A Short History of the Life Saving Apparatus

An abstract from the report of the Board of Trade on Life Saving Apparatus on the Coasts of the United Kingdom presented to Parliament for the year ending 30th of June 1913

South Shields
Volunteer Life Brigade
Established 1866
The Lifeboat and the Rocket Apparatus form the principal means adopted for saving life on the coasts of the United Kingdom. With few exceptions the lifeboats are the property and under the management of the Royal National Lifeboat Institution. The boats at Ramsgate and Fair Isle are now the only lifeboats under the superintendence of the Board of Trade. The Rocket Apparatus is the exclusive property of the Board of Trade.

The following is a short account of the history of the Apparatus:

Captain G. W. Manby, F.R.S. (Born 1765, died 1854), was the inventor of the mortar apparatus, and therefore of the system of the rocket apparatus. The same idea had, however, previously occurred to Sergeant Bell, of the Royal Artillery, who, as early as 1791, devised a plan for throwing a rope on shore by means of a shell from a mortar on board the vessel in distress, or vice versa and similar experiments were made by a Frenchman named La Fere. Manby, however, had not heard of these inventions, and his own was the first that was used. The idea occurred to him in February 1807, when present at a shipwreck, and in February of the next year he saved seven persons from a wreck by throwing a line over it, with which a boat was hauled off; and in the year after he saved several crews. In 1810 the invention was brought before Parliament; again in 1814, when 45 mortar stations were established; and again in 1823, when a grant was made to Captain Manby of 2,000l, in addition to previous grants.

Though the Government thus took the apparatus under its protection, and it was worked by the Coast-guard, it was not until 1855 that the management of it was placed under Government Department. Before this, the Shipwreck institution, the Royal National Institution for Saving Life from Shipwreck (now called the Royal National Lifeboat Institution), and other local shipwreck societies, assisted and cooperated with the Government in establishing and supervising stations, but there was no central authority.

In the meantime, however, rockets had been invented and used for carrying the line. In the same year that Manby had conceived the idea of the mortar apparatus (1807), a rocket had been proposed by Mr. Trengrouse, of Helston, in Cornwall, who also proposed a kite, and a hand and lead line, as means of communication with a vessel in distress. The first and third of these proposals have borne fruit in the rocket and heaving-cane, now used at every station in the United Kingdom. Mr Trengrouse exhibited his rocket apparatus at Woolwich on 28 February 1812,
before Lieut.-General Ramsey, Rear Admiral Sir C. Rowley and a board of officers. As a result of this exhibition the Admiralty ordered some sets to be manufactured in the Ordnance Factory, and awarded Mr. Trengrouse £50. In the same year his invention was considered by a Committee of the Elder Brethren of Trinity House. On 28 May, 1819, he exhibited his apparatus over the Serpentine in Hyde Park before the Society of Arts, and was awarded the Society's large silver medal and the sum of thirty guineas.

In 1826 the Royal National Institution for Saving Life from Shipwreck supplied four places in the Isle of Wight with rockets made by Mr. John Dennett, of Newport, Isle of Wight; and life was first saved by them at Bembridge in 1832. In 1853 there were about 120 stations in the United Kingdom supplied with Dennett's rockets.

In 1836, a Mr. Carte, of Hull, produced a modification of the Congreve rocket, which was supplied to about thirty-one stations, chiefly in Durham and Yorkshire. This rocket had no special advantages, and never came into general use.

In the autumn of 1852 experiments were made with an anchor shot and a grapnel shot.

When the Government took the Life-saving Apparatus under its own entire control in 1855, there were a large number both of mortar and rocket stations, at about half of which there were both mortars and rockets. The superiority of the Rocket Apparatus was acknowledged, but experiments were made by Colonel Boxer with a view to improving both means of communication. He succeeded in improving both; the first by a new shot of different shape, and containing fuzes, which threw a light over vessels as they passed, and the latter by a new rocket, a combination of two rockets in one case, one being a continuation of the other, so that the first compartment carried the projectile to its full elevation, and the second gave it an additional impetus; the range thus obtained was found to much exceed that of two rockets attached side by side to one stick. This rocket was the same in principle as that now used.

In 1857 the Board of Trade, who had then taken over from the Customs the management of the apparatus. Issued fresh instructions, which adopted almost entirely the proposals made by Admiral J. R. Ward, Chief Inspector of Lifeboats to the Lifeboat Institution, and published in The Life Boat for July 1853. Admiral Ward was also the inventor of the cork lifejacket used universally by the Coast-guard, specimens of which were exhibited at the Paris Universal Exhibition of 1855. In the same exhibition there was also shown the "Travelling Life Buoy" or "Sling Life Buoy," now used with the apparatus, and known as the "Breeches Buoy," which was invented by Commander Kisbee, R.N.

The Board of Trade issue cards of instructions to crews of vessels. These cards are supplied gratuitously to ship owners and masters to be placed in their vessels in a conspicuous position, and are also fixed in public places along the coast. Every certificated officer in the mercantile marine is required to understand the working of the apparatus.