

Bristol . *Flyer*

September 2020

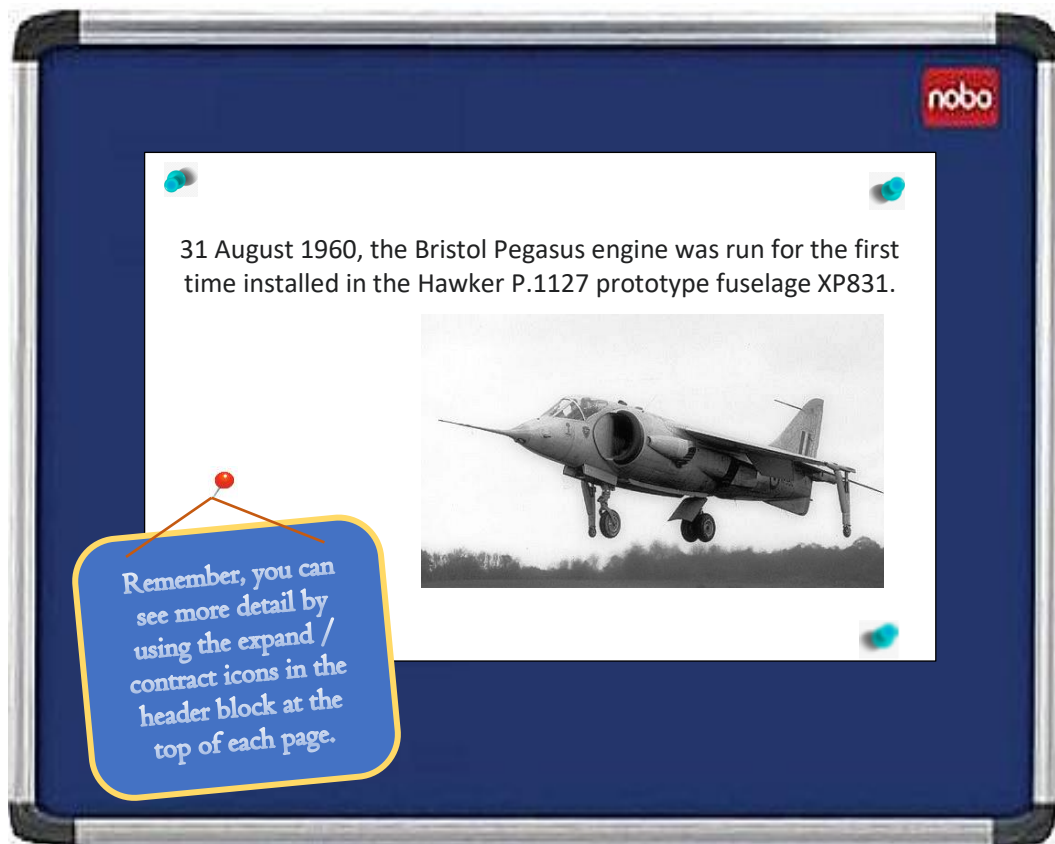


Filton Blitz – 25th September 1940

The "Bristol.Flyer" is a privately produced and published electronic journal which focuses on the history of the British & Colonial Aeroplane Company, the Bristol Aeroplane Company, the airfield and the people who worked there between 1910 and 1977, when it became part of British Aerospace.

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Mutterings from the Editor.

Welcome aboard the September 2020 issue of the *Bristol.Flyer*.

The story of the many tens of thousands of people who have worked in and around the Filton Works and Aerodrome, their innovations and the products they built, is a fascinating one which began in February 1910.

Eighty years ago, on 25th September 1940, Filton and its surrounding area suffered one of its darkest days. That was the day that the German Air Force, the Luftwaffe, tried to stop the Bristol Aeroplane Company from making aircraft, armaments and aero-engines for His Majesty's Armed Forces in their bid to stop Herr Hitler and his thugs over-running the UK.

You would have thought that, after such a long time, the story would be well known and much told but, in writing this fourth edition of the Bristol.Flyer, I have many found contradictions and differing versions of the same event. It is not my purpose to attempt to write a final version of the events of that day, but rather to record what happened from the meories of those who were around, and from "official sources".

Of course, "official sources" included government censorship which often had to not tell the truth deliberately and which often added to the inevitable confusion following an earth-shattering event, literally earth-shattering in the case of the Filton bombing. My colleague in the interpretation of local history, Eugene Byrne, Editor of the Bristol Times, wrote to me recently *"... government censorship ... completely locked down in WW2. So you can't rely on newspaper reports for anything. Given that the papers often get things wrong on a breaking story when everything is still confusing, you then have to add in the Man at the Subs' Desk with the blue pencil and the government manual in front of him."*

The Filton factory complex was a prohibited area and so photographs of damage, etc, which occurred are rare to the point of almost none – especially inside the factory. Forgive me if the images I use are not up to my usual standard, but I hope they adequately show what happened all those years ago.

So, what did happen 80 years ago ... ? Let's see what we can find out. Any local or family memories you hold would be gratefully received for potential publication in later editions.



Duncan aka "Smiler" 1952.



Email: bristol.flyer@btinternet.com

NAZI 'PLANES MAKE MASS ATTACK ON BRISTOL

SEVERAL FAIL TO RETURN

Many Houses Wrecked and Some People Killed

WHEN NAZI 'PLANES CROSSED THE DORSET COAST AND MADE A MASS ATTACK ON BRISTOL YESTERDAY, SEVERAL OF THEM FOUND OUR DEFENCES EQUAL TO THE OCCASION, AND FAILED TO RETURN HOME.

The raiders, believed to number at least 50, dropped bombs in a few districts, wrecked many houses, and caused some casualties, a number of people being killed.

