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HIS 102

## Bletchley Park

Bletchley Park was one the greatest British secrets of World War II. It was the largest and most successful code breaking facilities being credited with breaking the German Enigma code and the Lorenz, Fish cipher.



The Bletchley Park mansion as we know it today was built in the late 1870's by its owner, Sir Herbert Samuel Leon (1850-1926). The estate remained the property of the Leon family until the death of Fanny Leon (Herbert's Wife) in 1937. At this point the manor was purchased by a builder who intended to demolish the buildings and turn the property into a housing estate. In the spring of 1938 the developer was approached by Admiral Sir Hugh Sinclair, Director of Naval Intelligence, who made an offer to buy the estate. Although Sinclair was the head of MI-6 he failed to convince any of the government groups to purchase the estate and ended up buying the property with his own money. The Admiral knew that war was inevitable and Bletchley Park held many key advantages that made it an appealing location. It is only 50 miles from down town London, provided a stop on the Varsity line (train line between the university of Oxford and Cambridge), provided access to a main road (the A5), and had access to the main phone lines.

When England became involved in the Second World War Bletchley Park became known as Station X. This designation was due to the numbering of the radio stations, which were numbered numerically using Roman numerals. When the facility increased its code



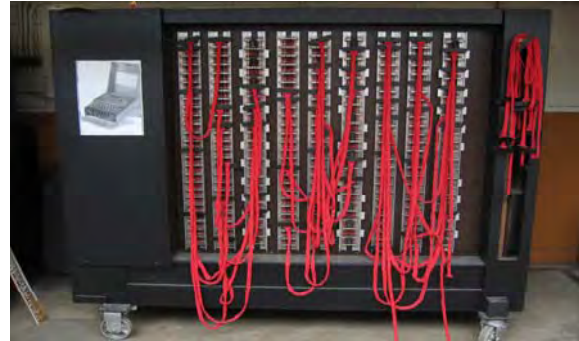
breaking work the radio transmitting equipment was moved away from the manor and down the road so as to not draw attention and possible bombing by the Enemy. (The radio equipment located at Bletchley Park was housed in the square tower which is positioned above the van in the picture to the right) It is not believed that the Bletchley park facility was ever targeted by the Axis bombers, but it was nearly missed on one bombing raid that was believed to have been directed at the Bletchley train station which lies only a few hundred yards away.

The facilities quickly filled with the war effort and additional buildings (huts) had to be built to accommodate the growing work force. The first huts were built of wood, but the latter were eventually built of brick to allow more strength and support in case of



enemy attack. Each building or hut was given a number and some of the various tasks were divided up between them.

Bletchley Park is credited with breaking the German Enigma code which is thought to have turned the tide of the war in the Atlantic and placed it in the hands of the Allied for the first time since the outbreak of the war. The Enigma code machine was an encryption device that was widely used by the Germans for coding radio and diplomatic messages between troops and government facilities. The enigma worked off of a series of wheels and jumpers. These could be arranged in such a way that the combination of possibilities were enormous. To attempt to break this code system the British, with the assistance of other allied countries, developed a machine named the Bombe. This



machine resembled a larger version of the Enigma. It had many more gears and jumpers which allowed it to try all the possibilities of wheel and jumper setting to find the code that was being used that day. Once the code was determined it would be displayed on a different set of gears that an operator was trained to read. This configuration was then set to decode the messages that were intercepted that day.

The facility is also the home of the first programmable digital computer named Colossus. This programmable computer was produced to try and break the Fish ciphers, especially the Lorenz cipher which was the most widely used during WWII. These ciphers used something similar to digital code only instead of a one or zero on a computer

they would punch holes in a strip of paper. These holes could then be read by a cipher machine that would decode the message depending on the positioning of the holes. (The Colossus that is being built at the Bletchley Park site is of the original working design of the Colossus that was built in the 1940's. Where as the Bombe machines shown in the pictures above were actually donated by a movie company and are the actual props used in the movie Enigma.)

The work that was done at the Bletchley Park facility was so secretive that the employees of one group had no idea of the information that was provided by another, yet they may have worked only thirty feet apart. The secrets of Bletchley Park remained untold until the 1970 when some of the information became unclassified and books began to be written. If not for the information provided by this facility the United Kingdom may have fallen to the Germans and lengthened the war in the Pacific.