The Landmark Trust

SEMAPHORE TOWER, CHATLEY HEATH

The Semaphore Tower standing on ancient Chatley Heath is the last surviving tower semaphore station in the country. This unique remnant from the Napoleonic era was once a vital link in a signalling chain that transmitted messages from Admiralty House in London to Portsmouth Docks in a matter of minutes. The construction of the line was ordered in 1816 in the aftermath of the Battle of Waterloo, when foreign invasion still seemed a real possibility.

For over 20 years the affairs of the Royal Navy passed back and forth along this line, relaying orders to the fleet and reporting the movements of friend and foe alike. When it was built, its semaphore system was state-of-the-art.

If things had turned out differently – if there had been another war with France, if England had been invaded – this tower on Chatley Heath would have played a key role in a great naval conflict. As it turned out, peace reigned during its period of active service, until its mechanical signalling was superseded by the arrival of the electric telegraph in the 1830s.

Historically, long-range military communication was a real challenge: simple hilltop beacons signalled the arrival of the Spanish Armada in 1588. As naval warfare developed across the centuries, more sophisticated signalling systems were invented using flags or moving balls, but these were slow and unreliable. Semaphore was the solution; moveable arms on a mast that signalled letters of the alphabet. The French invented the first semaphore system to use 'arms' in 1794, but the British preferred to devise their own signalling methods. The first British coastal stations in the 1790s used either flags and balls, or shutters in a frame for land-based signal stations, but none were efficient in bad weather.

The British semaphore was devised by Rear Admiral Sir Home Riggs Popham, who had long been fascinated by signalling. In 1800, Popham devised his own telegraphic code for flags, famously used by Nelson to declare 'England expects that every man will do his duty.' In 1813, he devised a semaphore with wooden arms for ship-to-ship signalling. This was easier to operate than the shutter system, and the Navy began to use it on land, the signalling masts mounted on the roofs of existing buildings or specially built signal stations. Yet in 1814, with Napoleon apparently safely confined on Elba, the Admiralty decommissioned all their signal stations.

Napoleon's escape and the 'damn nearest run thing' at the Battle of Waterloo soon made them realise this optimism was mistaken. Just eleven days after the Battle of Waterloo in 1815, an Act was passed to acquire land for a new chain of signal systems, this time using Popham's semaphore.

Naval surveyor Thomas Goddard was instructed to survey and acquire sites for a line of fourteen semaphore masts to cover the 75 miles between Admiralty House in

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Whitehall and the naval base at Portsmouth. Only the Chatley Heath mast required a five-storey tower, for visibility over seven miles to its two neighbours, Claygate near Esher to the NE and Pewley Hill to the SW.

Most other stations were little more than one or two storey blocks. In 1822, on its completion, Chatley Heath was also chosen as the junction for another line to lead to Plymouth, although this line was never completed. The tower and the accommodation block at its base were well-built by the Navy's contractors of light red brick with fine penny-struck pointing, an octagonal tower being easier to build than a round one. The alternate windows were always blind, no doubt a measure to save costs (government buildings were exempt from window tax so this did not apply). Erecting the 40-foot mast and the chains to operate the arms proved a challenge even for the naval engineers of Chatham Dockyard, but the mast was fully operational by 1822.

The stations were lived in and operated by Royal Naval lieutenants who were close to retirement and had fallen on hard times. They worked with one or two retired ratings who found themselves similarly down on their luck. At Chatley Heath, the men stood for long hours at the first floor windows, telescopes trained on the stations to either side for messages passing up or down the line. On a clear day and when everyone was on their toes, a message could be relayed to, or from, Portsmouth in fifteen minutes. By 1830, however, the railways were coming, and with them the electric telegraph: messages could pass down the wire instantaneously. In 1847, the semaphore lines were decommissioned. Heath wardens and gamekeepers lived in the tower until 1963, when the lack of modern services made it no longer habitable.

Left empty, it suffered vandalism and then was gutted in a major fire in 1984. In 1988, Surrey County Council carried out a full restoration to mark the 100th anniversary of their founding under the Local Government Act of 1888, with the help of Surrey Historic Buildings Trust. Water and electricity were brought in and the tower was let residentially. Its care passed to the Surrey Wildlife Trust, which manages the Chatley Heath Site of Special Scientific Interest around the tower. However, the detailing of the tower in this exposed site had been a problem in both original and restored forms. 30 years on, water ingress at the base of the mast and around the windows was again causing problems beyond the SWT's remit or resources.

The Landmark Trust was called in as a specialist organisation that could also provide a new use for the tower to pay for its future maintenance. The tower was completely rewired and –plumbed, and the roof re-leaded. Windows were repaired and replaced where necessary, and a new kitchen and bathrooms were created. The mast and its arms (which can still be operated for open days etc. but are kept fixed in between) has been completely overhauled and repainted its original red oxide colour. The stairs and chimney pieces date to the 1988 restoration: as they are entirely in keeping with the original period, we have kept them. The tower's early residents endured an often lonely existence with frequent complaints to the Admiralty about the state of their accommodation. Today, the tower's solitude in the woods is something to be sought out, and, we hope, its rooms a cosy place for a few days' retreat, to muse on the days when the semaphore arms clacked daily overhead.

The Landmark Trust is a building preservation charity that rescues historic buildings at risk and lets them for holidays. Semaphore Tower sleeps up to 4 people. To book the building or any other Landmark property for a holiday, please visit www.landmarktrust.org.uk