German airmen who baled out when their machines crashed were captured by the police, soldiers, and members of the Home Guard.

THE following Air Ministry communique was issued at 8.40 last night:—

"It is now known that 23 enemy aircraft have been destroyed to-day, three of them by A.A. guns. One of our fighters previously reported as lost is safe. Our losses are therefore four fighter aircraft, the pilots of three of them being safe."

An earlier Air Ministry and Ministry of Home Security communique stated:—

"Enemy aircraft crossed the Dorset coast to-day and attacked Bristol."

"Bombs were dropped near the coast and in the outskirts of Bristol, causing some damage and killing and injuring a number of people."

"There has also been some minor activity in the South-East of England, but reports indicate that little damage and few casualties were caused."

"The enemy were engaged by our fighters at all points. Eighteen enemy aircraft, including at least 13 bombers, were shot down. Five of our aircraft were lost, but three of the pilots are safe."

50 'Planes in Two Waves

MANY houses were wrecked and a number of people killed and injured in Bristol, yesterday, when enemy 'planes, estimated by eye-witnesses to number at least 50, flew over in two waves and dropped bombs on several districts.

Fierce anti-aircraft gunfire met the raiders, and later their formations were broken up by British fighters which dived out of a bank of cloud and went savagely into action.

Three German 'planes were seen to crash to the north of the city, some members of their crews saving themselves by means of their parachutes, and four more 'planes were chased by our fighters and brought down at different places in the South-West.

The four were a Heinkel III, between Failand and Portbury, Somerset; a Junkers 28 at Wolverton, Somerset; a Messerschmitt at Greatridge, Wilts., and a Heinkel III at Swanage, Dorset.

A reporter saw about 100 'planes, flying in formation, approach from the south. About half of these made for the Welsh coast and the others made for Bristol, their main objective. When the formation was attacked by Spitfires a Nazi 'plane was seen to burst into flames and dive to earth.

There were a great number of amazing escapes from death. Several families were buried under the debris of their houses, but were found almost uninjured when neighbours and rescue workers

NAZI GUNNED STREETS—FOR LAST TIME

A DORNIER bomber flew low over a South-East Coast town going from west to east, yesterday afternoon. It had obviously been roughly handled, for one engine was out of commission.

The crew machine-gunned some streets, but people had fled for cover at the noise of its approach, and no one was hit.

The machine fell into the sea and it is not known whether anyone was rescued.

Two of them, Lionel Thomas and George Bennett, were engaged in putting injured people into an ambulance when a bomb exploded near by.

The ambulance was lifted bodily off the ground and a number of gaping holes were ripped in the roof. Huge pieces of clay, one weighing over 20lbs, were afterwards found inside the ambulance.

This is Mr Thomas's second narrow escape. Some weeks ago an ambulance he was driving in another area was machine-gunned and he was forced to seek shelter in a ditch. Mr Bennett is detained in a hospital suffering from shock.

In a South-West village a pig was the only casualty when a bomb fell on a farm, while a woman who was digging potatoes in her garden in another village went indoors just before a German bomb fell in the garden and did all her work for her.

RAIDERS MISS OBJECTIVES

Between 20 and 30 enemy aircraft, including one formation of ten, raided a coast town in South-west England yesterday afternoon, when bombs were dropped. All the bombs missed their objectives.

The raid was the fourth during the day. A number of bombs which landed in a working class district of the town destroyed about half a dozen houses in one street, while a number of houses in a neighbouring street were badly damaged.

According to an A.R.P. official, no one was killed but one person was seriously injured and five slightly injured.

Twenty bombs were dropped in a raid on a South-East coast town yesterday

afternoon. Fierce anti-aircraft gunfire met the raiders, and later their formations were broken up by British fighters which dived out of a bank of cloud and went savagely into action.

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There were a great number of amazing escapes from death. Several families were buried under the debris of their houses, but were found almost uninjured when neighbours and rescue workers succeeded in extricating them. Enquiries revealed that not a single person who had taken refuge in Anderson shelters was hurt.

NAZI AIRMEN CAPTURED

Many of those who were sheltering beneath the stairs or in the hall were also unhurt.

One anti-aircraft battery on the outskirts of Bristol claims to have "drawn blood" with its first shell.

Its victim, a Heinkel III, crashed near Portbury, but the five occupants escaped by parachute and were captured by police, soldiers and Home Guards at Failand. One of the crew, minus one of his boots, cried "No comprez English" as he surrendered. Another said "Hitler is a good man." And a third, apparently hysterical, fired his revolver in the air. One of the crew broke his leg and had to be taken to hospital.

In a working class suburb, where damage was caused, streets were littered with debris and a number of fires were started. A workman was injured by a spent bullet, apparently fired during the dog fights which were raging over the town.

In other suburbs many shops had windows smashed.

Bristol City and Marine Ambulance workers did heroic work tending injured people, despite the risks.

detained in a hospital suffering from shock.

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Twenty bombs were dropped in a raid on a South-East coast town yesterday afternoon. Three landed on the shore and most of the others fell in gardens or playing fields which are no longer in use. Most of the residents have left owing to the absence of holiday-makers. The only damage was to unoccupied property.

BRISTOL RAID—NAZI CLAIM

"German formations bombed the aircraft motor works at Filton, near Bristol, early this morning," said a statement issued by the Official German News Agency yesterday.

"The attack was made in several waves. The bombers, which were protected by fighters, scored direct hits on the works. Several air combats ensued. The exact number of enemy 'planes shot down has not yet been ascertained."

"The last squadron of our 'planes were able to observe the devastation caused by our bombs. As they left there were thick clouds of smoke over the factory."

