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Abinger & the Royal Greenwich Observatory

From the Abinger & Coldharbour Parish News archive

Between Leith Hill and Abinger Bottom is a house called "The Old Observatory" which together with the land in which it stands formed an important outpost of the Royal Greenwich Observatory from 1924 until 1957.

Magnetic measurements had been made at Greenwich since 1847 but with the electrification of tramways and railways in the area it became necessary to find an alternative site where interference did not occur. Abinger was chosen as a suitable site and the Magnetic Observatory was set up here in 1924. In the early 1920's, the South Eastern and Chatham Railway wanted to electrify their lines through Greenwich, the Admiralty objected and started to look for a magnetically "quiet" site in the southern part of the country ("southern" because there were magnetic observatories at Eskdelemuir and Lerwick). In 1923 the Southern Railway (into which the SECR had been grouped) agreed to pay the cost of moving the instruments and staff to a new observatory at a suitable location.

The Admiralty first looked at five sites at Holmbury St Mary which they assessed early in 1923 with the intention of compulsory purchase if necessary. There were many objections to the construction of an observatory in the Holmbury area by local landowners, but particularly from the Commons and Footpaths Preservation Society and the Society of Antiquaries. There was a great deal of correspondence about the scheme, both to the Admiralty and to the national press.



In view of all the objections it was decided in September 1923 to abandon the Holmbury sites and to acquire 8 acres of woodland on the Wotton Estate which was leased to Lady Lugard of Little Parkhurst, Abinger Common.

Work on constructing the buildings, similar to those at Greenwich, began early in 1924 and magnetic measurements were taking place

later that year with all the magnetic work being transferred to Abinger in 1925. Soon Lady Lugard was having correspondence with the Astronomer Royal and the Admiralty about the noise from the motor-alternators at the observatory, although it was demonstrated that she was complaining about the noise at times when the machinery was not running.

The Officer-in-Charge of the Magnetic Department moved to Abinger from Greenwich in 1939, occupying the house to the west of the site. However, the chosen site soon proved not to be ideal; the Guildford-Portsmouth railway line was electrified in 1937 and the Dorking-Horsham line a year later, so that by 1939 a further move was proposed, this time to Hartland Point in South Devon well away from any railway line.

The Second World War delayed the move from Abinger; the Magnetic Department eventually moved to Hartland Point,



and the Abinger station ceased recording on 1st January 1957. About eighteen months before the outbreak of World War II it was decided to install a time system at the magnetic station at Shortt Clock Abinger. Two Shortt clocks were transferred

from Greenwich and two additional clocks were obtained. The GPO installed the necessary landlines and the installation was all in a blast proof building. Large aerials were set up on Leith Hill to receive radio time signals from the UK and overseas.

A second time service was installed in Edinburgh, and for the duration of the war the service was run jointly from Abinger and Edinburgh. After the war the Edinburgh equipment was returned to Greenwich.

Extra buildings were required at Abinger when the Time Department joined the Magnetic Section. Two small huts were added to the magnetic enclosure. From 1924 until the 1930's there were only two members of the RGO scientific staff based at Abinger together with the caretaker. With the addition of the Time Department staff during the war the numbers increased and by 1950 the scientific staff of the Magnetic Section were three whilst the Time Department had about twenty. During the war staff were compulsorily billeted with local residents but in time some found houses in the locality. As the main activities of the Royal Greenwich Observatory took place at Abinger during the war, the Astronomer Royal, Sir Harold Spencer-Jones, and the administrative staff moved to the area setting up the offices in "Cornerways" in Sutton Abinger.

When the war ended the Astronomer Royal and his staff returned to Greenwich vacating "Cornerways" which was then converted into a hostel for single staff, at that time numbering about five or six. It also served as a canteen, which was used by all the staff at lunchtime. Around 1948 the Admiralty acquired "Feldemore", a large country house in Pasture Wood Road towards Holmbury St Mary; at the same time "Cornerways" was vacated. "Feldemore" had been requisitioned by the army during the war and when it was taken over by the Admiralty the top floor was divided into self-contained flats for married staff whilst the ground floor was the hostel and library. There was a men's dormitory and a women's dormitory separated by the warden's flat, kitchen, common rooms, etc.

Observations were made when the sky was clear enough and the walk from the observatory to the hostel through the woods could be very dark. When the Observatory staff moved out in 1957 the house was taken over by Belmont School who moved from Westcott. A member of the observatory staff during its final years at Abinger describes life there as being very friendly and sociable. They arranged parties, summer fetes and dances and generally joined in the village life.

What remains in place from the Royal Greenwich Observatory at Abinger? "Feldemore" is still occupied by Belmont School whilst "Cornerways" is once again a private residence; it is in Sutton Abinger on the south side of the junction of Hoe Lane and Horsham Road and now known as "Sutton Place Farm". With the exception of the house which was built for the Officer-in-Charge in Sheephouse Lane which is now named "Forest Lodge", the remainder of the Admiralty property was sold to Surrey County Council in 1961. The caretaker's house with its outbuildings for batteries and dark rooms is now occupied by one of the County Council's Countryside Rangers. When the council first took on the property the house was called "Surrey Cottage" but it has since been re-named "The Old Observatory".

No other buildings remain but at least two of the boundary stones at the corners of the site are still in-situ, these are engraved with anchors indicating the boundaries of the Admiralty property. Within the grounds, near the north-east corner is a concrete obelisk which used to



support the azimuth mark. This mark was viewed from the

Absolute Instruments Pavilion and was used as a reference when determining the Magnetic Variation.

So what, at first sight, appears to be a small wood attached to the Ranger's house was, in fact, the site of an important part of the history of Greenwich Observatory. It provided the country's magnetic information from 1924 to 1957 and time information, including that for the radio "pips" and the GPO speaking clock, from 1939 until 1957.

This article "Abinger and the Royal Greenwich Observatory" is extracted from a 16 page booklet by Peter Tarplee, published by Surrey Industrial History Group. Complete copies of the booklet can be obtained from Mr. John Mills, 35 Trotsworth Avenue, Virginia Water, Surrey. GU25 4AN. Price £2.50 including postage.

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See also Abinger Magnetic Observatory (1923-1957) [Royal Observatory Greenwich]

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