**PRESS INFORMATION**



**A BRIEF HISTORY OF BLETCHLEY PARK**

Bletchley Park holds a unique place in the history of the United Kingdom. During World War Two it was home to a collection of brilliant minds, tasked with breaking the enemy’s secret codes, their success changing the course of history. The surviving fabric of Bletchley Park reflects every stage of the advances made in cryptographic, computing and intelligence processes - work that began in the Mansion, then expanded into hastily built timber huts and, later, brick, steel and concrete blocks, most of which still stand today.

The Government Code and Cypher School (GC&CS), now known as the Government Communications Headquarters (GCHQ), began moving into Bletchley Park in 1938, shortly before the onset of World War Two. It was here that GC&CS succeeded in breaking the seemingly impenetrable codes and ciphers that were being used by the German, Italian and Japanese forces, and others. The most famous of these was Enigma, the family of cipher machines used by the German armed forces, its intelligence services and police, as well as by other Axis powers. GC&CS was first able to read German Enigma messages in January 1940 and continued to do so in ever increasing numbers throughout the rest of the war. Bletchley Park’s staff grew from a small team of specialists to a vast intelligence factory of thousands of dedicated women and men. This extraordinary combination of brilliant and determined people and pioneering, cutting-edge technology came together against all the odds, and in tough conditions, to win the war of national survival.

Kept secret after the war for almost 30 years, Bletchley Park’s story was first revealed in 1974. The formation of the Bletchley Park Trust in 1992 secured the site’s future and it opened to the public as an independent museum and historic visitor attraction in 1993.

**BLETCHLEY PARK’S CONNECTIONS WITH AI**

Bletchley Park is considered the birthplace of modern computing, due to both the technological innovations that took place here during World War Two, and the achievements of the computing pioneers who worked here.

Bletchley Park (BP) Codebreaker Alan Turing was a pioneering mathematician and is often considered ‘the father of computer science’ - his powerful mind allowed him to break conceptual ground in the fields of both cryptography at (BP) and computing (in his academic work). Other notable BP codebreakers such as Jack Good and Donald Michie wrote extensively about AI/intelligent machines in their post-BP careers.

**A BIRTHPLACE OF MODERN COMPUTING TECHNOLOGY**

Bletchley Park was the place where the world’s first programmable computers were deployed to defeat the Nazis. The world’s first programmable digital computer was Colossus, devised by the team at the General Post Offices’s research laboratory at Dollis Hill to respond to the problems outlined (and theories developed) by the Bletchley Park team, led by Max Newman.

Ten Colossi, each weighing around a ton, were built and used by Bletchley Park to attack the German cipher produced by the Lorenz machines (codenamed Tunny at Bletchley Park).

After the war, several of those who worked at Bletchley Park continued to work in Computer science and parts of some Colossi, now mostly broken up into components, were taken to Manchester University where early computing technology flourished.

Two Colossus machines were also retained and used by GCHQ until the 1960s. Subject to the Official Secrets Act, those who had worked on Colossus were unable to speak about its development until years later, unlike in the USA where wartime technological advances like ENIAC (which started in late 1945) fed directly into American post-war computer development.

**ALAN TURING**

The Turing Test, originally called the imitation game by Alan Turing in 1950 (hence the name of the film ‘*The Imitation Game’*) is a test of a machine's ability to exhibit intelligent behaviour equivalent to, or indistinguishable from, that of a human.

The test was introduced by Turing in his seminal 1950 paper "Computing Machinery and Intelligence" while working at the University of Manchester. It opens with the words: "I propose to consider the question, 'Can machines think?’" Advances in AI in recent years has led some to question whether this test still holds.

**DONALD MICHIE**

Professor of Artificial Intelligence and machine learning pioneer Donald Michie served at Bletchley Park and worked (along with Jack Good) on Colossus in the Newmanry and Testery. Between 1942 and 1943, he frequently dined with Alan Turing. Michie’s son – now the President of Kellogg College – has described how the two met weekly to play chess and discuss the potential of machine learning.

