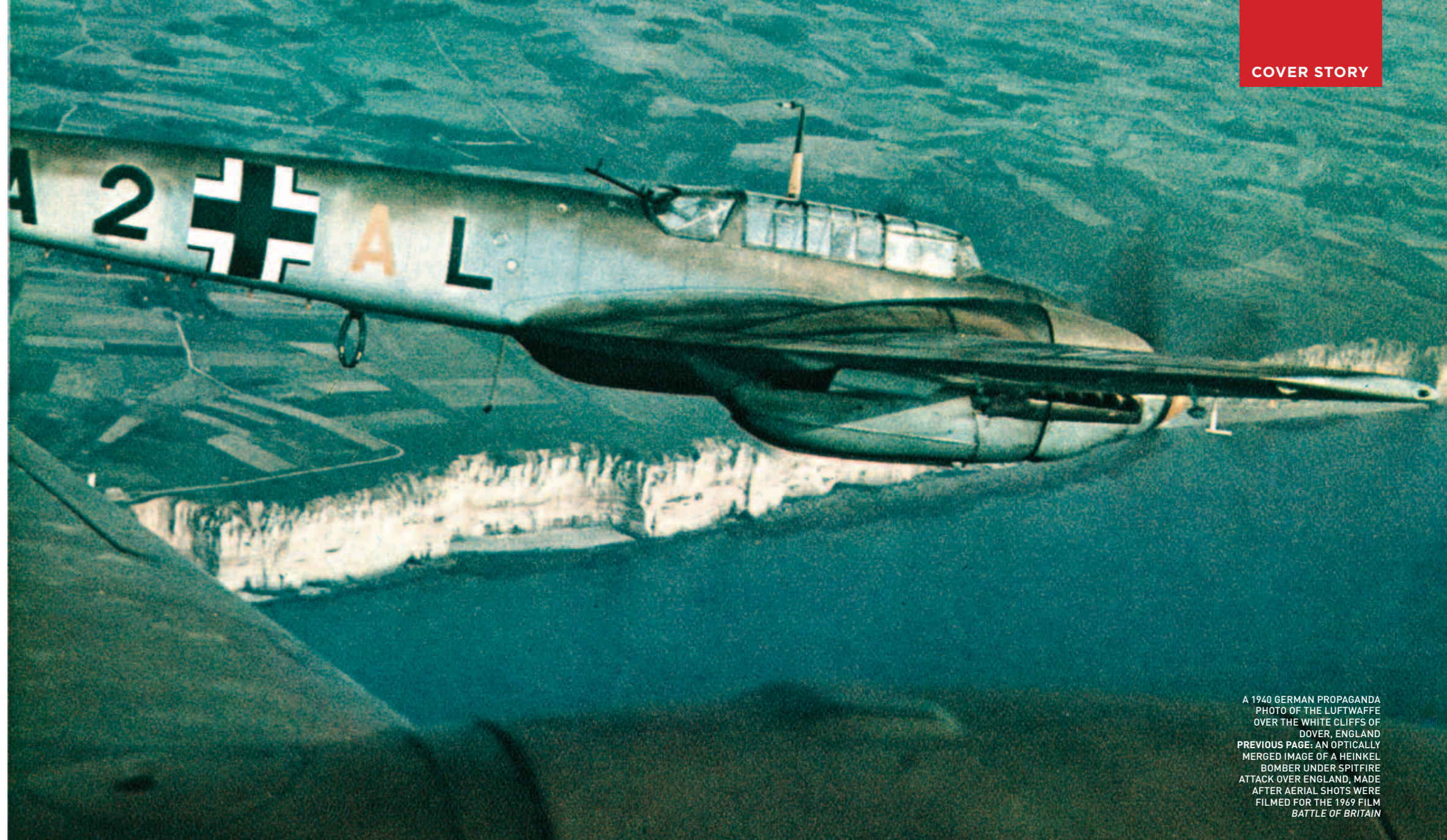


BATTLE OF BRITAIN

It defined World War II in Europe, and emerged as one of our time's most remarkable stories of wartime turnaround. Yet just how did the Battle of Britain play out — and what impact does it have on present-day Britain even today? **Chris Wright** takes an in-depth look at the battles which played out each night over a nation's skies, including visiting some of the key landmarks of the conflict, and examining how everything from the weather, to a range of fortunate circumstances, helped to turn around what had once looked like inevitable victory for Adolf Hitler's forces

PHOTO: GETTY IMAGES

History is full of moments we might call turning points. Days that signalled the end of one era or trend, and precipitated a new direction. Some would say Pearl Harbour, which led to the American entry into the Second World War, was such a moment. Or the dropping of atomic weapons on Hiroshima and Nagasaki four years later, which not only ended that war, but also ushered in a new and frightening world. It was a time in which superpowers hoarded nuclear weapons while being too horrified by what they had seen in Japan to ever use them. Others might point to the fall of communism in Eastern Europe in the 1980s, the assassination of Archduke Franz Ferdinand in Sarajevo in 1914, which triggered the First World War, or Chairman Mao Tse-tung's foundation of the People's Republic of China in 1949.



