LARGE PRINT GUIDE



15 AUGUST 1940

THE **BATTLE**OF **BRITAIN**

'The Luftwaffe will ... destroy the British Air Force as quickly as possible.'

Adolf Hitler, 1 August 1940

German operations until mid-August were hampered by bad weather. They were able to launch a major attack across Britain on 15 August, two days after Adler Tag (Eagle Day), as they prepared for invasion in Operation SEALION. The Luftwaffe made more sorties than on any other day in the Battle destroying 34 RAF fighter aircraft, cutting off power to radar stations and causing damage at eight airfields. However, the Germans lost 76 aircraft in return, leading Churchill to declare the day to be 'one of the greatest in history'.

Discover more about 15 August 1940 on the screen.

Phases of the Battle of Britain 1940

10 May The Battle of France. German forces enter Belgium, the Netherlands and Luxembourg. Churchill becomes Prime Minister

26 May–4 June Operation DYNAMO, evacuation of Dunkirk

10 June Italy declares war on France and Britain

14 June German troops occupy Paris

15–25 June Operation AERIAL, evacuation of remaining forces from France

22 June France surrenders

Phase one: 10 July

10 July The official start of the Battle of Britain

16 July German Directive No. 16, Operation SEALION

1 August German Directive No. 17, Destroy the British Air Force

16 July German Directive No. 16, Operation SEALION

1 August German Directive No. 17, Destroy the British Air Force

Phase two: 13 August

13 August Adler Tag (Eagle Day)

18 August The so-called Hardest Day

24 August The Luftwaffe bombs London

25–26 August RAF Bomber Command attacks Berlin in retaliation

Phase three: 7 September

7 September The Luftwaffe attacks London

15 September Battle of Britain Day

17 September Operation SEALION postponed indefinitely

Phase four: 1 October – 31 October

1 October The Luftwaffe abandons daylight raids on London

24–25 October Corpo Aereo Italiano begins operations over England

The Blitz: 1 November onwards

31 October The official end of the Battle of Britain and start of the Blitz

14–15 November The Coventry Blitz

The graph shows how the widely-held perception by the Luftwaffe – that the RAF did not have enough fighter aircraft to withstand a sustained attack – was incorrect.

Aircraft supply and availability were not the problem. In fact, the supply of pilots lagged behind available aircraft as it takes longer to train a pilot than to produce an aircraft.

During the Battle of Britain, the most inexperienced pilots (from both the RAF and the Luftwaffe) were the most likely to get shot down.

Plotting a Course to Victory

Plotting tables were an important part of the Dowding System, showing the position of allied and enemy aircraft. They were used in Fighter Command, Group and Sector Operations Rooms. Plotters of the Women's Auxiliary Air Force (WAAF) used long rods to place position indicators and information blocks on the map.

Controllers used the information presented on the table to guide RAF pilots to intercept the enemy. Swift and accurate communications between different RAF Commands was vital during the Battle of Britain.

1. Head and Breast Telephone Set

1939–1945

This standard General Post Office equipment was widely used by telephonists, Women's Auxiliary Air Force Plotters and members of the Observer Corps during the Second World War. It enabled the wearer to make and receive calls while freeing their hands for other tasks.

67/R/449

2. Hostile Raid Plotting Block, Friendly Forces Plotting Block

1939-1945

Wooden blocks were used to represent aircraft on the situation map. The top line of blocks relating to enemy aircraft were given an identification number proceeded by the letter H for 'Hostile'. The estimated number of aircraft was displayed below. The top line of friendly plots recorded the height of the aircraft in thousands of feet, so 15 would indicate 15,000 feet. The number of aircraft was recorded below. Symbols indicating which squadrons were in action were attached to the top.

X002-6553, X0084179

3. Plotting Counters

1939-1945

Counters were used as position indicators. The colour of these changed every five minutes corresponding to coloured segments displayed on the Operations Room clock. Arrows indicated visual or radar sightings, shields were used for reports based on sound and disks showed aircraft which were circling.

X 9 P/O 75/I/536

4. Plotting Rod

1939-1945

Plotting rods were used to place counters and blocks onto the situation map. This pattern of plotting rod, which was introduced just after the Battle of Britain, has a magnetic head to aid the placing of counters. It is rumoured that early versions of these rods were acquired form local casinos and the WAAF Plotters were frequently likened to croupiers.

X008-4522

'You are supporting the men in the air. I mean you can't fail, can you?'

Diary extract, Edith Kup, WAAF plotter

Unsung Heroes: The Observer Corps

Chain Home radar could only detect raids over the sea. Once the Luftwaffe was over land, it was up to the volunteers of the Observer Corps, using a Post Instrument, to calculate the position and height of a raid. This information was reported to a Sector Control room, together with the number and types of aircraft.

In recognition of its vital contribution during the Battle, the Corps became the Royal Observer Corps in April 1941.

