Club Speaker David Greatorex’s six minute address on Bletchley Park presented at our September meeting.

BLETCLEY PARK

In 1937 a developer acquired this sixty acres and mansion, then in 1938, with war looming, the government wanted an out of London site for their Code and Cypher School. So they made an offer you don’t refuse – “Sell it to us at our price or we’ll resume it!”

It started with a staff of 12 and for cover was known as Captain Ridley’s Shooting Party. The first chief, Alistair Denniston, was typical of the extraordinarily bright people who worked there. He was offered a place at Oxford University at age 13. Later in the war he went to the Far East and realized he needed to speak, read and write Japanese so he just sat down and taught himself.

A Colossus Mark 2 computer. The operator on the left is Dorothy Duboisson. The slanted control panel on the left was used to set the pin patterns on the Lorenz; the paper tape transport is on the right.

At its peak there were between 9,000 and 12,000 people working at Bletchley Park, 75% women, all billeted off-site. Exact numbers were not known because all records were destroyed in 1947 and nothing could be revealed for 30 years. Most countries to this day change their codes at midnight, so imagine all those bicycles descending on the property just before 12. A participant wrote an expose in 1976 and for the first time all those very clever women who had gone back to being typists, housemaids or whatever, could talk about what they had really done which, Churchill reckoned, reduced the war’s length by at least two years.

There is a lot of misinformation about the Enigma machine some of which I hope to correct.
The Enigma machine was invented in Germany in 1918 as a banking security device. It failed to sell in the US or UK but in 1922 (long before Hitler) the German government grasped its military significance and took it over. Arguably the world’s leading cryptographers at the time were the Poles and in 1933 they cracked it using what they called Bombas, after the ice cream. These gadgets are not computers.

In mid 1939 three Polish professors escaped with the details to England and BTM (known later as ICL) built 200 Bombes (English spelling). For the next four years Enigma was improved and, mainly through the genius of Alan Turing, so were the Bombes. In 1941 a junior intelligence officer came up with a crazy idea of capturing a German submarine and thus getting the latest Enigma. He was told to shut up and get back in his box. Two years later the British Navy did capture a submarine and get the latest machine. The young idiot, two years ahead of his time, did alright after the war. His name is Ian Fleming.

Later in the war the crack UK communications unit, not the military but the Metropolitan Police, started receiving strange signals. They finally figured out it was a new code many thousands of times more sophisticated than Enigma. They called it Ultra. It was way beyond the Bombes so again genius Turing solved the problem by designing the world’s first computer as we know it today, ie:- a stored program machine. It was called Colossus and 12 were built. After the war Churchill had them and all records destroyed because the Soviets didn’t know about them and he didn’t trust the Soviets not to get their hands on the design.

When the BP Trust was established in 1992, efforts were made to recreate the Bombes and Colossus. Too long a story for here but they succeeded and I’ve seen them running. It is claimed that twenty years passed before England again saw a computer as powerful as Colossus.

In 1994, a team led by Tony Sale (right) began a reconstruction of a Colossus at Bletchley Park. Here, in 2006, Sale supervises the breaking of an enciphered message with the completed machine.