
BT
Remembering the
Second World War

How did BT's predecessor contribute to Allied victory?

We can see how it supported the war effort by looking at three major events in WWII: the fall of France, the Blitz and D-Day.

Today, BT uses its global network to support the modern armed forces. Its experts do everything from analysing cyberattacks to connecting bases with secure wi-fi.

The technology is new, but this relationship is longstanding. BT is building on a 165-year history of collaboration that hinges on the Second World War.

This anniversary year gives us a chance to look back and appreciate the work of BT's predecessor, the General Post Office (GPO).

Rallying after the fall of France

By May 1940, the GPO had bolstered its telephone network to make it less vulnerable to bombing and reserved much of it for the armed services. But, after the fall of France, the government demanded more.

Britain built aerodromes, battery sites, searchlight centres and radar stations, all of which needed to be connected. The GPO rose to the challenge. It hired extra personnel, including women, and started working longer hours.

Eventually, they established operations rooms all across the country, the most impressive of which was in Bentley Priory, the Headquarters of Fighter Command.

It displayed the tracks of aircraft that flew over Great Britain and its waters, allowing the Commander-in-Chief to see the broad 'air picture'.

The other large room in the Priory was known as the Filter Room. This was where approaching aircraft could be labelled as 'hostile', 'doubtful' or 'friendly'.

Surviving the Second Fire of London

The sky swarmed with hostile aircraft on December 29 1940. Approximately 100,000 bombs fell on London that evening.

A GPO building on Wood Street had its doors and windows blown in. As the fire spread, operators continued to work a switchboard from their shelter. They held this station for as long as possible. The walls collapsed, moments after the last person was evacuated.

This left the GPO with the huge task of reconnecting thousands of telephone lines. It brought in so many workers to move rubble, pump water and lay cables that a canteen was set up in the neighbourhood and kept open around the clock.

In less than ten days, houses and government offices could use their phones again and the public could walk up to any of a hundred call-boxes in Cheapside and Moorgate Street. Communication would not break down.

Cracking the code ahead of D-Day

The GPO's lines of communication extended with the Allied invasion of Normandy. In preparation for D-Day, its engineers installed hundreds of miles of cable along the south coast, and its network would follow the army into Europe.

But the success of the Normandy landings is owed to one GPO worker above all others: the pioneer and inventor Tommy Flowers.

The code-breaking Colossus computer, used at Bletchley Park during WWII, was built at the research station on Dollis Hill under the leadership of Tommy Flowers (pictured).

Flowers joined the GPO in 1926 and began exploring the use of switching electronics in phone networks. This work was to prove crucial when he started designing machines to crack the German military's ciphers.

He planned to build a machine with 1,800 electronic valves – a great number at the time. The idea was met with scepticism, but Gordon Radley, director of the GPO's research station, allowed him to develop it in the Post Office Research Labs.

Flowers completed his Mark 1 Colossus in November 1943, creating a computer with electronic circuits that were five times faster than those in previous code-breaking devices. It was used to break German messages at Bletchley Park from February 1944.

On 5 June, a Colossus machine decrypted a message that confirmed Hitler wasn't going to send reinforcements to Normandy. Upon hearing this, Dwight D Eisenhower is reported to have said, "We go tomorrow."

Returning to the present moment

BT's predecessor did much for the nation during WWII. 50,000 workers served in the GPO Home Guard; 73,000 left to join the armed forces; 3,800 gave their lives; and a further 413 GPO men and women died working on the home front.

Each November, BT remembers the military and civilian servicemen and women who sacrificed so much in the two World Wars and later conflicts. The moment has a special poignancy for those who continue to support the British Armed Forces.

They hope to build on the GPO's wartime legacy by equipping our military with digital communication technology and contributing to further victories.

Three reasons to choose BT

1 **We're innovative.**
We spent £662m on R&D in the last year alone. And, over the past decade, we've been one of the UK's largest investors in innovation. This means no one can bring you onto the frontline of innovation like we can.

2 **We're trusted.**
More than 1,800 UK public sector customers trust us to manage their networks.
Our presence on government procurement frameworks makes us easy to work with.

3 **We're secure.**
Our team includes 3,000 security experts and 3,500 ex-military personnel. We prove our credentials by defending against 1.4 million cyberattacks each year.

Learn more at business.bt.com/public-sector/defence

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