The German News Agency also stated: "German aircraft to-day carried out reconnaissance flights with single aircraft and in small formations over Southern England, during which bombs were dropped on a specially important military target, and on aircraft factories and armaments works. Isolated air battles

LATEST AIR BATTLES OVER THE WEST

Large German bomber formations were seen over England yesterday for the first time since the Luftwaffe's defeat of September 15, states the Air Ministry News Service. A very high proportion of bombers was again destroyed. Of the 23 enemy aircraft known to have been destroyed, as shown by reports up to 7.30 p.m., 20 were shot down between Bristol and the English Channel by Spitfire and Hurricane pilots. Three were shot down by anti-aircraft guns. Four of our fighters are lost or missing, but three of the pilots are safe. Between 100 and 200 enemy bombers and fighters flew North-West in a variety of formations just before noon.

Pilots of a Hurricane squadron chased a great formation of Heinkels 111 from the mouth of the Severn well out into the Channel. They kept diving in line astern from 22,000 feet, picking off one Heinkel after another until they had destroyed six and seriously damaged others.

Later reports show that in yesterday's air battles a total of 26 enemy aircraft was destroyed—22 by fighters and four by anti-aircraft guns.

The text of the Western Daily Press has been extracted and displayed on the previous page to make it possible to read – you can use the +/- icons above to increase the page size.

As already discussed in my initial mutterings at the head of this piece, a combination of the sensor's blue pencil, and the inevitable confusion as to what actually took place, is evident in what the WDP reported.

From a distance of 80 years, given all the various ways of accessing the latest news we have today – sometimes, it seems, almost before things have happened – it is difficult to appreciate what it was like for the people under the bombs eighty years ago.

And, of course, today we are not strangers to violent conflict coming into our homes through the many and various forms of media. Although the First World War had only been over for 20 years, people were not generally aware of what the reality had been like for those who were involved, either as part of the military or as one of the affected, often displaced, population.

The rest of this issue will look at how the raid was prepared, how it progressed as the formations flew north, the actual raid, the recollections of those who were there or observed from a distance, and the aftermath.

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By 1935, the Bristol Aeroplane Company at Filton had for many years been producing aircraft and aero-engines that were very important to the fighting forces of the UK and many other countries worldwide.

As we saw in the first issue of the Flyer, in October 1935 the then Air Minister, Philip Cunliffe-Lister, had privately written to Herbert Thomas, the Works Manager at Filton, saying that "the BAC" was crucial to providing new aircraft and engines to equip the RAF, especially because of the growing political crisis on mainland Europe. This effectively cemented the Company's close relations with the Ministry which bore fruit in time for the start of World War 2.

By September 1939, the Bristol Mercury-powered Blenheim fighter/bomber accounted for half of the front-line RAF aircraft and Bristol aero-engines powered 80% of all of the RAF aircraft in service. A year later, for Bristol the war so far had been relatively quiet, but it could have only been a matter of time before its important industrial sites and docks attracted the attention of the bombers. The first bombing raid happened in June 1940, but the "Bristol Blitz" is not reckoned to have started until 24th November 1940. In the case of the "BAC", their luck ran out a month earlier, on the morning of Wednesday 25th September 1940, when all hell descended on Filton.



## The Aggressors - Kampfgeschwader 55

On 1<sup>st</sup> May 1939, the command group and the first two units – 1./KG55 and 2./KG55 - were formed, followed by III./KG55 on 1<sup>st</sup> November 1939. The training group, IV.(Erg)/KG55 was set up on 1<sup>st</sup> August 1940 to provide new and replacement crews.



KG55 first saw action during the invasion of Poland from 1<sup>st</sup> September 1939 and grew to be perhaps one of the best known and successful German bomber unit of the Second World War. During the so-called Phoney War from September 1939 to April 1940, its role was to fly armed reconnaissance missions over France. It was involved in the Battle of France in May and June 1940 and inevitably locked horns with Filton's own 501 Squadron, RAF – they would clash again in the Battle of Britain later in 1940. Throughout the war, KG55 operated the Heinkel He 111 aircraft in various marks, such as the examples below.



In common with the UK Air Ministry Specifications for RAF aircraft, the Luftwaffe wanted the best possible view for the pilot and navigator. Above we can see the entirely glazed nose of the later marks of the Heinkel He.111 aircraft as used from 1940 onwards - it must have been a very scary place to be when faced head-on by a fire-breathing, lead-spitting Hurricane or Spitfire. The crew were located close together, with the instrument panel directly above and in front of the pilot, as can be seen in the pictures on the next page.





Unlike in RAF aircraft, the pilot was not always the captain of the aircraft – often the navigator (especially if senior in rank to the pilot) would take command to leave the pilot to concentrate on flying the aircraft.

The crew of five comprised the pilot, navigator / bombardier / nose gunner, ventral gunner, dorsal gunner / radio operator and side gunner. Despite the number of gunners, the He.111 was generally considered to be lacking self-defence capability.



The aircraft was powered by a pair of 1300 hp Junkers Jumo 211F inverted liquid-cooled piston engines, giving a speed of 240 mph and a range of 1,400 miles with maximum fuel load. The internal bomb load was 4,400 lbs (2,000 kg).

