

Tolsford Hill Radio Station

The radio station 600 feet up on Tolsford Hill was opened in 1957. It was then known as the Post Office Radio Station and its purpose was to link the telephone network of the United Kingdom with that of France and the rest of Europe.

The first radio link, operating at a frequency of 4Ghz (4,000 million cycles per second), carried 600 simultaneous telephone conversations via large parabolic aerials called dishes mounted on the 200ft mast. The link used two radio channels in each direction, a main and a standby with automatic switching between the two, the purpose of this being to safeguard transmission in the event of a fault in the main channel. It also enabled maintenance work to be carried out without interrupting telephony traffic. The other end of the link was in France near the village of Fiennes not far from Boulogne. From there the signal passed in two "hops" via another station at Saint-Silvestre, to Loos in the suburbs of Lille.

In addition to the telephony link were two other radio channels. These were used to carry the television signals of the Eurovision network in both directions between the BBC and the Eurovision centre in Brussels.

In the early days the BBC had a room at Tolsford Hill where, by means of camera converters, they converted the television signals coming from the continent to the British system, and vice versa.

Another feature of the work at Tolsford Hill were the cable links with London and St. Margaret's Bay, not only carrying international telephony circuits but television as well to the local BBC and ITV transmitters.

Since those early days there have been many changes at Tolsford Hill; during the seventies the old steel mast was becoming no longer big enough for the growing numbers of dishes and was replaced by a 210ft ferro-concrete tower, which with its red navigation lights has become a prominent landmark for many miles around.

A new access road had been built to replace the old narrow lane that frequently became blocked by deep snowdrifts in winter. Inside the building the growing population of radio links had filled the available space and an extension to the Radio Room was built to house further links with the Post Office Tower in London and France.

Now, of course, the business is called British Telecom and it is no longer a state-run enterprise but has become a private company. Telephony traffic with Europe is increasing at an ever accelerating rate and there are many times the original numbers of 600 circuits.

There is a third channel devoted to television, this tune linking Tolsford Hill with Paris. Conversion between the various television standards is done electronically elsewhere and the BBC are no longer at Tolsford Hill. The television signals which feed the local ITV transmitters come to Tolsford Hill on radio links instead of cables.

The new technology of optical fibres is beginning to outstrip radio links in reliability and performance on long distance routes, but radio will of course still be used for other growing services such as 'radio paging and cell-phone, so Tolsford Hill Radio Station is likely to be around for a good few years yet.