The Code Room Guide

What's the room about? This Timewarp is all about codes. It inspired by Bletchley Park but is also features other codes from history.

1. This is Bletchley Park. Codebreakers worked there during the Second World War. During the war it was called 'Station X' and everything was extremely secret. Staff there were not allowed to tell anybody about their work. The codebreakers there worked hard to crack codes and understand what Germany was planning. This helped the Allies prepare for invasions and attacks. It is reported that the work of the people at Bletchley shortened the war by at least 2 years and perhaps up to 4 years.



- 2. This is our Candie Code Machine. It has been made by Marcel Lernormand and is inspired by the Enigma machine.
- 3. This is a real Enigma. These were used for sending coded messages during the Second World War by the Germans and Japanese.

How does it work? Imagine you are trying to send a message. You begin typing on the keyboard and each time you press a letter, a different one will light up above. The machine is scrambling the letters into code. Even when the same letter is pressed, it will come out differently. The Engima codes were very difficult to crack.



- Go to the German Naval Signals HQ to see a high quality replica of an Enigma machine. It is just around the corner from here.
- Visit the German Occupation Occupation Museum in the Forest to see the only original Enigma in Guernsey.
- 4. The German Forces changed the Enigma codes at midnight every 24 hours.
- 5. Bletchley Park is in the countryside near London and did not have a view of the sea. We have included this view to show a ship using Morse code. This is a system of sending messages using dashes and dots. A dash lasts 3 times as long as a dot. Can you figure out the message from the ship?

The ship in the photograph is HMS Bulldog and was used by the Allies during the Second World War. In 1941 her crew captured a complete Enigma machine and codebooks from a German submarine. Later she came to Guernsey and the German surrender of the Channel Islands was signed on board, on 9 May 1945.









- 6. Winston Churchill was Prime Minister of Britain from 1940 1945. He visited Bletchley Park and was very supportive of the work going on there. At one point Churchill instructed all daily Enigma messages to be shared directly with him.
- 7. Codebreaker Alan Turing had a teddy bear called Porgy and he used the teddy to practice his speeches on.
- 8. Alan had a favourite mug and kept it chained to a radiator.
- 9. Turing wrote a letter in 1953 to an eight year old girl he knew called Maria. It describes how to successfully play out a game of solitaire. The real letter sold at auction for £40,000 in 2015.
- 10. Many of the Bletchley Park codebreakers enjoyed chess and puzzles in their spare time. Hugh Alexander was an International Chess Master. Dilly Knox told riddles, Bill Tutte liked Mastermind and Joan Clarke was very good at maths puzzles.
- 11. This is Marian Rejewski. He is one of the Polish codebreakers who worked on breaking the Enigma during the 1930s. Their work gave the Allied codebreakers an invaluable head start when the war started. Rejewski's incredible contribution to the Enigma story remained a total secret until the 1970s.
- 12. This is part of a machine created by Turing and Welchman called a bombe. It was based on the machine 'bomba', created by the Polish mathematician and codebreaker Marian Rejewski. The purpose of the bombe was to speed up the decoding by finding the daily setting used by the Germans. Turing and Welchman were able to use common words or phrases that frequently came up (eg. Heil Hitler) to guess parts of the messages. The Enigma machine had a flaw: a letter could never be coded as itself. This was very useful information for the codebreakers.
- 13. The chalkboard features equations for working out the number of possibilities on an Enigma machine. The number depended on the type of machine and whether it was used in the army, navy or Luftwaffe. The machines also changed during the war and became more difficult to crack. At one point the combination of rotors and plug connections on the Enigma gave a total of 158 billion, billion different settings.

We do hope this guide is interesting. If you spot anything you believe to be incorrect, please contact Jo via museums@gov.gg















