

RATTRAY HEAD LIGHTHOUSE

Light Established:	1895
Engineer:	David Alan Stevenson
Position:	Latitude 57° 36.6' N Longitude 01° 48.9' W
Character:	Flashing (3) White every 30 secs
Elevation:	28 metres
Candlepower:	156,000
Nominal Range:	24 miles
Structure:	White tower. Lower part granite, upper part brick, 34 metres high. There are 64 steps to top of tower.
Fog Horn:	2 blasts every 45 seconds

The lighthouse tower is listed as a building of Architectural/Historical interest.

The light was established in 1895, forty six years after Mr Alan Stevenson, Lighthouse Engineer, had first undertaken to carry out a series of experiments to ascertain whether Rattray Briggs could be effectively marked by a red arc shown from the flashing light of Buchan Ness. On the completion of these experiments in 1857 he reported that such a scheme was not possible.

In 1859 the Commissioners again sanctioned a series of experiments due to a suggestion by Captain Bedford, who reported that the lantern at Buchan Ness be altered to admit screens and other appliances to obtain a cut off. After many experiments the Engineers reported in October 1862 and January 1863 that it had been found impossible to obtain a cut off which would be of any practicable value (the cut offs tried had adversely affected the distinctive character of the white flashing light). He was of the opinion that Rattray Briggs should be marked by the aid of a light, the position of which could only be determined after careful inspection and survey.

The matter rested until 18 November 1874, when the Sheriff of Renfrew and Bute called the attention of the Commissioners to the propriety of erecting a Lighthouse at Rattray Head. Once again the Engineer was asked to report and once again he recommended the erection of a Lighthouse on a site to be determined. Consequently, on 17 December 1874, Trinity House was requested to sanction the erection of a Lighthouse. This, Trinity House refused to do. On 18 January 1875, they wrote stating that the dangers of Rattray Briggs could be avoided by use of lead and by not coming under 20 fathoms of sounding. They suggested that a bell buoy be substituted for the one marking the reef.

It was decided that the Commissioners' Inspection Committee should examine the site during their Inspection Voyage. Having done so they resolved to resume consideration of erection of a light. Regarding Trinity House's proposal that a bell buoy be substituted, the Engineer reported on 3 November 1875 that, as great difficulty had been experienced in maintaining the relatively small buoy at present marking the position - it had drifted from its position five times in the previous five years - it would be almost impossible to maintain a larger bell buoy. Furthermore, the bell would often be inaudible as it would be drowned by the noise of breaking water on adjoining beaches.

The matter fell into abeyance yet again until 18 March 1887, when William R Lord, Master, SS "Critic" reopened the subject by writing to the Commissioners in the following terms, "It is

a rare thing to pass this dangerous point without finding a ship of some sort stranded and it is one of the most prominent turning points of North East Scotland.

Mariners will consider it a great boon by having a light placed here". However, he was informed by the Commissioners that there was no money available for such a project. On 14 November 1889 a further application for a light was received from the local Fishermen of Peterhead and this was remitted to the Engineer, David Alan Stevenson, who reported that the area "was notorious among mariners for its foul ground, rapid tides and high and dangerous seas. No part of the East Coast of Scotland was more dangerous than this. Also a light was more important in view of the fact that a harbour of refuge was being built at Peterhead at an estimated cost of £500,000". In March 1890 Trinity House was approached for sanction once again but requested further information which failed to convince them that there was any need for a light. They refused sanction stating that they had "no reason for reversing their previous decision in the absence of any evidence that traders, upon whom the cost of its support would fall, are desirous of a light on Rattray Head and are willing to pay the necessary toll for its maintenance". The Engineer set about obtaining the necessary support from shipowners for the erection of the light and fog signal and received it from the following:-

1. Henderson Brothers, Glasgow
2. Langland & Sons, Liverpool who sent 4 reports from 4 Captains sailing in the area.
3. James Currie & Co, Leith
4. A C Gow & Co, Glasgow
5. C Salvesen & Co, Leith
6. G Gibson & Co, Leith
7. Joseph Robinson & Sons, North Shields
8. John Warrack & Co, Leith
9. Secretary, Leith Shipowners Society
10. Secretary, Lloyd's London
11. Arrow Shipping Co, Newcastle
12. North of Scotland, Shetland, Orkney Shipping Co
13. Dundee Harbour Trustees
14. Peterhead Harbour Trustees

The Commissioners decided to by-pass Trinity House and forwarded the list of shipping companies wishing a light and fog signal to the Board of Trade with a request that the Board of Trade should arbitrate in the matter. (Commissioners had power, to act in this way under the terms of the Merchant Shipping Act 1854). On 30 December 1890 the Board of Trade wrote stating that they had written to Trinity House informing them that they had sanctioned the erection of a Lighthouse and Fog Signal at Rattray Head as proposed by the Commissioners. They added that it might be necessary to give priority to other works upon which Commissioners and Trinity House were agreed. Trinity House's sanction followed on 8 January 1891. Estimated cost £18,169 2/6d made up as follows:-

1.	Offer by David Porter of Aberdeen for		
	Tower and dwelling houses	12,216	2/-1d
2.	Lantern, parapets, apparatus	2,892	0/-0d
3.	Fog Signal apparatus	2,200	0/-0d
4.	Oil cistern	120	0/-0d
5.	Water Supply	200	0/-0d
		<u>17,628</u>	<u>2/-1d</u>
	10% incidentals (of 2,3 and 4)	541	0/-0d
		<u>18,169</u>	<u>2/-1d</u>

Actual Cost = £18,949 1/1d

The light was exhibited for the first time on 14 October 1895.

Quite a new departure in lighthouse design was planned. Stevenson built a rock tower in two parts, the lower containing a foghorn and engine-room, and the upper the lightkeepers' room and lantern. It was the first time that a first-class siren fog signal had been installed in a rock lighthouse.

Work was begun in 1892, and the masonry of both portions of the tower was completed in sixteen months, spread over three seasons. The lower section, 20,000 cubic feet of dressed granite blocks mostly quarried at Rubislaw, was 46 feet high, with an entrance door reached by a 32 foot outside ladder, at high water it is covered to a depth of 7 feet but it is possible to walk ashore when the tide is out, the upper, with a case diameter of 21 feet for the lightroom, lantern and dome brings it to a total height of 120 feet above the rock. The engine room is at the entrance level, and the upper tower and siren are planted on a platform known colloquially as the 'quarter deck'. The five-wick paraffin lamp, when first lighted in 1895, had a candlepower of 44,000, compared with 6,500 at neighbouring Buchan Ness.

During the Second World War on 20 September 1941 an enemy plane circled the lighthouse, dropped three bombs, one of which did not explode. The lantern was machine-gunned but the damage caused did not seriously impair the efficiency of the apparatus. No one was injured in the attack.

Many changes have taken place since 1895. A mains electricity supply and telephone cable were laid under the seabed and completed in September 1977. In February 1982, the light was made fully automatic and the keepers withdrawn. The light is protected by a Dynamic Logic alarm. This machine dials a telephone number after the alarm has been set off. To trigger the machine the alarm must persist for five minutes, the machine will then dial the first of five telephone calls it is programmed to make. In the case of the Rattray Head, the first three calls are to Kinnaird Head Lighthouse.