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RUSSIAN LIGHTSHIPS OF THE BALTIC SEA IN 19TH AND 20TH CENTURY

ABSTRACT

Successful preliminary archival research in Russian Naval National Archives in St. Petersburg (RGAVMF) was conducted by the author in 201. It concerned the period between the 19th and the beginning of the 20th century, was a result of making archive materials available, however, only up to 1917.

Based on the available sources, one can state that the general situation concerning navigational security of shipping in the regions of the Gulf of Finland and the Gulf of Bothnia in the times of Russian Empire, up to 1918, was complicated because Finnish land, between 1809–1917, formed Grand Duchy of Finland, an autonomous part of the Russian Empire. Due to this situation, the safety navigational regulations in the region were based on Russian law. Lightships and lighthouses of the described regions had Russian names. It was not until Finland was separated from Russia when the original, Finnish, names of navigational signs, written in Latin alphabet were introduced. The lightships shown in the monograph have both Russian and Finnish names written in Cyrillic alphabet. Some of the vessels are also present among Finnish lighthouses but have different names. A similar situation occurs when describing Estonian and Latvian lightships, which belonged to those countries between 1920–1939 but, apart from that period, belonged to Russian and Soviet governments.

Key words:

history, lightship, The Baltic Sea.

Introduction

The given material has been drawn up on the basis of rather poor Russian archive materials. It has been supplemented on the basis of data available in English and German List of Lights and Beacons and detailed data

gotten via e-mail correspondence with the representatives of different associations and hobbyists who also research similar issues.

Preliminary archival research in National Russian Navy Archive in Sankt Petersburg, carried out by the author in 2011, resulted in gaining materials concerning the 19th and the beginning of the 20th century. The materials the author was provided with were dated up to 1917.

The analyses have showed that the biggest number of lightships were present at the Sankt Petersburg (Leningrad) harbor entrance, at the mouth of Neva River as well as at a navigationally difficult region of Finnish ports, where there are many rocky obstacles, making sailing naturally difficult. In this region served, as navigation and pilot devices, such ships as *Newskij (Neva)*, *Londonskij (London-Grund)* and *Elaginskij (Elagin)*. Between 1936–1955, the vessels were replaced by one lightship, *Leningrad*. Other lightships served at the entrance to such ports as for example: Talinn (Reval) – *Revalstein (Tallinnamadal)*, Wentspils (Windawa) – *Ventspilskij* and, at the mouth of Irba strait leading to the Riga Bay – *Irbienskij*¹.

The enlisted lightships were vessels adapted for navigational tasks rather than built for that purpose. That was the reason why it was difficult for larger crews to serve on them, a problem which was not taken very seriously in Russia. For example, the crew of the lightship *Elagin* consisted of twelve sailors, a paramedic and the captain – an ex colonel². It wasn't until after 1912 that, due to a detailed inspection and severe corrosion, that the new vessels were planned to be built. The first new ship project was drawn in 1914. It was a ship which was 36,5 m long, 8,54 m wide and its draught was 3,05m. It was supposed to replace the lightship *London-Grund* and the vessel's shipyard project number was 15546/I. I004³. The available materials indicate that the ship was built and did replace the above-mentioned lightship. Due to the changes in the denoting Leningrad port entrance, three lightships were replaced by one, called *Leningrad*. A detailed analysis of the ship's photographs allowed to state a high similarity to the project numbered 15546/I. I004. The given reconstruction shows the visualization of the lightship. (Fig. 1.)

¹ Developed based on archival documents: RGAVMF: Opisanije majakov, baszen i znakov Rossijskoj Imperii po beregam Baltijskogo Moria s zalivami, St. Petersburg 1913, s. 2-127 oraz The Admiralty List of Lights and Time signals. Part 3. Baltic Sea with Kattegat, Belts and Sound, London 1920.

² RGAVMF F404 op3 d 1498 L 15.

³ RGAVMF F404 op3, d 1805 L 136.

