In 1912 due to the geographical location, elevation and the availability of the Crown Lease; the pioneering Marconi on behalf of the Post Office started experimental radio transmissions on the site. Prior to this there were already a few makeshift huts where experiments had been made of meteorological nature.

Work was interrupted during the Great War of 1914-1918 but the importance of the site was regarded by the government to warrant protection by troops. Soon after the war development resumed on what was to be the Imperial Wireless Chain. This was a scheme to provide radio - telegraph communication between countries of The British Empire using spark transmitters of 300 KW power. It's sister station was situated at Cairo and was destroyed during the Suez War in 1954.

Thirteen masts each being 305 feet high were erected. These were originally constructed of steel sections bolted together to form a hollow tube. The method of ascending was by entering a trap door at the base and climbing up a 32 ft ladder, pulling the ladder up and hooking it on brackets. This operation was repeated 10 times to reach the top. At each stage they had to knock out wooden bungs to allow in air and light and they were replaced on decent.

Due to weather damage the masts required replacement in 1943 but there was at that time a shortage of steel and it was decided to encase them in concrete to prevent further damage, increasing their weight from 50 tons to 120 tons each. These great poles dominated the site and were used as a landmark by many people from a great distance.

The site in early days consisted of 152 acres. This acreage was later increased to some 600 acres being used mostly for aerial fields. It was rented from the Crown and sub-let to local farmers for sheep grazing.

Because of the extremely high voltage required to operate the transmitters it was felt necessary to build its own electrical generating plant. Two coal fired steam driven turbines each developing 800 HP were housed in the 'D' building. It had a large chimney stack at the front and the ashes were spread over the soil to form a roadway from the site to the Shipton - Leafield Road. This roadway is still referred to today as the ash track.

Leafield became a very important part of British Communications handling most of Reuter press Transmissions as well as government and maritime radio and required a staff of 74 to operate it efficiently.

It played an important role during both great wars and was constantly guarded by troops and the local home guard units against possible attack and sabotage's). During the 2nd World War the buildings were camouflaged and a decoy building was built in Plywood a short way off in the hope of confusing enemy aircraft. Leafield also played an important Long wave Communications link during the Falklands war in 1982.

In 1961 a start was made on the construction of a new radio station which was built at a cost of £1,000,000. The site took on an entirely new look with large modern looking buildings surrounded by a maze of wires supported on about 80 masts of 180 feet high. The large concrete and steel masts having been demolished. The station was officially opened in 1962 and was adjudged to be one of the most modern, powerful and finest in the world, It was fitted with new and up to date equipment and technology, much of it automated which reduced the workforce to about a ¼ of its original strength.

The radio station finally closed down in June 1986 due mainly to the advancement of Satellite Communication, the remaining workload of transmissions was transferred to Rugby Radio Station.

Most of the land used for aerial fields has been returned to the Crown but in 1988 12 ½ acres, which included the site of the buildings, was purchased by B.T.

**The BTI Training College**

After completion of the new radio station a decision was made to set up a training scheme on the site for apprentice engineers. A single storey utility type building was erected for use as a residential hostel with 50 bedrooms. Most of the radio station engineer's bungalows by this time were empty and they were used as an additional annexe.

The old transmitter rooms were no longer required so these were converted for use as lecture and practical demonstration rooms.

As the years passed more and more emphasis was placed on training and gradually the college increased in size. An additional wing was built on the hostel (Red Corridor) and a Welfare block was built with recreational facilities, which until then had been confined to a large wooden shed in the vicinity of the garage. A restaurant was added to the residential block and the existing restaurant was convened into lecture rooms. In the early days the canteen was in a nissen type hut alongside a similar hut, which was used for the riggers workshop.

On the imminent closure of the radio station it was decided that the college and radio station buildings should merge with a view to demolish the old utility buildings which had reached their life expectancy and were becoming outdated and expensive to maintain.

In September 1986 the first phase of the conversion of the radio station building into college facilities was completed. This entailed the conversion of the East Wing into 38 modem bedrooms, each with showers. WC, telephone and colour TV.

As technology has moved forward over the years then training has had to keep pace. This has necessitated the organisation and installation of high tech equipment and widened the scope of courses. Such equipment included, Satellite Communications systems, a Submarine Cable Terminal and an AXE Training Test Bed. Many computers, word processors etc for clerical and management type training were utilised. Although there was no longer an operational radio station, the college ran a unique rigging training scheme.

In November 1988 after much deliberation by BTI Management and enthusiastic persuasion from the then head of College Ray Gray a decision was made to go ahead with the completion of the conversion of the radio station at the cost of £5,500,000. The work was completed in early 1991. Visiting tutors moved to the area, took up mortgages and had their children settle into new schools as it was assumed that the college, having had £5½ million capital lavished on it had a promising future. By the end of 1992 BT management decided merge the training wings of BTI and BT and thus to close the Leafield BTI College by September 1994, ending an era in communications history, and a disappointment to many staff who had invested their future in it.

This is only a brief history of the college that has been gleaned from the knowledge of former members of staff and in particular the late Bill Dunlop who commenced employment on the site in 1937 and left his bungalow in 1989 and the late Dennis Horlor former chief administrator of the radio station. Most of the details were provided by these two gentlemen and from Doris Fields who was a member of the domestic staff whose father worked on site in the 1920's and 30's maintaining the boilers for the steam turbines.