

A VISIT TO 'STATION X'

During World War Two, Bletchley Park, located south of Milton Keynes in Buckinghamshire, was given the cover name of 'Station X' because of its code-breaking activities and it was here that the Sci-Tech group and fellow members (totalling 45) went by coach on Friday 24th June. After a coffee on arrival we were led into the library where we were introduced to our guide for the day, Nick Hill, who proved to be an excellent speaker and a man of infinite knowledge about the history of this establishment.

In late August 1938 a small team from MI6 decided that Bletchley Park was an ideal location to re-locate the Government Code and Cypher School to provide a safer home for the secret team of scholars turned code-breakers as they had been previously based in London. It was this site that was to become one of Britain's best kept secrets during the second world-war.

Over the next 6 years there were many codes and ciphers to be broken but the most famous and long remembered success of the team was mastering the codes transmitted by the Germans using a device called the Enigma machine. You will appreciate the complexity of this machine when you understand that it was capable of creating chances of one in 150, million, million, million to locate the correct character of a message and when you couple this with the fact that these codes were changed at least once a day it was indeed a gigantic challenge to the code-breakers. Also the speed of breaking the code was most important so that you could read the messages - a message several days old was of no use to be acted upon. It was therefore necessary to speed up the decoding operation and to this end a machine called the 'Bombe' was built which was an electro-mechanical machine of clattering code wheels that greatly reduced the odds and thereby the time required to break the ever-changing keys. As the workload at Station 'X' increased additional Bombe units were sited at other locations in the area and by 1944 there were at least 200 machines in use.

Hitler and his generals used an even more highly sophisticated cipher machine named 'Lorenz' that gave chances of one in 183, million, million, million, million – change that once a day and what chance have you got of decoding anything!! Not to be put off the Bletchley team devised another machine they called 'Heath Robinson' that gave partial success but had practical drawbacks. Then came another machine, this one given the name 'Colossus' but this time it was an electronic machine needing 2,500 valves and an electrical power consumption of 8½ kilowatts. Indeed, it has been said that the inventors Messrs. Turin, Newman and Flowers are now credited as fathers of the modern computer. If you also take into account that 'Colossus' had a processing speed as fast as a Pentium II in a modern computer you can appreciate how advanced this machine was for its time. Recognition for the contribution made at Bletchley has been given by the American Institute for Electrical and Electronics Engineers by dedicating a citation to Bletchley Park, home of the world's first electronic code-breaking enterprise.

There is no doubt that the code-breaking successes achieved at Bletchley Park helped to save countless lives by shortening World War Two by around two years.

In the Stable yard at Bletchley is a Polish Memorial commemorating the achievements of the Polish code-breakers, three brilliant mathematicians, who made a considerable contribution by their work in breaking Enigma in 1932 when the encoding machine was undergoing trials with the German Army. The cypher at that time was only changing once every few months but with the advent of war the cipher changed at least once a day and so the Poles were then unable to break Enigma and so they decided to inform the British in July 1939.

Station 'X' became almost a production line to cope with the tremendous amount of data to be processed and at its peak around 3,000 people worked on the site and so the various sections were moved into large pre-fabricated huts set up on the lawns of the Park. For security reasons the various sections were known only by their hut numbers of which only five currently survive.

During the day our members were able to get a lunch, hot or cold, at a café in Hut 4. Whether you snatched time for a lunch or not there is such a lot of detail to see, to take in and certainly too much to report in this Newsletter but everybody said how they'd enjoyed the day as we left at 4.30 pm.

If you are interested in recent history and particularly that of the wartime period then ask for Nick Hill as your guide at Bletchley and you won't be disappointed.

Peter Thurkettle