5. Aircraft Recognition Cards

1941

Aircraft recognition was a vital skill for members of the Observer Corps and for aircrew on both sides of the conflict. Many hours were devoted to studying photographs or drawings of aircraft, with illustrated playing cards adding some fun to the process. Models were particularly useful as these could be viewed from any angle.

69/K/414

6. Junkers Ju 88 recognition model

1939-1945

7. Blenheim Mk I Recognition Model

1937–1941

These recognition models were used to train aircrew, particularly pilots and gunners, in the vital skill of aircraft recognition. Some aircraft were easily confused in the heat of conflict. On 15 August 1940, a Blenheim was attacked by Spitfire pilots when they mistook it for a German Junkers Ju 88. Models were often hand-made by RAF personnel in their spare time. The Junkers Ju 88 is German-made, manufactured by Wiking, a model company still in existence.

75/M/237, 65/M/196

8. Post Instrument Mk IIC

Post Instruments were used in the Second World War by members of the Observer Corps as an aide to assess the height, bearing and location of enemy aircraft.

This post instrument is fitted with a Micklethwait Height Correction attachment which, when used in conjunction with information from another observer post monitoring the same aircraft, could refine the estimate of the aircraft's height. Information was passed to Observer Corps plotting centres and then to RAF Fighter Command, so they could plot a real-time picture of German air attacks as they developed.

79/1/932

9. Observer Corps Lapel Badge

10. Observer Corps Armband

In 1940, Observer Corps personnel were ordered to wear lapel badges and armbands at all times while on duty, to provide them with legal protection as legitimate combatants in the event of a German invasion. During the Battle of Britain, information gathered by the Observer Corps was a vital part of the Dowding System, enabling fighter aircraft to be mobilised swiftly against enemy attacks.

Images

11 Group Operations Room, Uxbridge. CH7698, © Crown Copyright, Imperial War Museum

Airmen with aircraft recognition playing cards. CH1241, © Crown Copyright, RAF Air Historical Branch

Fighter Funds

Fighter Funds were set up in 1940 by the Minister of Aircraft Production, Lord Beaverbrook. He encouraged the public to donate money to buy aircraft which were then named after that individual, town, country or business.

Each Fighter Fund needed to raise £5,000 for a fighter aircraft. The Spitfire was the most popular and over 1,500 were purchased. The Funds helped every citizen believe they were contributing to the war effort and brought communities and Allied countries together.

1. MAP Presentation Plaque

1941

Plaque presented to the Wolverhampton Express and Star Fighter Fund by the Ministry of Aircraft Production to commemorate the purchase of Spitfire Vb AB917, known as The Inspirer. It was shot down on 28 April 1942 with the loss of its pilot, American-born Pilot Officer Gerald Bickle Whitney RCAF.

X004-4347

2. Spitfire Fund Badge

1940-1941

These badges were sold to raise money for Spitfire Funds, formed to buy aircraft for the RAF during the Second World War. This badge was purchased by Leading Aircraftwoman Osbon. 84/U/032

3. Spitfire Fund Brooch

1940-1941

Lapel brooches like this one, formed from an old penny, were sold to raise money for Fighter Funds. This example was purchased by Mary Avis Taylor, a member of the Women's Auxiliary Air Force.

X006-8819

4. Membership Badge of the Fellowship of the Bellows

1940-1946

The Fellowship of the Bellows was a fundraising organisation originating in Argentina in 1940 to collect money to purchase additional aircraft for the RAF during the Battle of Britain. The bellows referred to the need for 'more air force'.

Individuals could join the fellowship by pledging an amount of money for every enemy aircraft the RAF brought down. Fellows received a badge according to how much they donated, starting with the rank of Puff and ending in Typhoon, with the final rank of The Order of the Bellows. The Fellowship contributed approximately £600,000 to the RAF.

1995/0539/U

5. Hendon Four Fighter Fund Card

1940-1941

Savings cards encouraged the public to donate a small but regular amount to a Fighter Fund. Stamps could be purchased for a penny and, on completion of the card, the owner was issued with a large Stamp of Honour. The Borough of Hendon managed to achieve its ambitious target of raising £20,000, enough to supply four fighters.

A1191

6. Hendon Four Fighter Fund Jigsaw

1940-1941

Many products, including toys, were made and sold to raise money for aircraft during the Second World War. A London-based manufacturer created this jigsaw, which has over 200 pieces, for the Hendon Fighter Four Fund.

1986/0962/C

Bravery and Gallantry

During the Second World War, campaign medals and gallantry awards were given to show the participation and bravery of individuals during particular battles or actions.

Women were also recognised by the award of gallantry medals. Two members of the Women's Auxiliary Air Force received the highest award possible, the George Cross, and six received the Military Medal.

7. Medal Bar of ACM Sir Trafford Leigh-Mallory

1939-1944

Leigh-Mallory was one of the most important commanders in the Battle of Britain, leading No. 12 Group of Fighter Command. His 'Big Wing' tactics – attacking the enemy with large formations of fighters – led to tension between him and Sir Keith Park, who led No. 11 Group until December 1940, when Leigh-Mallory took over command.