A 1940 GERMAN PROPAGANDA PHOTO OF THE LUFTWAFFE OVER THE WHITE CLIFFS OF DOVER, ENGLAND
PREVIOUS PAGE: AN OPTICALLY MERGED IMAGE OF A HEINKEL BOMBER UNDER SPITFIRE ATTACK OVER ENGLAND, MADE AFTER AERIAL SHOTS WERE FILMED FOR THE 1969 FILM *BATTLE OF BRITAIN*

But for a real what-if moment, one should never overlook the Battle of Britain, which was waged early in the Second World War between Germany's Luftwaffe air force and Britain's Royal Air Force (RAF) in the summer and autumn of 1940. It is an extraordinary story of courage and resilience. The RAF pilots, massively outnumbered by their German counterparts, were fighting for the future of their country, and for many other countries besides.

It's an important moment not just for the valiance it represented, but because of the unimaginable

consequences of what would have happened had the British lost. Very likely, Britain itself would have been invaded, and it — and all of Europe — could have remained in Nazi hands indefinitely. Even if Britain had not been invaded but simply knocked out of the war, the rest of Europe would have remained under Nazi control, and possibly all of Russia, right up to Japan.

Britain's wartime leader Winston Churchill, who had more of a way with words than possibly any other politician in history, put it like this when he knew the battle was coming. "The Battle of Britain is about to begin. Upon this battle depends the survival of Christian civilisation. Upon it depends our own British life — and the long continuity of our institutions and our Empire.

He continued: "The whole fury and might of the enemy must very soon be turned on us. Hitler knows that he will

have to break us in this island or lose the war. If we can stand up to him, all Europe may be freed and the life of the world may move forward into broad, sunlit uplands. But if we fail, then the whole world, including the United States, including all that we have known and cared for, will sink into the abyss of a new dark age made more sinister, and perhaps more protracted, by the lights of perverted science."

It was a call to arms, the likes of which Churchill would

need to use again to rouse outnumbered and weary soldiers and bombed-out civilians. "Let us therefore brace ourselves to our duties," he concluded, "and so bear ourselves, that if the British Empire and its Commonwealth last for a thousand years, men will still say, this was their finest hour." Indeed, it probably was.

BUNKERED DOWN

Discovery Channel Magazine is in a bunker 20 metres

underground beneath Uxbridge, a suburb of West London. It is a fascinating room, dominated by a huge map table, with the southeast of England and the mainland European coast on it, as well as dozens of wooden markers representing squadrons of aircraft, and some wooden sticks to move them around.

The main wall is filled, every inch of it, with something called a tote board, with a list of British airfields across the top — Biggin Hill, Henley, Northolt,

Hornchurch — and a long list of status alerts — Available 30 minutes, Ordered to standby, Left ground, Enemy sighted. There are 14 different positions in total, annotated by coloured lights. The whole thing is overlooked through curved glass from an operations room above.

This is known today as the Battle of Britain Bunker, and it is the place from which the air defence of southeast England — the area under most fire, being closer to Germany and the part of England where



one finds London — was coordinated. At the table, a man called Chris Wren, a former RAF Warrant Officer and the curator of this subterranean attraction since 1985, is talking with passionate detail about what happened here.

What we call the Battle of Britain today is usually celebrated in the UK on September 15, considered the moment when Germany began to accept it would not win. But Wren and other RAF historians consider the battle itself as a process that lasted several months.

For Wren, it started on July 10, 1940, when the Luftwaffe — Germany's powerful air force — began bombing shipping convoys in the English Channel, and ended 114 days later on October 31. By this time, German strategy had switched from trying to beat the air force, to trying to bomb the cities, a period we know today colloquially as "The Blitz".

But it's worth remembering the state of the war then, and what it was all for. By then the war was almost a year old, having started with Germany's invasion of Poland on September 1, 1939, and Britain's declaration of war against Germany two days later.

Aside from naval battles, little happened for a long time after that. Britain's air force and army — through what was called the British Expeditionary Force — decamped en masse to set up in France, and the armies dug in, made preparations, and pretty much just looked at each other for a while. It came to be known as the Phony War.