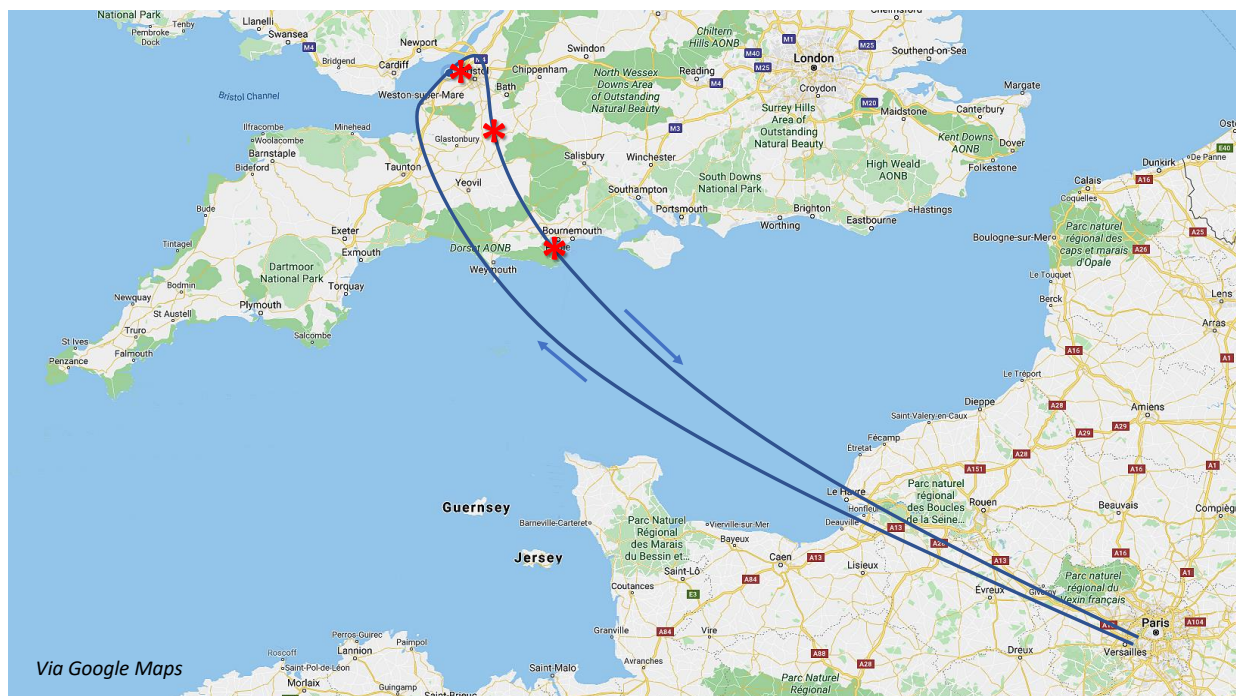
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In July 1940, KG 55 took part in the Battle of Britain but suffered significant losses.

From 10th July 1940, the Luftwaffe began its first phase of operations over the English Channel – a period called by the Germans “Kanalkampf”. Throughout the summer German air operations gradually pushed further inland to destroy RAF Fighter Command in southern England – without this, Operation Sealion, the invasion of the UK could not begin.

On 13 August, Adlertag (Eagle Day) started, this was the offensive to annihilate the Royal Air Force in southern England. That day, KG55 bombed Plymouth, Feltham and RAF Middle Wallop without loss. On 14th August it suffered its most significant loss when their leader, Geschwaderkommodore Oberst Alois Stoeckl, and his crew were shot down near the Royal Naval Armament Depot at East Dean in Hampshire; there were no survivors. He was replaced by Major Hans Korte of I./KG 55 and Major Friedrich Kless took over command of I./KG 55. On 26 August I./KG55 took part in the last major daylight raid for three weeks as they were reassigned to attacking the West and East Midlands industrial areas.

On the morning of 25th September 1940, at Villacoublay, about eight miles south-west of Paris, Major Kless, the new Gruppenkommandeur (Squadron Leader) of 1./KG 55, was making preparations to attack Filton. He had been trained as a pilot/observer and, to enable him to take command of a raid without having to worry about evasive flying, he acted as observer/navigator. The formation of 58 Heinkels, supported by a small number of Junkers Ju88s from Lehrgeschwader 1 and 52 Messerschmitt Bf 110s of ZG26, were mistakenly believed by the RAF 10 Group controllers at Rudloe Manor, near Box, Wiltshire, to be heading for the Westland factory at Yeovil. I have plotted out a potential course from Paris to Filton via Weston-super-Mare below – we cannot know the actual course the attackers took – but looking at the map, a raid on Yeovil was an easy mistake to make.



Kless' formation approached the south coast of England close to Portland but, having not been initially identified as a serious threat to Bristol or Filton, the warning was issued late. Perhaps because of the late warning, most of the Bristol defences were neither co-ordinated nor accurate. KG55 then headed up across Dorset and Somerset and, coming in from the south west, they used Weston-Super-Mare, clearly recognisable by its Pier, as their outer marker. At 11:45 hours, they came in over Portbury, where accurate anti-aircraft fire brought down one of the lead aircraft, G1+DN. This crashed near Failand (left) to the south west of Filton; the crew bailed out and were captured by farm workers who, according to their recorded memories, used various sharp implements to prevent their captives getting away!



** He 111P, Works Number 2126, G1+DN of 5./KG 55*

*Oblt. Gottfried Weigel (F) POW; Ofw. Alfred Narres (B) POW; Uffz. Karl Gerdsmeyer (Bm) POW;
Gefr. Karl Geib (Bs) POW; Fw. Georg Engel (Bf) POW injured
Shot down by A.A. fire from Portbury gunsite (237 Battery, 76th HAA Rgt.).
Aircraft abandoned by crew and crashed at Racecourse Farm, Failand, near Bristol at 11.45 hrs.*

At 11.48, the 57 surviving bombers dropped over 80 tonnes of high explosive and 6 tons of oil bombs simultaneously from 11,000 feet in a period of only 45 seconds. The bombers then headed south to get back to their bases near Paris, losing several aircraft on their way home.