Fig. 1. Lightship *Leningrad* – reconstruction



Source: RGAVMF F 404. Op.3, d 1805, L136. Author. S. Sierakowski.

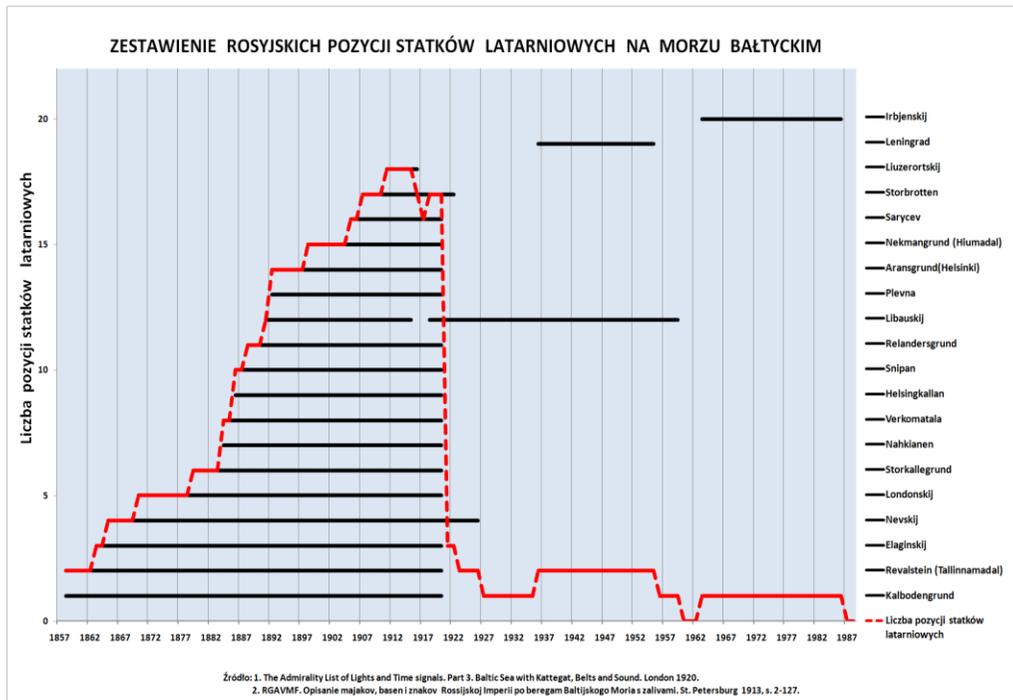
According to the archive materials, Russia exploited five lightships in 1884 (*London – Grund, Kalbadagrund, Elagin, Revalstein and Neva*)⁴, eight in 1898 (*Neva, Elagin, London-Grund, Werkkomatala, Kalbadagrund, Åransgrund, Libau and Revalstein*)⁵, and in 1914 – twelve (*Neva, Elagin, London-Grund, Werkkomatala, Revalstein, Nekmangrund, Liuzerort, Sarichev, Libau, Zapasnoj –Reserve, Relandersgrund i Storbrotten*)⁶.

⁴ Opisanije majakov, baszen i znakov Rossijskoj Imperii po beregam Baltijskogo Moria s zalivami, St. Petersburg 1884.

⁵ Locja Ruskogo bieriega Baltijskogo Moria, St. Petersburg 1898.

⁶ Opisanie majakov, basen i znakov Rossijskoj Impierii po beregam Baltijskogo Moria s zalivami, St. Petersburg 1914.

Fig. 2. A list of Russian lightships from the Baltic Sea.



Source: Own elaboration.

The given graph and chart indicate the names and basic data concerning the lightships as well as their geographical positions. The map indicates the deployment of the vessels in the area of the Finnish Gulf and the Gulf of Bothnia.

Tab. 1. The Russian lightships between 1863–1986

Number	Name	Geographical position, Width/length	Years of service	Notices
1.	Elaginskij	59.58/030 09	1863–1920	
2.	Eransgrund (Aransgrund)	59 58/024 56 (59 56/024 56)	1892–1920	
3.	Helsingkallan		1886–1921	
4.	Irbienskij	57 51/021 37	1963–1985	The ship is now in the museum in Lomonosovo, near St.