All that began to change in April and May of 1940. First Germany attacked Denmark, ("that was over in a matter of hours"), Wren says, and Norway, which took longer. Britain and France sent troops and aircraft to support the Norwegians, hanging on to the Arctic Circle town of Narvik, but when the Germans attacked those

GERMAN STRATEGY HAD SWITCHED FROM TRYING TO BEAT THE AIR FORCE, TO TRYING TO BOMB THE CITIES, A PERIOD WE KNOW TODAY COLLOQUIALLY AS "THE BLITZ"

forces in May, the Allies were outnumbered.

The British sent ships across to extricate the army, and an aircraft carrier with two accompanying destroyers to take out the remaining airmen and their planes. But on June 8, the returning British ships were intercepted by German battle cruisers and sunk.

Some 1,500 British personnel died, many of them airmen. Only two members of the RAF survived. It was to be a defining moment. "Weeks before the momentous Battle of Britain, we lost all those experienced pilots," says Wren.

By then, the situation had turned desperate closer to home. On May 10, Germany launched a ferocious attack that

overwhelmed everything in its path. Within five days the Dutch surrendered. Before May was out, Belgium did too.

"The British Army fell back to avoid being cut off, ending up principally at Dunkirk," Wren says. "The British High Command estimated we might be lucky to get 40,000 soldiers back into the safety of the UK."

What happened next is one of the most fundamental and lasting points of pride in British history and a key element of the national psyche. In the Dunkirk evacuation from May 26 to June 4, 338,000 British and Allied troops were rescued, not just by warships and troop carriers but civilian ships, fishing trawlers, and pretty much every little tin boat on the English south coast. Another 11,000 were evacuated from Le Havre, and many more from the west of France.

But the sense of heroic resilience masks some desperate information that would take years to recover

from. All the guns, ammunition, tanks, supplies and other material was left behind in France; and there were also terrible losses along the way.

Many of the air force ground crews, for example, had made their way

to the west of France, to Brittany and Normandy, to be evacuated from Saint Lazaire by Cunard liners. One was the *Lancastria*.

"Nobody will ever know how many people were on board," says Wren. "Official estimates are 6,000. The *Lancastria* Association just says they stopped counting at 6,000. They estimate upwards of 9,000."

On June 17 the ship was hit from the air by four bombs, and sank in 20 minutes. Less than 2,000 survived. To this day it is the worst maritime disaster in British history — with far more fatalities than the much more famous *Titanic* and *Lusitania* sinkings combined — but it is little remembered today because Churchill suppressed news of it, and survivors were



PHOTO: ALAMY (TOP, LEFT); GETTY IMAGES

A VIEW OVER THE WING TO THE MAIN BODY OF A BRITISH WORLD WAR TWO FIGHTER PLANE, A HAWKER HURRICANE
OPPOSITE: PILOTS OF 'B' FLIGHT, NO. 32 SQUADRON RELAX ON THE GRASS AT HAWKINGE IN FRONT OF HURRICANE MK I P3522, GZ-V

THE PLANES THAT FOUGHT THE WAR

YOU CAN'T FIGHT A WAR IN THE SKY WITHOUT THE RIGHT EQUIPMENT. DCM TAKES A LOOK AT THE MACHINES THAT BRAWLED IN THE BATTLE OF BRITAIN

There is no aircraft that stirs the British soul like the Spitfire. "One of the true icons of aviation," says the RAF Museum, "the Spitfire was more technologically advanced, faster, and simply more beautiful than any of its contemporaries. It quite simply entered the imagination of all participants; the mere name eclipsed all other fighters."

When you see one up close, you can't help but be struck by how small it is. It is sleek and dogged, nimble and zippy, and although it caused headaches for the people who had to build and maintain them — and for pilots on the ground — they were wonderful aircraft in the sky.

The Spitfire, despite popular belief, was not the most vital aircraft in the battle. That was the Hurricane. There were 1,700 Hurricanes that fought in the Battle of Britain, far more than any other fighter, and those aircraft brought down far more German aircraft than any other, yet they are overshadowed.

Why? Maybe because the Hurricane was a less sophisticated plane. It had a more traditional fuselage construction, says the RAF museum, with a metal tube frame and wooden formers and stringers covered with a doped fabric.

The chief counterpart was the Messerschmitt Bf109, "in the early years one of the finest fighters in the world," says the RAF Museum. "The various strengths and weaknesses of the three main single seat monoplane fighters largely cancelled each other out and victory often depended on the experience and skill of the pilot." It had a cramped cockpit — difficult to get out of, which would prove fatal to many pilots whose fuel-starved planes crashed into the sea on the way back — but a quick throttle response, good acceleration, a short take off and outstanding low-speed handling.

The most feared German bombers were the dive-bombers, the Junkers Ju87 and 88. The latter, the RAF now admits, was "arguably the most versatile combat aircraft produced by any nation during the war."

