

# Bletchley Park & the Enigma Machine

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by MAUREEN MORRIS

Last year we had an interesting talk by Audrey Wind about her work on the Enigma machine during World War II, so we were looking forward to this visit to Bletchley Park to learn some more of its secrets. Our trip, twenty four hours before the longest day, seemed appropriate as the Normandy Landings took place at that time in 1944 and much of their success was due to the brilliant code cracking abilities of the people working at Bletchley.



*The Enigma Machine*

After an early start from Dover we were badly delayed in traffic congestion on the M1. But we were pleasantly greeted when we arrived and given an introductory talk about Bletchley and how the operations had evolved there.

The attractive Victorian mansion was the first major building on the Bletchley site although the manor had been recorded in the Doomsday Book. Since then it had belonged to several noble families including the de Greys who held it for nearly 400 years. In 1883 it became the home of Sir Herbert Leon, Liberal MP and financier. He was responsible for most of the building seen today and some of the rooms are splendidly decorated with fine moulded plaster ceilings and wooden

panelling. In 1937 when his widow died the property was sold, but hardly used until 1939 when it was purchased by the government as new premises for the Code and Cipher School. With war looming Bletchley seemed a safer place than London, with good rail and road connections as well as being half way between Oxford and Cambridge, where the finest mathematical brains were. It became the most important communications centre for modern warfare.

With the aid of audio *wands* we were able to take ourselves off to explore the buildings and the grounds. The tour started in the mansion itself where the first decoding staff worked, and then moved on to the outside buildings, including the former staff cottages and temporary huts, with the commentary detailing their uses. We passed the back gate where despatch riders brought in the intercepted German messages received from the surrounding RAF stations while other messages from around the country arrived by telephone. Aerials in the trees enabled contact with the British embassies in Europe but by 1940 these were removed for security reasons. Above the stables was the loft for the pigeons which carried vitally important messages from the Resistance in France. In

the former tack room Alan Turing, the brilliant mathematician, having gathered information from colleagues who had met the Polish cryptanalysts in Warsaw, was able to make the first break through into cracking the Enigma code. He, along with Gordon Welchman and Tommy Flowers, went on to develop their ideas into computer research. The Germans changed the Enigma keys daily so the team developed their own *Bombe* machine, named after the ice cream, an electro-mechanical machine of clattering code wheels which broke the cipher. After this the *Colossus*, a valve operated semi-programmable computer, was developed to break the even more highly sophisticated cipher machines being used later by Hitler. In Block H we saw the recently built version which had been painstakingly reconstructed from pieces of information gathered from many sources. It is one of several machines brought to life again by dedicated enthusiasts at Bletchley. After the war every piece of equipment and information there was destroyed for

security reasons. It was only with the knowledge and help of people who had worked there, including American forces personnel, that it has been possible to build up these displays of equipment and systems.

During the war, as Audrey Wind described in her previous talk, the many buildings housed hundreds of operators all working independently, not telling anyone what they were doing, keeping Bletchley's secrets totally secure. At its busiest 8,000 staff worked there and 18,000 messages were deciphered daily. The *Colossus* machine was ready and running for the D-Day landings and played a major part in their successful outcome, shortening the war by two years, some said.

Some of the huts now show examples of how people lived during the second world war. One room has displays of Winston Churchill memorabilia while in another there is a splendid sculpture, in layered slate, of Alan Turing seated at his keyboard. A man of tremendous abilities his personal life was unfortunately troubled and he died of cyanide poisoning in his early forties.

The work of Codes and Ciphers now continues in the Government Communications HQ at Cheltenham where it works closely with HM Customs, the National Criminal Intelligence Service and the Immigration and Nationality Directorate.

As we boarded the coach to come home someone remarked that they hadn't understood much of it, but it was so interesting they would like to see it all again. If only a code breaker could sort out traffic congestion on our roads we reached Dover at 9.15 pm, five and a half hours after leaving Bletchley!

*Alan Turing slate sculpture*