At 12.02, the raiders were intercepted by RAF Spitfires, including N3173 flown by 20-year-old Australian Sergeant Kenneth Holland of No. 152 Squadron. Unfortunately, Sergeant Holland was hit in his head by return fire from the doomed Heinkel he had just attacked. His Spitfire came down in a field next to his victim - his third of the war - at Church Farm, Woolverton, near Frome; he died in the crash. (* on map above, south of Bath).

** He 111P, Works Number 1525, G1+EP of 6./KG 55*

Hptm. Helmut Brandt (F) POW injured; Ofw. Günter Wittkamp (B) killed; Ofw. Rudolf Kirchoff (Bf) killed; Uffz. Hans-Fritz Mertz (Bm) killed; Gefr. Rudolf Beck (Bs) killed.

Starboard engine hit and aircraft severely damaged in attacks by F/O. I.N. Bayles and Sgt. K.C. Holland in Spitfires of 152 Sq. (Warmwell), as well as P/O. J.R. Urwin-Mann and Sgt. R. Little in Hurricanes of 238 Sq. (Middle Wallop). Crashed at Church Farm, Woolverton, near Frome, Somerset at 12.02 hrs. Hptm. Brandt was Staffelführer.

** He 111P, Works Number 6305,*

G1+BH of 1./KG 55

*Fw. Fritz Jürges (F) POW; injured:
Hptm. Karl Köthke (B) POW:
Gefr. Rudolf Weisbach (Bf) POW:
Fl. Otto Müller (Bs) POW injured:
Uffz. Josef Altrichter (Bm) POW died same day.*

Attacked by P/O. J.S. Wigglesworth in a Hurricane of 238 Sq. (Middle Wallop) and P/O. J. Curchin in a Spitfire of 609 Sq. (Middle Wallop). Force-landed at Westfield Farm, Studland, near Swanage, Dorset at 12.10 hrs.



Other German losses were:

- He 111P, Wnr.1579, G1+AP of 6./KG 5
Oblt. Helmut Kindor (B) injured; Uffz. Erich Turek (Bs) injured;
Damaged by fighters in combat over England. Crash-landed at Caen, France 50% damaged.*

- ** He 111P, Wnr.2803, G1+LR of 7./KG 55*
Oblt. Hans Brocker (F) killed; Oblt. Heinz Harry Scholz (B) killed; Uffz. Kurt Schrapls (Bm) POW; Uffz. Josef Hanft (Bs) killed; Uffz. Günter Weidner (Bm) killed
Attacked by P/O. N.le C. Agazarian in a Spitfire of 609 Sq. (Middle Wallop) and P/O. J.R. Urwin-Mann in a Hurricane of 238 Sq. (Middle Wallop). Also engaged by P/O. R.F.G. Miller in a Spitfire of 609 Sq. Crashed on "Chatsworth", Westminster Road, Branksome Park, Poole, Dorset at 12.08 hrs. Oblt. Brocker was Staffelkapitan.
- *Bf 110C-4, Wnr.3591, 3U+GS of 8./ZG 26*
Gefr. Heinz Schumacher (Bf) killed; Fw. Walter Scherer (F) POW injured
Port engine set on fire in attacks by P/O. W.D. Williams in a Spitfire of 152 Sq. (Warmwell) and P/O. H.C. Mayers in a Spitfire of 609 Sq. (Middle Wallop). Crash-landed at Well Bottom, near Boyton, Wilts at 12.15 hrs.
- *Bf 110C, Wnr.3263, of III./ZG 26*
Crew rescued unhurt by Seenotdienst (German Air Sea Rescue)
Ditched in the English Channel following combat with RAF fighters over Weymouth.
- *Bf 110C-4, Wnr.2194, of III./ZG 26*
Crew unhurt
Damaged by fighters over English Channel. Crash-landed at Theville airfield, France. Aircraft 60% damaged

The crew reports and photographs taken by KG 55 during the attack, together with a reconnaissance mission flown over Filton later that day by a Bf 110 of 4(F)/14, encouraged the Germans to think that the raid had been successful. The Luftwaffe's magazine, *Der Adler*, proudly proclaimed "this factory will not produce many more aircraft" – how wrong they were! Major Kless, the attack leader and *Gruppenkommandeur* of II/KG 55, was awarded the *Ritterkruz* on October 14th.

Author's note:

There has been some confusion over Sergeant Holland's identity as his memorial in Woolverton clearly marks his surname as Ripley (right, via Wikipedia). This is because he had a guardian with that surname, who said Kenneth was his adopted son. In 1936, he had been christened at Mr. Ripley's parish church, St. Materiana's, Tintagel, Cornwall, and there is a memorial plaque to Sergeant Holland in the church, again in the name of Ripley.

He had joined the RAFVR as an Airman "under training as a pilot" in 1939, being posted to 152 Squadron on completion. The RAF only recorded him as having the surname Holland and that was how he was commemorated at Weymouth Crematorium, near No. 152 Squadron's then home at RAF Warmwell. For more details see http://www.152hyderabad.co.uk/html/body_sgt_k_holland.html

My mother's family were farmers close to Woolverton and the pub near Sergeant Holland's grave was an occasional Saturday night haunt of my cousin and I in the late-1960s and early-1970s. When my interests turned to the historical sometime later, I was frustrated for many years in not being able to correctly identify Sergeant Holland's history. I can now put that right, if only in some small measure through the Flyer.