A host of other aircraft were involved from the German Heinkel He 111 bomber to — unbelievably — an old biplane called the Gladiator.

Exact figures are difficult to pinpoint, but it's estimated that between 10 July and the end of October 1940, the RAF lost around 1,023 aircraft whilst the Luftwaffe lost 1,887.

told for many years they would be court martialled if they spoke of it.

The Battle of France, as we call it today, took a huge amount of the RAF's strength in its brief six-week duration. The RAF lost just over 900 aircraft, half of them the iconic and vital Spitfires and Hurricanes, and almost 300 pilots. France formally capitulated on June 22, leaving the UK standing alone.

The result of all of this was that when the Battle of Britain came, it found a British air force that was horribly depleted, and particularly of those with any experience of combat. At the start of the war, the air defence of Britain had numbered 52 fighter squadrons. By May 1940, it was the equivalent of 36.

"The only thing that saved us," says Wren, "was that little stretch of water." He points to the map. The English Channel.

DAVID AND GOLIATH

Once Hitler had taken over much of Western Europe and decimated the equipment of the British Army, he assumed that Britain would simply withdraw from the war. Once it became clear that the British had no intention of doing anything of the sort, he decided to invade. In July 1940 he issued Fuhrer Directive 16. "Since England, in spite of her hopeless military situation, shows no signs of being ready to come to a compromise, I have decided to prepare a landing operation against England and, if necessary, to carry it out."

It was followed by Fuhrer Directive 17, which set out plans for that invasion: Operation

Sea Lion. It involved a plan to land at least 13 divisions on the southeast coast not far from Folkestone in Kent.

"But before he could launch the attack, he realised the German Air Force would have

"THE ONLY THING THAT SAVED US," SAYS WREN, "WAS THAT LITTLE STRETCH OF WATER." HE POINTS TO THE MAP. THE ENGLISH CHANNEL

to gain air superiority over the channel," which meant obliterating the RAF, and quickly, ideally before the end of the summer. Hitler threw everything he could at it. "Germany deployed 3,000 aircraft, 2,500 of them fighters and bombers," says Wren. "To defend the country, we had less than 700 fighters."

At the RAF Museum in Hendon, north London, the Battle of Britain curators divide the battle into five phases (which don't quite match Wren's interpretation). The first, from June 26 to July 16, involved scattered and limited day and night attacks directed mainly against ports, shipping, and towns with aircraft factories.

The second, which followed Hitler's order that the Luftwaffe be at full readiness from



THE "OPS" ROOM ON SEPTEMBER 15, 1947 AT THE SECRET OPERATIONAL HEADQUARTERS AT UXBRIDGE RAF STATION, FROM WHERE THE BATTLE OF BRITAIN WAS CONDUCTED

THE FIGHTERS AND BOMBERS OF WORLD WAR II

SPITFIRE MK 1 COUNTRY: UK

CLASS: FIGHTER; **CREW:** 1
MAX SPEED: 365 MPH (487 KPH)
RANGE: 395 MILES (635 KILOMETRES)
ARMS: EIGHT BROWNING .303 CALIBRE MACHINE-GUNS WITH BALL, TRACER, INCENDIARY OR ARMOUR-PIERCING ROUNDS
POWER: 1,030 HORSEPOWER ROLLS-ROYCE MERLIN III ENGINE;
NICKNAMES: SPIT; SPITTER



MESSERSCHMITT BF-109 COUNTRY: GERMANY

CLASS: FIGHTER
MAX SPEED: 426 MPH (685 KPH)
RANGE: 373 MILES (600 KILOMETRES)
ARMS: ONE 30MM MK 108 CANNON, TWO 13MM MG 131 MACHINE GUNS
POWER: DAIMLER-BENZ DB 605D ENGINE
NICKNAME: DIE BEULE OR THE BUMP FOR THE BULGING MACHINE GUNS

P-51 MUSTANG COUNTRY: USA

CLASS: FIGHTER
MAX SPEED: 437 MPH (703 KPH)
RANGE: 1,000 MILES (1,609 KILOMETRES)
ARMS: SIX .50 CALIBRE MACHINE GUNS AND 10 ROCKETS OR OVER 900 KILOGRAMS OF BOMBS
POWER: ROLLS-ROYCE MERLIN V-1650
NICKNAME: TASKED WITH ESCORTING US FIGHTERS DEEP INTO GERMAN TERRITORY, KNOWN AS "LITTLE FRIENDS"



FOCKE-WULFE FW-190 COUNTRY: GERMANY

CLASS: FIGHTER-BOMBER; **CREW:** 1
MAX SPEED: 426 MPH (685 KPH)
RANGE: 519 MILES (835 KILOMETRES)
ARMS: TWO MG 131 MACHINE GUNS, TWO 20MM MG 151 CANNONS, OPTIONAL UNDERWING BOMBS
NICKNAME: WÜRGER, MEANING BUTCHER BIRD

July 17, focused on shipping and, increasingly, on radar.