				Petersburg
5.	Kalbodengrund	59 59/025 37	1885–1917	
6.	Libavskij	56 31/020 51	1891–1915	As a Finnish lightship between 1918–1959 jako was called: Aransgrund, Helsinki, Relandersgrund
7.	Liuzerortskij		1912–1917	
8.	Leningrad	60 05/029 21	1936–1955	
9.	Londonskij	60 00/029 31	1870–1920	
10.	Nahkianen		1884–1921	
11.	Nekmangrund	59 05/022 13	1898–1920	
12.	Nevskij	59 56/030 08	1865–1926	
13.	Plevna		1885–1921	
14.	Relandersgrund		1887–1921	
15.	Revalstein	59 43/024 45	1858–1920	Served as a lightship Tallinnamadal in 1970
16.	Sarycev (Sarichev)	57 38/021 37	1905–1920	
17.	Snipan		1867–1921	
18.	Storbrotten		1905–1921	
19.	Storkallegrund		1879–1921	
20.	Ventspilskij	57 51/021 37	1985–1986	
21.	Werkkomotala	60 02/028 55	1884–1920	

Source: *The Admiralty List of Lights and Time signals. Part 3 Baltic Sea with Kattegat, belts and Sound. London 1920; RGAVMF. Opisanie majakov, basen i znakov Rossijskoj Imperii po bieregam Baltiskogo Moria s zalivami. St. Petersburg 1913, s. 2-127; RGAVMF. Opisanie majakov, basen i znakov Rossijskoj Imperii po Bieregam Baltiskogo Moria s zalivami. Ispraviennoje 1 apriela 1884, St. Petersburg 1884. oraz 1914; RGAVMF. Locja Russkogo bieriega Baltijskogo Moria, St. Petersburg 1898.; www.plavmayak.spb.ru*

One of the basic problems with using the lightships serving in the area of the Finnish Gulf and not only, was icing of the waters during winter, which forced the administration to suspend the vessels' mission from November to April. In that time, maintenance took place, all the necessary renovations and repairs were done.

Fig. 3. The Gulf of Bothnia and the Finnish gulfs with the lightships



Source: Own elaboration.

Due to their navigational significance, the history of two lightships *Irbienskij* and *Revalstein* serving in the area of the Finnish Gulf will be presented separately.

1. Lightship *IRBIENSKIJ*

The history of the lightship began in the 1950's. Because there were more and more ships appearing at the Riga Bay, the safety of the sailing in that area had to be better taken care of. There is a lot of shoal areas and reef in the pass leading from the Baltic Sea to the Riga Gulf, which makes naviga-

tion in the region difficult. One of the most dangerous shoal in the region is the Michaylovska Shoal and it was in this area that the lightship *Irbienskij* was sent.

The ship was ordered in the late 1950's by the USSR in a Finnish shipyard together with its twin – lightship *Astrachanskij*, which was designated to serve at the Caspian Sea.

Irbienskij, lightship with project number 852, was the very last vessel of such kind which was destined to serve by the USSR. Both ships built in Finland turned out to be the very last lightships that were to be built in the world as the era of crewed lightships as important navigation devices was ending.

Irbienskij's parameters:

- length – 43,4 m;
- width – 9,5 m;
- ship's side height – 4,7 m;
- maximum draught – 3,8 m;
- maximum displacement – 672 t;
- engine power – 375 KM;
- economic speed – 7 knots.

The fuel supply, 90 tons, was enough for the main engine to work for 10 days. The drinkable water supply, 46,5 ton was enough for 50 days. There was a pilot motorboat on the ship which was 6,5 meters long and two rescue boats, which were lowered by a rotational crane. The ship's fuselage was divided into seven waterproof compartments.