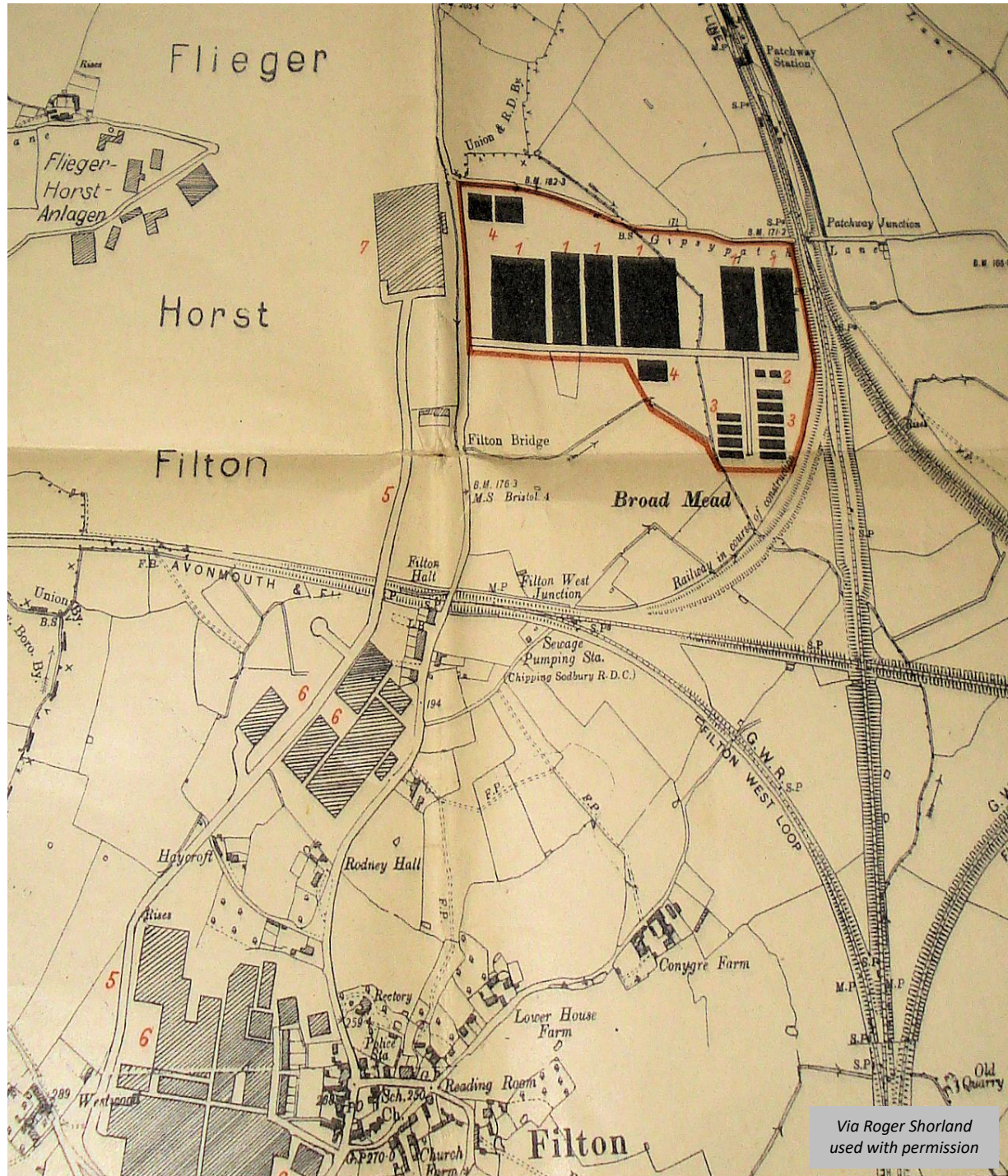


The Germans made a close aerial survey of most of the UK during 1938, presumably in preparation for hostilities, but also as a very good training exercise for potential future flights against the UK. The two images below were sent to me Roger Shorland, for which many thanks. In his email, Roger said that he “noticed that you intend to talk about the Filton Bombing Raids on 25/26th September 1940. As complete coincidence a friend of mine, knowing I was into planes said she had found the following original WW2 German documents/maps concerning these raids. Apparently her father-in-law was an RAF Intelligence officer in WW2”.

Roger asked why the hard runway does not show up – I think the answer is simply that the photograph was taken in May 1938 but before work started on laying the hard runway.



The photograph also shows that the railway tracks to the east of both Works would give any aggressor ideal aiming points. Also shown on this photograph, to the east of the Engine Works **A** on the edge of the image is RAF Filton and the aerodrome, marked **10B1**. Again, there is no sign of an active airfield just, apparently, a few field boundary hedges, which were probably “painted” on the ground to confuse any enemy. Unfortunately, the date and scale of this picture, taken from a good bombing height of about 11,000 feet, does not show the legendary hay bales placed on the rooves of the East Works in 1939, which were painted white and made to look like grazing sheep!



The large legend *Flieger Horst Filton* clearly shows the Germans knew about the aerodrome but must have thought it of no consequence. A literal translation means “*Filton Flying Field*”, but “*horst*” can also mean eyrie, as in an eagle’s nest. Unfortunately, the “eagles” in question – No. 501 “County of Gloucester” Squadron – had been transferred away to the Battle of France and then the Battle of Britain – they really had flown the nest! Although other squadrons had temporarily occupied RAF Filton for short periods in the meanwhile, an early morning German high-altitude reconnaissance of the airfield on the day of the raid had confirmed no fighter aircraft were present on the airfield.