Without radar, the UK would likely have lost the Battle of Britain and, therefore, the war. The system was in its infancy, having only first been tested in 1935, but it would prove to be absolutely crucial.

"I think we can say," Sir William Sholto Douglas, Marshal of the Air Force and a key commander, said, "that the Battle of Britain might never have been won if it were not for the radar chain."

By modern standards the systems were very primitive, but in these early days Britain prioritised them a lot more than Germany. It was chiefly only useful over the sea, partly because the radar stations all faced out to sea but also because the signals could be misinterpreted, particularly over land.

Not only did the British use radar, they integrated it well into their overall defence strategy — right into the bunker where DCM is standing. Radar would be able to detect German aircraft leaving their airfields in France or Belgium. It would also monitor them as they crossed the English Channel or North Sea. When that happened, the information from the radar would be sent to Fighter Command, whereupon it would be filtered and passed to this room.

More than three quarters of the people who worked in this room were women, who would use wooden blocks denoting squadrons of planes and move them on the central map according to the latest information. Then a complex

process would also monitor everything about the available RAF forces — how close to being ready to take off they were, how many there were, the weather they were operating in, when they were airborne, when they engaged with the enemy, and so on.

As the battles raged overhead, the WAAFs, as the women were known — for Women's Auxiliary Air Force — would move the blocks to give a clear picture of the situation, helping the controller to decide where best to deploy forces.

Radar allowed the English forces to be ready to meet the invaders. This was crucial, so it was little surprise when the Germans — having figured out why this was happening — started targeting the radar stations themselves.

A LUCKY BREAK

The Germans had several successes, particularly in two raids against a vital facility in the Isle of Wight, which was knocked out for 10 days. But Goering, the commander in chief of the Luftwaffe, made a watershed mistake. The English, in desperation, had plugged the gaps in their radar defences with vulnerable and inefficient mobile sets.

But the Germans, detecting the signals from these mobile sets, believed they had failed to knock out the main systems. "They thought the radar systems were in hardened shelters below the ground," says Wren. "They were not. They were in wooden huts above the ground."

Sometime in August, Goering said: "It is doubtful whether



COCKPIT CONTROLS OF A BRITISH SPITFIRE FIGHTER PLANE
OPPOSITE: LOCALS WATCH AS TROOPS AND POLICE INSPECT A MESSERSCHMITT BF 109E-1 WHICH CRASH-LANDED IN A WHEATFIELD AT MAYS FARM, SELMESTON, NEAR LEWES IN SUSSEX, 12 AUGUST 1940

there is any point in continuing attacks on radar sites, in view of the fact that not one of those attacked so far has been put out of action."

It was a key moment of good fortune for the British. "If they had pursued their attacks on the radar station, they might have won the Battle of Britain," said Wren. "It was the first major error of the battle. Had they obliterated radar stations we'd have been flying blind on a hit and miss method of interception."

This was just as well, as the RAF had been struggling badly, losing 25 pilots in a single day on August 11. There were a number of problems. One was that many German pilots had war experience from their involvement in the Spanish Civil War.

The British, meanwhile, were sticking with a long-standing three-plane V formation and were hell-bent on maintaining formation. They used to do demonstrations in peacetime with ribbons tied between the three planes in order to prove their precision, but this formation had no flexibility in battle. The German formation model was for two pairs of two: a looser formation that remains the basis of air combat today.

The third phase of the battle came from roughly August 13 to September 6, when Germany changed its target from radar to the RAF airfields in the southeast of England, "with the object of exhausting the RAF's ability to provide a defence," as the RAF museum explains.

The Germans had big ambitions here. They had a target called Adler Tag, or Eagle



Day, on August 13, an attack so vicious that it would drive Fighter Command out of the southeast of England within four days and completely destroy the RAF within four weeks.

On the afternoon of August 13, there were 485 bomber and 1,000 fighter sorties from Germany. It was brutal and exacted a terrible toll on both sides, far worse than the Luftwaffe had been expecting. On August 18 alone, the RAF lost 68 aircraft, 31 of them in combat, while the Luftwaffe lost 69. It didn't ease after that. The RAF says that between August 26 and September 6 alone, the RAF lost 248 aircraft, the Luftwaffe lost 322.