L001-1221

8. Medal Bar of Wing Commander Geoffrey Page

1939-1945

Geoffrey Page was badly burned when he was shot down while attacking a German bomber formation over the English Channel on 12 August 1940 during the Battle of Britain.

He became one of the patients, known as 'Guinea Pigs', of Dr Archibald McIndoe, who used pioneering reconstruction surgery on injured aircrew. Page eventually underwent 40 operations. He returned to flying in 1942, destroying several German aircraft, before becoming a spokesman for the 649 members of the morale-boosting and fund-raising Guinea Pig Club.

Medals, from left to right: Distinguished Service Order, Officer of the British Empire, Distinguished Flying Cross and Bar, 1939–1945 Star with Battle of Britain clasp, Air Crew Europe Star with France and Germany clasp, Africa Star, Defence Medal, 1939–1945 War Medal, Order of Orange-Nassau (4th Class).

X003 6855

9. Distinguished Flying Medal of Sergeant Josef Dygryn

Joseph Dygryn became a qualified pilot in Czechoslovakia before escaping to England in 1939, where he joined the RAF Volunteer Reserves at the Czechoslovak depot, Cosford.

During three sorties in one night, Dygryn shot down two Heinkel He IIIs and a Junkers Ju 88 and was awarded the Distinguished Flying Medal. In 1942, he was killed in action over Le Havre.

80/D/1864

10. Medal Bar of Flying Officer Michael Staples

1939-1941

Michael Staples was a successful Spitfire pilot in the Battle of Britain, serving with No. 609 Squadron at RAF Middle Wallop in Hampshire.

Staples joined the RAF Volunteer Reserve in 1938 and was called up at the beginning of the Second World War. In October 1940 he was shot down in flames during aerial combat over Yeovil while intercepting a surprise attack of enemy fighters. Staples baled out at 21,000 feet and later recovered in hospital despite sustaining huge blood loss after being shot in the thigh. He was killed in November 1941 when his Bristol Beaufighter crashed while coming in to land at night.

Medals, left to right: 1939–1945 star with Battle of Britain clasp, Air Crew Europe Star, 1939–1945 War Medal.

80/D/1923

11. Medal Bar of Air Commodore Alan Deere

1939-1953

RAF Spitfire pilot 'Al' Deere was perhaps the most famous of the many New Zealanders who joined the RAF and fought in the Second World War.

By the end of the war he had 22 confirmed victories, of which 10 occurred during the Battle of Britain. Nevertheless, he believed he had cheated death on nine separate occasions while flying Spitfires.

Medals from left to right: Distinguished Service Order and Bar, Order of the British Empire, OBE (Military) 2nd Type, Distinguished Flying Cross and Bar, 1939–1945 Star with Battle of Britain clasp, Air Crew Europe Star with France & Germany clasp, Defence Medal, War Medal 1939–45, 1953 Coronation Medal, Distinguished Flying Cross (USA).

X003-1918

12. Medal Bar of Squadron Leader Alfred Whitby

1939–1956

Alfred Whitby was rated as an exceptional pilot who flew Hurricanes with No. 79 Squadron at Biggin Hill in the Second World War.

Whitby joined the RAF in June 1936 and quickly qualified as a pilot. During the Battle of France, he claimed five enemy aircraft as damaged or destroyed and was commended for his courage and determination. Following a stint as a training instructor, in 1942 Whitby joined No. 135 Squadron in Burma. He was later posted to the Navigation Department at Fighter Command. He remained in the RAF until 1962, retiring as a Squadron Leader.

Medals, from left to right: Distinguished Flying Medal, 1939–1945 Star with Battle of Britain clasp, Aircrew Europe Star with France and Germany clasp, Burma Star, the Defence Medal, the War Medal 1939–1945 with Mention in Despatches oak leaf, General Service 1918-1962 (ERII) medal with Cyprus clasp.

X002 6494

13. Spitfire Windscreen

1940

This armoured windscreen from a Spitfire Mk I was damaged by machine gun fire on 9 September 1940 during the Battle of Britain. The pilot was Sub Lieutenant Arthur Blake RN from No. 19 Squadron based at Fowlmere.

It is thought that a Messerschmitt Bf 109 fired on Blake's Spitfire from behind and, after clipping his ear, hit the inside of the windscreen, causing it to shatter. Bulletproof windscreens gave pilots only a minimal amount of protection. In October 1940, Blake was shot and killed over south London while his aircraft continued to fly for some time before crash landing in Chelmsford.

80/A/1142

Sir William Sholto Douglas

[&]quot;... one had to see Leigh-Mallory and Park actually facing each other to realise how strong the clash was ..."

Images

Poster for Spitfire Fighter Funds. FA10464, © Crown Copyright

ACM Sir Trafford Leigh-Mallory. X003-8417-002, Copyright lapsed