In my email reply to Roger, I mentioned another coincidence concerning the German images. In 1971, I was part of the Concorde Flight Test Team based at RAF Fairford and I traveled from Filton to Fairford and back every day in the original Filton air-bus, a WW2 Douglas DC-3M Dakota, G-AMPO – wonderful aeroplane, 120 knots at 1,600 feet! A fellow passenger was a chap called Harry North and when the base started to run down after early-1973, we were both transferred back to Filton as Flight Test Engineers working in the Aerodynamics Department. As Harry’s desk was next to mine, we got to know each other well. He told me that twenty years earlier, around 1953, he had worked with a chap in Flight Test who had been an RAF Intelligence Officer in Germany after the war; he was the chap who came across the reconnaissance pictures and also some crew notes on a former German airfield they were closing. I cannot help but wonder if Roger’s friend’s father-in-law and Harry’s colleague were the same person. I have used Roger’s pictures in this article as his 2020 copies are vastly better than those I took in the 1970s.

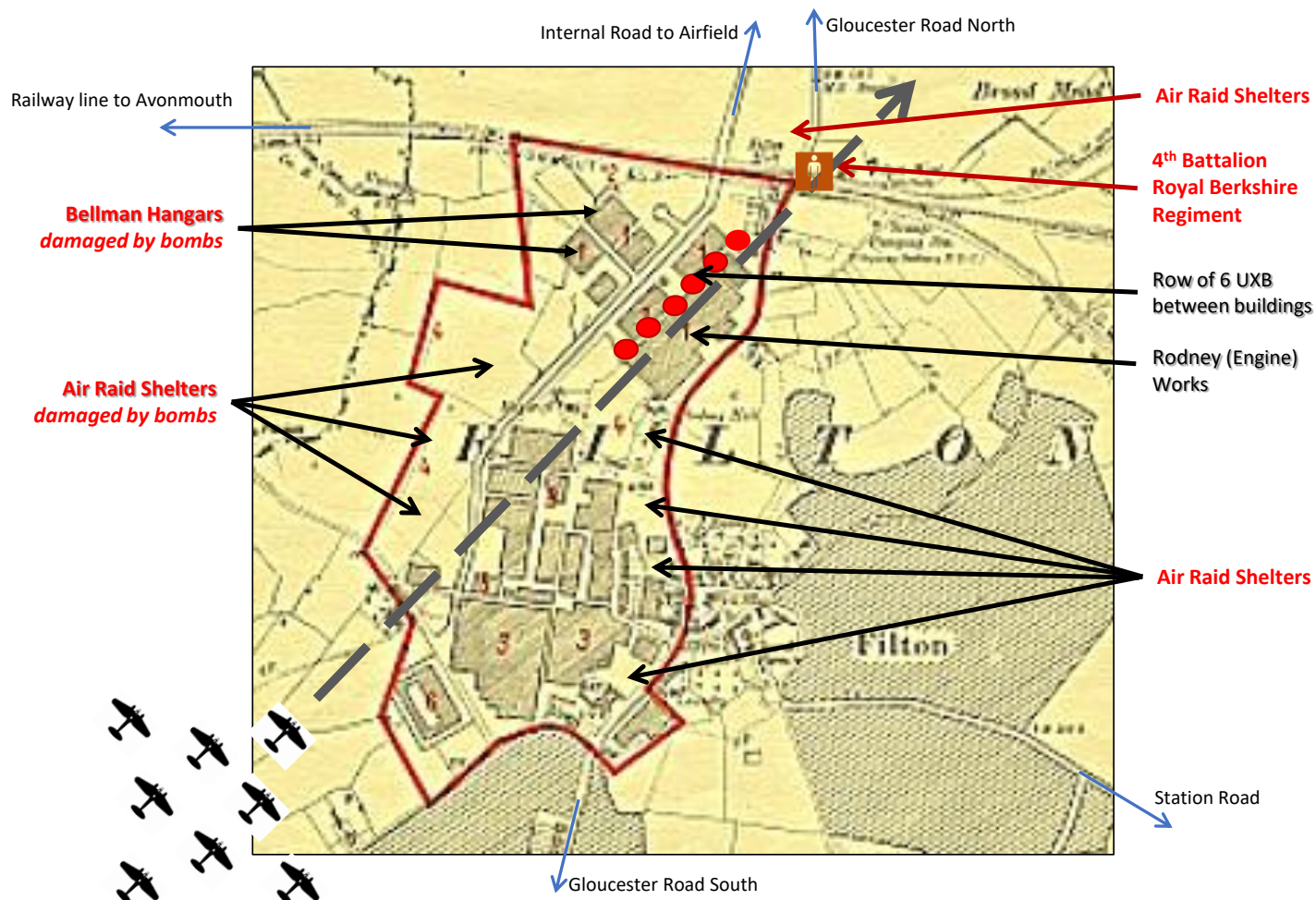
The legend on the chart on the previous page can be interpreted as follows.

- | | | |
|------------------------------|--|--|
| 1 (Engine East Works) | Engine manufacturing and build shops. | Surrounded
by red border
on image. |
| 2 (Engine East Works) | Engine Test Cells. | |
| 3 (Engine East works) | Air Raid Shelters. | |
| 4 (Engine East Works) | Engine Test Cells. | |
| 5 (Aircraft Works) | Internal road down to the Airfield, B on the aerial photograph above. | |
| 6 (Aircraft Works) | No.4 Flight Shed (west of 5); No.3 Flight Shed to north of No.4 not shown.
No.1 and No.2 Flight Sheds (east of 5)
Rodney Works (Engine Works)
Filton Main Aircraft Manufacturing & Assembly Halls (bottom of map) | |
| 7 (Engine West Works) | Engine Works. | |

Within a few minutes of the air raid sirens sounding, “Marching through Georgia” was played to ensure the staff realised that this warning was to be taken seriously.