The RAF's resilience was quite extraordinary, but it was simply running out. "The lifeblood of fighter command — its pilots — was ebbing away," says Wren. It was in the middle of this period that Winston Churchill, visiting the bunker and realising just how unbelievably important were the events within it, came out

and said: "Never, in the field of human conflict, was so much owed by so many to so few." A few days later he would say the words again in Parliament. "The Few" remains the name given to Battle of Britain flyers to this day.

THE WRONG TARGET

Fortunately, the Germans made another mistake at this time, and Wren believes it came about by accident. On August 24, London was bombed, apparently by accident. Hitler had, for the moment, banned it, wanting to keep it in reserve as an option. Churchill ordered a small force to retaliate with a daring (and costly) series of raids against Berlin, which achieved little damage, but plenty of provocation.

Revenge was vicious. "On Saturday, September 7, at a quarter to five, the German Air Force mounted a raid of 900 aircraft, 600 bombers and 300 fighters. The target was the capital of England. London.

THE FIGHTERS AND BOMBERS OF WORLD WAR II

JUNKERS JU 87 STUKA COUNTRY: GERMANY

CLASS: FIGHTER-BOMBER; **CREW:** 2
MAX SPEED: 255 MPH (410 KPH)
RANGE: 954 MILES (1,535 KILOMETRES)
ARMS: FOUR 7.92MM MACHINE GUNS, TWO 37MM UNDERWING ANTI-TANK CANNONS, 1,800 KILOGRAMS OF BOMBS
NICKNAME: PANZERKNACKER, OR TANK-CRACKER



ILYUSHIN-2 SHTURMOVIK COUNTRY: RUSSIA

CLASS: FIGHTER-BOMBER; **CREW:** 2
MAX SPEED: 251 MPH (403 KPH)
RANGE: 373 MILES (600 KILOMETRES)
ARMS: TWO 23MM CANNONS, TWO 7.62MM MACHINE GUNS, TWO BOMBS, FOUR 132MM ROCKETS
NICKNAME: DUBBED SCHWARTZER TODT OR BLACK DEATH BY ITS GERMAN ENEMY

HEINKEL HE 177 COUNTRY: GERMANY

CLASS: BOMBER; **CREW:** 6
MAX SPEED: 303 MPH (487 KPH)
RANGE: 3,418 MILES (5,500 KILOMETRES)
ARMS: TWO 20MM CANNONS, THREE 7.92MM MACHINE GUNS, TWO 13MM MACHINE GUNS, ALMOST 6,000 KILOGRAMS OF BOMBS
NICKNAME: PROVING UNRELIABLE AND PRONE TO FIRE, CREW DUBBED IT "THE TORCH"



BOEING B-17 FLYING FORTRESS COUNTRY: USA

CLASS: BOMBER; **CREW:** 10
MAX SPEED: 287 MPH (461 KPH)
RANGE: 2,001 MILES (3,220 KILOMETRES)
ARMS: ELEVEN 12.7MM MACHINE GUNS, 8,000 KILOGRAMS OF BOMBS
POWER: FOUR WRIGHT CYCLONE R-1820-97 RADIAL PISTON ENGINES
NICKNAME: NAZI PROPAGANDA DUBBED IT THE FLYING COFFIN



BALHAM BOMBING

On October 14, 1940 at 8.02pm, a 1,400 kilogram bomb penetrated 10 metres underground and exploded just above the cross passage between the two platforms of the Balham train station in south London. Colin Perry wrote in his diary *Boy in the Blitz*: "The water main was burst and the flood rolled down the tunnels, right up and down the line, and the thousands of refugees were plunged into darkness, water. They stood, trapped, struggling, panicking in the rising black invisible waters. They had gone to the Tubes for safety, instead they found worse than bombs, they found the unknown, terror."

A NUMBER 88 BUS LIES IN A LARGE CRATER IN THE ROAD IN BALHAM, LONDON, THE MORNING AFTER A GERMAN AIR RAID DURING THE BATTLE OF BRITAIN, OCTOBER 15, 1940
OPPOSITE: PILOTS FROM THE REGIA AERONAUTICA OR THE ITALIAN ROYAL AIR FORCE WERE SENT BY ITALIAN DICTATOR BENITO MUSSOLINI TO SUPPORT HITLER'S ATTACKS ON THE UNITED KINGDOM

PHOTOS: GETTY IMAGES

It was bombed for 57 consecutive nights."

London, and many other British cities, suffered unimaginably in what followed. Today, we call this "The Blitz", and it is supposed to represent the innate British ability not only to survive but also to thrive under immense duress.

This is the era of the "Keep Calm and Carry On" posters (although that particular poster was hardly ever displayed); of getting on with it, of finding a way to continue to live when your house is blown up and your family has been buried under rubble. In those first 57 nights, a million homes were destroyed or damaged and more than 40,000 civilians killed, almost half of them in London. But it was, tactically, a decision that probably lost Germany the Second World War.