There were nineteen people among the ship's crew, thirteen of which lived in cabins adapted for one person or two people. One of the cabins was meant for a pilot, although, he never used it. A light system mast was situated in the center of the deck – it was a metal pipe, inside of which there were steps, which the crew was using to get there to operate the system. The lightship's light was visible over 17,5 meters above the sea level and its range was about 12 sea miles. The light system was ordered and made in a Swedish company AGA, known for producing lightships devices of an exquisite quality. The system was built of a 50-centimeters diameter big drum lenses, inside of which there was a light bulb with 1700 candela power. The whole system was situated on a Cardan suspension.

Fig. 4. Lightship *Irbienskij* – reconstruction

Source: Author S. Sierakowski.

The lightship was also equipped with a radio lantern MRM-54 and a Swedish foghorn LIEGE – 300. The ship had full navigational equipment, including: compasses, radio direction finder, echo-sounder and a radar.

The described lightship appeared on its position for the first time on the 2nd of August 1962, it was since placed on its permanent position, namely, 57°51'N and 21°37' E for the first time on May 5th 1963 and served there from April 1st to December 1st. The crew would change at sea, the supply and base harbor was Venspils, where *Irbienskij's* maintenance and docking took place. The lightship never took part in any sea collisions throughout its service.

The *Irbienskij's* service ended in 1985 when a lighthouse "Irbienskij" was built and situated at the sea bottom near the Michaylovskaja Shoal. The lightship was delegated to serve at a different position – the beginning of the pass leading to Venspils harbor. The ship began its service there with a new name, *Ventspilskiy* and served there for one year. Next, it spent four years in the harbor out of service, with no crew. In 1994 the ship was transported to Bałtyjsk harbor and, finally, appeared in Łomonosow harbor where it was used for fifteen years as a floating base of one of the navy's divisions' staff.

In 2009, lightship's service came to a definite end and it was decided to scrap it, but no buyer was found. The ship is still moored in the Łomonosow harbor and it is now rotting, completely plundered. Russian historians and lightships' lovers were trying to revive the vessel and to display it in one of the Russian harbors as a museum. A foundation MAJAK and a website plavmayak.ru were started to unite the supporters of keeping the lightships for the future generations.

Finally, in 2012, due to the President of Russia's decision, the ship, after being renovated, will become a museum showpiece of St. Petersburg and will be taken care of by the Kronstadt History Museum. The dreams of the lightship's enthusiasts have come true⁷.

2. Lightship *TALLINNAMADAL* (*REVALSTEIN*)

At the entrance to the port of Tallinn (Revel), about nineteen sea miles due North West away from it, near a rocky shoal area called Revalstein, a wooden lightship *Revalstein*⁸ was designated to serve in 1858. It wasn't the best choice, so in 1864 the ship was replaced by a vessel of the same name, but based on metal fuselage. During the day, two spheres painted in vertical black and white stripes were hung on the ship's two masts. At night, light systems made of Arganda lamps and, later on, eight oil lamps with catadioptric lenses were hung. In 1898, the systems were replaced by newer ones, with Frensel 6-class lenses. In order to mark the lightship better at night, a lamp was also hung on the vessel's stay.

Fig. 5. Lightship Revalstein (Tallinnamadall)



Source: Klaus Huelse's collection.

After World War I ended, lightship *Revalstein* was taken over by Estonia. After the fuselage was repainted, the ship's name was changed to *Tallinnamadall* and it served as a navigational device until 1940. The Second World War discontinued the ship's further exploitation. After the end of

⁷ The last Russian lightship. www.plavmayak.ru [access: 02.01.2013].

⁸ The ship initially had a name composed of letters on the sides R. P.

World War II, the government decided to mark the shoal areas with buoys and the lightship was no longer put in service.

In 1960's an idea was born to mark the shoal areas at the entrance to Tallinn's with a lighthouse built on the sea bottom. After the reinforced concrete fifty-five-centimeters diameter-wide base was built, an eight-story (31.2 meters) high tower was put on it. The lighthouse's light is powered by automatic isotopic aggregates. The lighthouse is fully automatic and is controlled by the harbor⁹.