Michie’s post-war academic career in genetics fed his interest in ‘intelligence’. He went on to found the Artificial Intelligence department at Edinburgh University and became Editor-in-Chief of the publication ‘Machine Intelligence’. He is recognised as a leading pioneer who worked in the field into his 80s. AI expert David Levy described Michie as “the founding father of AI in the UK”.

**JACK GOOD**

Mathematics prodigy and statistician Good worked in Hut 8 with Alan Turing on Enigma, and joined him again after the war, under BP’s Max Newman, at Manchester University. He has credited his work at BP for his creative approaches to computer science: “I think my experience with Colossus led me to suggest an idea...which would later be called microprogramming.” He contributed to the development of early computing at Manchester before returning to classified work with computers at GCHQ in 1948. When he came back to academia in the 1960s, he became a prolific writer and thinker. Good’s work in the field of Artificial Intelligence is most striking in his publication on the ‘Ultraintelligent Machine’.

The concepts he described led to Stanley Kubrick appointing him as technical consultant on ‘2001: A Space Odyssey’. The Alan Turing Institute in London now has a Jack Good meeting room, in recognition of his contribution to the field of computer science.

**MAX NEWMAN**

Max Newman was a Cambridge University mathematician who was a mentor to Alan Turing during the 1930s, encouraging Turing to go to study at Princeton University in the USA, where Newman had also spent time in the 1920s. He assisted in Turing’s seminal publication of "On Computable Numbers with an Application to the Entscheidungsproblem" in 1937 in which Turing laid out some of his foundational ideas on computing. After joining Bletchley Park in 1942 Newman headed the ‘Newmanry’, the section responsible for the development of Colossus, as well as other cryptanalytical devices, bringing Donald Michie and Jack Good into his team, as well as consulting with Turing.

After the war Newman took up the Fielden Chair of Pure Mathematics at the University of Manchester, founding in turn the Royal Society Computing Machine Laboratory at the University. He rapidly re-established his wartime team, including Turing, and Good, leading to the development of the Manchester ‘Baby’ - the world's first electronic stored-program digital computer.

**BLETCHLEY PARK TODAY**

After extensive renovation, following a successful project funded by the Heritage Lottery Fund, Bletchley Park relaunched in 2014, becoming an internationally renowned heritage attraction and museum where visitors can walk in the footsteps of the incredible men and women who made a vital contribution to Allied victory.

Another key milestone was reached in 2023 with the conclusion of a £13-million development that helped to save wartime buildings and refurbish them for use by the Trust. Funds were successfully raised to complete the refurbishment of Block A, which now houses the largest permanent exhibition on site, *The Intelligence Factory,* and the new Collection Centre, to safely store and protect the Trust’s extensive collection of more than 420,000 items relating to the wartime story of Bletchley Park.

The final phase was completed this summer, with Block E becoming a new Learning Centre and Auditorium to support our award-winning learning programme.

To help run the site, serve our visitors and care for our collection, we rely heavily on volunteers, with over 225 involved, and also employ 95 staff across the site.

Our typical customer profile is local, national and international families and 45+ FITs, with groups and learning visits a key component of that.

**BLETCHLEY PARK TRUST**

Bletchley Park is owned and managed by The Bletchley Park Trust, a registered charity with the mission to attract, engage and educate people from all over the world in order to inspire them with Bletchley Park’s crucial role in World War Two.

The formation of the Bletchley Park Trust in 1992 saved the site from demolition to build a housing development, and ensured Bletchley Park remained as a tribute to the remarkable people whose collective intellects changed the course of WW2.

As an independent charity, the Trust relies on income from Bletchley Park's visitors, supporters and sponsors to secure the long-term future of the site, and to help keep the story alive for the education and enjoyment of future generations.

The vision of the Trust is that Bletchley Park will be recognised and acknowledged worldwide for the achievements that took place here in World War Two and how these remain relevant today.

For more information about Bletchley Park please visit

[www.bletchleypark.org.uk](http://www.bletchleypark.org.uk)

For Press images please visit <https://we.tl/t-l9QdrLou9V>

**For further information or images, please contact Wendy Towler, Event and PR Liaison wtowler@bletchleypark.org.uk**