It is hard to say how the RAF could possibly have held out if the Luftwaffe had instead continued to concentrate on destroying the airfields and wiping out the RAF. All historians can agree, though, that it wasn't much longer. Instead, the RAF was given a brief respite to regroup as Hitler and Goering shifted their focus to the cities.

And so to September 15, the day we now remember as the Battle of Britain day, but which the Germans had earmarked as the day they would achieve victory, allowing a full-scale invasion to take place two days later. A morning raid of 200 bombers came over. The Royal Air Force went aloft; the raid fizzled out. And then came a second raid of 400 aircraft. "And this time," Wren says,



"everything we possessed in the southeast was airborne."

A RED GLOW

Today, when you go into the bunker, there is a little paper calendar, the sort where you tear off a page for each day, at the entrance to the room; the page on the calendar is September 15, and the room is set up exactly as it would have been that day. On the day itself, Churchill was there, with his wife. Air Vice Marshal Keith Park, the New Zealand-born aviator who was the commander of RAF fighters for the southeast, had escorted them down to the bunker.

Sir Keith Park is today the most revered individual figure from the battle, remembered with a vast five-metre statue in the RAF's museum. Park had had to explain to Churchill, with suitable deference, that the air-conditioning system down there would not be able to cope

with his cigars. "As the day's dramatic events unfolded," writes Vincent Orange in his book on Sir Keith, "the Prime Minister was therefore obliged to observe them with no better consolation than a dead cigar between his teeth."

In the bunker, on the tote board that fills the far wall, there is an elaborate system of lights that allowed the controller to understand the operational status of every squadron under his command. Normally the board is multi-coloured, reflecting different aircraft at different stages. Some are stood down, some refuelling, some ready, some engaged, some returning.

One of the things that would cause red lights to appear was if a squadron was in action. Churchill would later write about a moment when "all the bulbs glowed red." The complete board showed the same thing: it meant that every single fighter aircraft in

THE FIGHTERS AND BOMBERS OF WORLD WAR II

DE HAVILLAND MOSQUITO DH98 NF11 COUNTRY: UK

CLASS: NIGHT-FIGHTER
CREW: 2
POWER: TWO ROLLS-ROYCE MERLIN 76 V-12 LIQUID-COOLED PISTON ENGINES
MAX SPEED: 407 MPH (655 KPH)
RANGE: 1,299 (2,090 KILOMETRES)
NICKNAMES: THE WOODEN WONDER, DUE TO THE USE OF WOOD IN HER FRAME



NAKAJIMA J1N1 COUNTRY: JAPAN

CLASS: NIGHT-FIGHTER; **CREW:** 2
MAX SPEED: 314 MPH (505 KPH)
RANGE: 981 MILES (1,578 KILOMETRES)
POWER: TWO NAKAJIMA NK1F SAKAE 21 AIR-COOLED RADIAL PISTON ENGINES
ARMS: FIVE 20MM TYPE 99 CANNONS, TWO OPTIONAL 250 KILOGRAM BOMBS
NICKNAME: GEKKO, MEANING MOONLIGHT IN JAPANESE

VOUGHT F4U CORSAIR COUNTRY: USA

CLASS: CARRIER FIGHTER-BOMBER; **CREW:** 1
MAX SPEED: 416 MPH (669 KPH)
RANGE: 1,016 MILES (1,635 KILOMETRES)
ARMS: SIX 12.7MM M2 BROWNING HEAVY MACHINE GUNS, 1,814 KILOGRAMS OF ROCKETS AND BOMBS
POWER: ONE PRATT & WHITNEY R-2800-18W DOUBLE WASP RADIAL PISTON ENGINES
NICKNAME: THE JAPANESE ARMY NICKNAMED THEM "WHISTLING DEATH" FOR THE DIVE BOMB SOUND



MITSUBISHI A6M ZERO COUNTRY: JAPAN

CLASS: CARRIER FIGHTER-BOMBER; **CREW:** 1
MAX SPEED: 316 MPH (508 KPH)
RANGE: 1,930 MILES (3,106 KILOMETRES)
ARMS: TWO 20MM CANNON, TWO 7.7MM MACHINE GUNS, TWO 59 KILOGRAM BOMBS
POWER: ONE NK1C SAKAE 11 RADIAL PISTON ENGINE
NICKNAME: DUBBED "ZERO" BECAUSE IT ENTERED SERVICE IN THE JAPANESE IMPERIAL YEAR 2600, I.E., 2,600 YEARS AFTER THE FIRST JAPANESE EMPEROR

the southeast of England was airborne and in combat at the same time. There was literally nothing else to give. This was it.