3. *LIBAVSKIJ (LIBAU) 1891–1915*

Initially, it was a wooden ship with a vertical white stripe painted in the middle of the fuselage and a black letter “Л”. From 1912 it was a steel ship with two masts and a chimney placed in the middle part of the deck. There was a white sign *ЛИБАВСКИЙ* placed on the sides. Built in St. Petersburg it was equipped with electric light and a pneumatic siren, both used to send fog signs. After the region of Lipava was taken by the Germans in 1915, the ship's service was suspended. When World War I ended, the vessel was given to the Fins by the Germans as a war haul.

Turned into a lightship it kept on being renamed: *Relandersgrund*, *Åransgrund* and *Helsinki*. It served on three different positions between 1918–1959. Later, between 1959–1983 it was being exploited as a supporting vessel named *HYÖKY*. Bought in 1983 by a private company it remained in Helsinki as a museum ship and a restaurant.

Fig. 6. Lightship *Libavskij*



Source: Klaus Huelse's collection.

⁹ A. A. Komarincyn, *Majaki Rossiji*, S. Petersburg 2001, s. 273-275.

Summing up

A general situation concerning the navigational safety of the Finnish and Bothnia Gulfs during the Russian Empire, until 1918, was complicated. The Finnish lands, Grand Duchy of Finland, was subjugated to the Russian Empire between 1809–1917 and because of that navigation safety of the above-mentioned gulfs were under Russian jurisdiction, thus both lightships and lighthouses of the described regions had Russian names. It wasn't until Finland became independent that the original names began to be written using the Latin alphabet. The vessels showed in this publication have both Russian and Finnish names, written in Cyrillic alphabet. Some of the vessels can also be seen in Finnish collections of lightships, but under different names. A similar situation appears in the descriptions of Estonian and Latvian lightships which, between 1920–1939 belonged to those countries but before 1920 and after 1939 were submitted to the Russian and Soviet power.

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ROSYJSKIE STATKI LATARNIOWE MORZA BAŁTYCKIEGO W XIX I XX WIEKU

STRESZCZENIE

Kwerenda archiwalna w Rosyjskim Państwowym Archiwum Marynarki Wojennej w St. Petersburgu (RGAVMF), którą autorka przeprowadziła w 2011 r., umożliwiła dość dobre opracowanie historii rosyjskich statków latarniowych z okresu XIX i początku XX wieku, co jest wynikiem udostępnienia przez wspomniane archiwum materiałów tylko do 1917 r. Późniejszy okres historyczny tych znaków nawigacyjnych został opracowany w oparciu o brytyjskie spisy świateł, jak też również dzięki pomocy rosyjskich hobbystów.

Na podstawie dostępnych źródeł można stwierdzić, iż ogólna sytuacja związana z zabezpieczeniem nawigacyjnym żeglugi w rejonie Zatoki Fińskiej i Botnickiej w okresie panowania Imperium Rosyjskiego do 1918 r. była złożona, bowiem ziemie fińskie tworzyły Wielkie Księstwo Finlandii podległe imperium rosyjskiemu w latach 1809–1917. Tym samym zabezpieczenie nawigacyjne zatok podlegało rosyjskim przepisom. Latarniowce i latarnie morskie omawianych rejonów nosiły więc nazwy rosyjskie. Dopiero po odłączeniu Finlandii od Rosji wprowadzono oryginalne nazewnictwo na znakach nawigacyjnych należących do tego państwa, stosując alfabet łaciński. Pokazane w opracowaniu sylwetki latarniowców noszą nazwy rosyjskie i fińskie, pisane cyrylicą. Niektóre z tych jednostek występują też w zbiorze fińskich latarniowców pod zmienionymi nazwami. Podobna sytuacja występuje przy opisach latarniowców estońskich i łotewskich, które w latach 1920–1939 znajdowały się w podległości tych państw, a poza wskazanym okresem podlegały rosyjskim i radzieckim władzom.

Słowa kluczowe:

historia, statki latarniowe, Morze Bałtyckie.