

North Ronaldsay Lighthouse

Light Established

1789

Engineer

Thomas Smith

Position

Latitude 59° 23.4'N

Longitude 02° 22.8'W

Character

Flashing White every 10 secs

Elevation

43 metres

Nominal Range

24 miles

Structure

Red brick tower with 2 white bands, 42 metres in height. There are 176 steps to the top of the tower.

Fog Horn

Horn blasts every 60 seconds

History

North Ronaldsay was the third lighthouse the Commissioners built, being preceded by Kinnaird Head and Mull of Kintyre. Thomas Smith, an Edinburgh lampmaker was the engineer with Ezekiel Walker, an English lighthouse designer, to advise in the initial stages. Smith was assisted by his step-son Robert Stevenson, founder of a famous family of lighthouse engineers, and grandfather of Robert Louis Stevenson.

Smith chose to build the first North Ronaldsay tower at Kirk Jaing, the most easterly point of Dennis Head. The transport of workmen and materials from Leith slowed down the work, but by the autumn of 1789 the masons, John White and James Sinclair, had constructed 70 ft tower of local undressed stone, along with the lightkeeper's dwellings. The bill of the mason's work came to £199-12-6d.

North Ronaldsay was first lit on 10 October 1789 along with Eilean Glas lighthouse. The most advanced lighting system of the time was the catadioptric or reflecting system, which consisted of a cluster of lamps burning oil, with

copper reflectors, the reflectors were cleaned with a soft linen rag and Spanish white or finely powdered chalk until they were perfectly bright. These instructions were to be strictly adhered to, or a great part of the effect of the light was lost.

In 1806, a lighthouse was built at Start Point, and North Ronaldsay, then considered redundant, was extinguished in 1809, its lantern replaced by a great wall of masonry removed from Start Point in 1806. It still survives as a great unlit beacon, its sturdy walls a tribute to good masonwork.

As the years passed, it became obvious that this island, with its dangerous shoals, still required its own lighthouse. By this time, the sea around North Ronaldsay had been carefully surveyed, and the site for the new tower at Dennis Head chosen to give maximum warning of the Reef Duke and Seal Skerry. "The necessity for giving an extensive range to the light at North Ronaldsay, which is to warn the mariner of his approach to the North Foreland of Orkney, combines with the lower level of land, to render a high tower unavoidable".

In a situation where there are no good materials for masonry and to which every thing must be transported by sea under all the disadvantages of bad anchorage and difficult landing, the elevation of 130ft, which I have found necessary to give to the Tower, must involve a larger outlay than usual. I have, accordingly, introduced brick work as affording greater facility of shipment".

So Alan Stevenson wrote to his "Report on the Offers for North Ronaldsay Lighthouse January 8, 1852". In his thorough-going manner, Stevenson had also designed an iron tower, so that the Commissioners might choose the more economical structure, at the same time he voiced the misgiving that in high winds the vibrations of an iron tower might affect the apparatus.

On Stevenson's recommendation, the Commissioners accepted the lowest offer of £6,181-8-7 for a brick tower from William Kinghorn, a "respectable builder" of Leith.

Kinghorn had first to build a stone jetty of half-a-mile with the help of locals. North Ronaldsay possessed what is still the highest land based lighthouse in the British Isles. Soaring to a height of 139ft, the gleaming red brick tower must have been a source of wonder to the inhabitants of the island. It dominated the low lying crofts, its revolving beam sweeping over the lighting up and the land as well as the sea, to the benefit of night visitors.

In 1889, the red brick tower was painted with two white bands to distinguish it as a day mark.

There have been many changes since a light was first shown in 1789. In 1907, the light was change to incandescent. A radio beacon was added in 1932, and in 1971 further improvements were made to this.

North Ronaldsay Lighthouse was automated on 30 March 1998.