A DARK SHADOW

Just how much was at stake at this time? Absolutely everything. Churchill had made another of his famous speeches a few months earlier when he said:



"We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills. We shall never surrender."

Churchill was expecting invasion, and he was talking about fighting to save his country. It really was very close to being a reality. Around this time, Joe Kennedy, the ambassador to the United States, more famous today as the father of John and Robert Kennedy, messaged his masters in the US to say he expected German troops to be marching down Whitehall within 14 days.

What must it have been like to go aloft in those conditions, knowing what would happen if the battle was lost? Few survivors remain — the last estimate was that 33 veterans of the Battle of Britain are still alive; the youngest of them aged 94 — but we do have accounts from some of them.

They were exhausted, and in most cases had already been in intense fighting in the morning, but they prepared to face an even more outnumbering force as they readied themselves to go airborne once more.

THE BRITISH BULLDOG

On 18 June, 2940, Winston Churchill, facing an impending onslaught from Hitler's forces, inspired the pilots of the RAF to victory in the Battle of Britain with these words: "If we fail, then the whole world, including the United States, including all that we have known and cared for, will sink into the abyss of a new Dark Age made more sinister, and perhaps more protracted, by the lights of perverted science. Let us therefore brace ourselves to our duties, and so bear ourselves that, if the British Empire and its Commonwealth last for a thousand years, men will still say, 'This was their finest hour.'"



AN OPTICALLY MERGED IMAGE OF A DOGFIGHT OVER ENGLAND BETWEEN A SPITFIRE AND A MESSERSCHMITT ME 109. MADE AFTER AERIAL SHOTS WERE FILMED FOR THE 1969 FILM BATTLE OF BRITAIN
OPPOSITE: THE SUN (NEW YORK) FRONT PAGE FROM 1940 REPORTING ON THE BATTLE OF BRITAIN AND RAF & LUFTWAFFE BATTLES OVER DOVER

PHOTOS: GETTY IMAGES (MAIN); ALAMY (NEWSPAPER)

"Some of us would die within the next few days," said squadron leader Peter Townsend, in 85 Squadron. "That was inevitable. But you did not believe that it would be you. Death was always present, and we knew it for what it was. If we had to die, we would be alone, smashed to pieces, burnt alive, or drowned."

"Some strange, protecting veil kept the nightmare thought from our minds, as did the loss of our friends," he continued. "Their disappearance struck us as less a solid blow than a dark shadow which chilled our hearts and passed on."

The fighting was intense but the RAF force — we shouldn't just say British, since a host of nationalities, such as Canadian, Polish, Czech and Slovak, Australian, South African, New

Zealand and various Caribbean states were involved — acquitted themselves with extraordinary craft and stubbornness. A total of 12 RAF airmen died that day, and another from injuries later. However, the next day, the headlines would say 175 German aircraft were destroyed. It was a bombastic exaggeration. But the true figure, 56, would still prove to be decisive.

other British cities. In October, daylight raids ended and Germany turned instead to night offensives, right into the spring. The last major assault was on May 10 1941. "But it was the end," says Wren. On June 22 Hitler launched Operation Barbarossa, the attack on the Soviet Union, and in order to do so he took his aircraft away to support that campaign. That would mean, ultimately, that he would end up fighting on two fronts. The west, spearheaded by Britain and galvanised by the American entry into the war at the end of 1941, and the east, against the Soviet Union. This would prove to be too much, and would lead to the Germans losing the war.

Wren takes the view that Britain would never actually have been invaded, because even if the British air force had been neutralised, its navy was superior to the Germany's.

"But had Fighter Command been defeated, and Germany on its daily incursions realised they were not meeting any

fighter opposition at all, in all probability Hitler would have issued us with an ultimatum: withdraw or we bomb your cities into rubble. And with no air defence, he could have carried out that threat."

The inevitable consequence would have been, at the very least, British withdrawal from the war. "Once Hitler was free from any preoccupation with the United Kingdom he could have turned the whole of his armies eastwards and southwards, linking up with the Italians and ultimately the Japanese," posits Wren. The Axis powers would, in all probability, have become masters of Europe, Africa and Asia. The United States of America would not have entered a European war; there would have been nowhere for them to come. Says Wren: "That's how significant the Battle of Britain was." ●

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It was not clear to the British for some time how decisive the day would be. But this appears to be the moment when Hitler realised he wasn't going to win in Britain. "Two days later he delayed the invasion," says Wren. "He realised his Air Force had not defeated our Air Force, and therefore the invasion could not go ahead."

There was more fighting still to come, and terrible ordeals for the citizens of London and