2009). Kustflottan. Marinlitteraturföreningen.  $\mathbb{N}^0$  94.

Von Hofsten, Waernberg, 2006 – Von Hofsten G., Waernberg J. (2006). Örlogsfartyg. Forum Navale.  $\mathbb{N}^{\circ}$  6.

Westerlund, 1992 – Westerlund K-E. (1992). Svenska örlogsfartyg 1855-1905. Marinlitteraturföreningen.  $N^{\circ}$  75.

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# Шведский броненосец береговой обороны Oscar II

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**Аннотация.** «Oscar II» служил в шведском флоте почти 70 лет в различных ролях: как флагманский корабль, корабль береговой обороны, учебный корабль для курсантов, и, наконец, как стационарный тренировочный блокшив. На следующем поколении броненосцев (типа «Sverige») было достигнуто значительное увеличение огневой мощи и скорости. Эти корабли вооружались четырьмя 28-см орудиями и приводились в действие паротурбинами, развивавшими 20 000 л.с. А разрыв между типами «Äran» и «Sverige» был заполнен всего одним «Oscar II».

**Ключевые слова:** Шведский флот, линкор, броненосец береговой обороны, вооружение, история.