Then, in only 45 seconds, over 80 tons of high explosive and 6 tons of oil bombs rained down on the factories and surroundings with devastating effects.





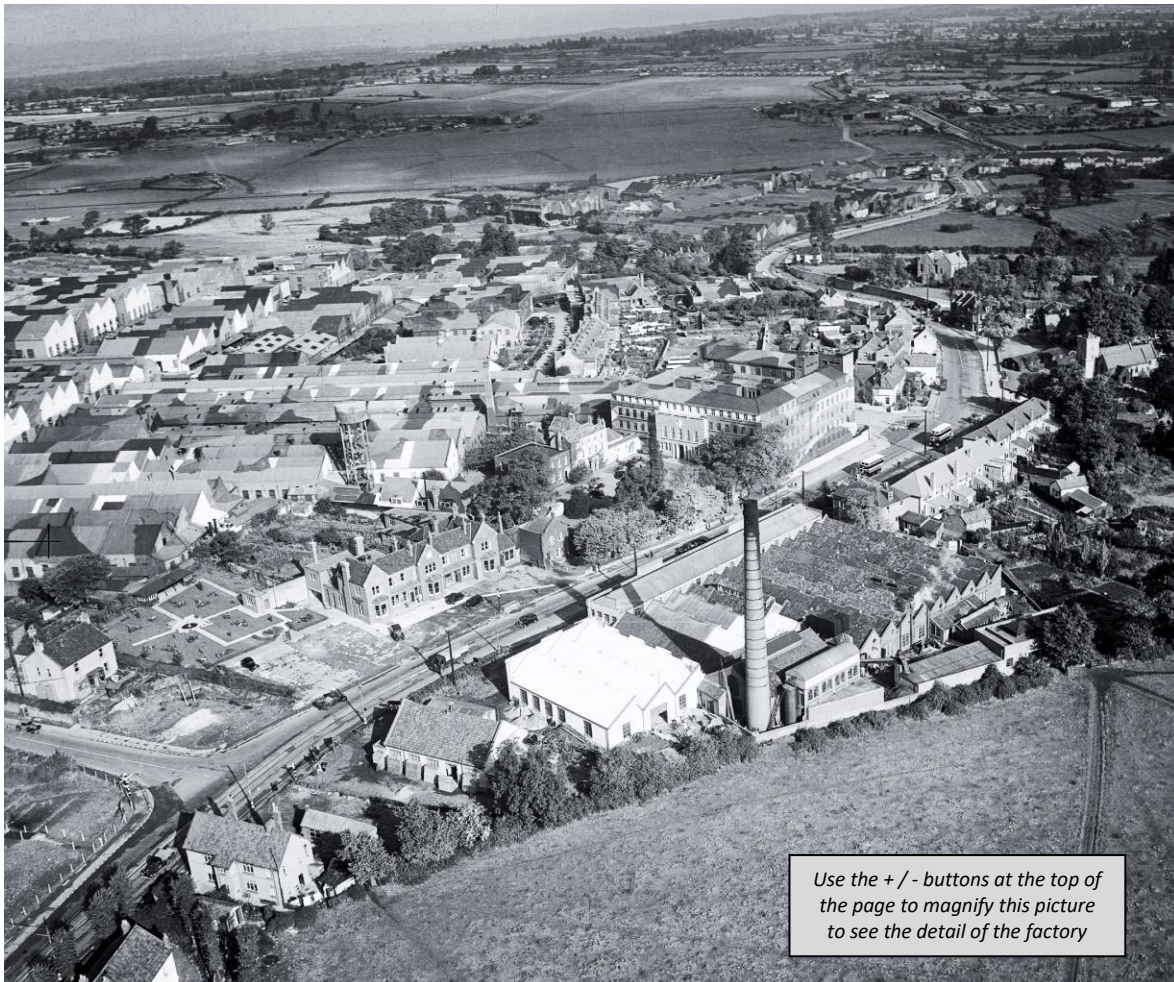
Note.
 60 employees
 killed 40
 injured 6
 injured (including 78)
 M.H.A.

The Managing Director reported that a regrettable loss of life and injury to employees had occurred through a raid on the company's works by enemy bombers on the 25th September when considerable damage to the company's buildings and plant was also occasioned. The premises damaged included the Engine Department, Rodney Works, Flight Sheds and Bellman Hangars and Dope Shop, as also the Shadow Factory at Patchway. He stated that full reports of the extent of the damage had been prepared and sent to the Minister of Aircraft Production. It was anticipated that the cost of reconstructing the company's damaged premises would be approximately £30,000.

On the previous page, I have annotated yet another map with the parts of the factory which were damaged in the attack. The rather cold short extract from the minutes of a Directors' Meeting of unknown date gives precious few details of what happened and what / where the damage was sustained. These are the only known reliable comments made on the outcome of the raid.

The German formation headed in from the south-west and, in 45 seconds, the air raid shelters had been hit, the squad of soldiers of the 4th Battalion Royal Berkshire Regiment decimated and various buildings damaged. The most miraculous aspect of the whole attack was the stick of six high explosive bombs which fell along the narrow alley (only 8 or 10 feet wide in my memory) between No.1 and No.2 Flight Sheds and the Rodney Works, of which not one exploded. Had that happened the carnage would have been much worse. The shrapnel damage to the Flight Sheds remains to this day, although it is now covered over by modern cladding.

The damage to the Flight Sheds and Bellman Hangers may well have included the serious damage to three RAF Beauforts – in for modification – and six or eight Beaufighters, the exact number is not reliably recorded. The loss of the Beaufighters was particularly serious – at least two of them were prototype aircraft being used for development purposes. Although production was not stopped by the raid, it was slowed down for a few months at a time when the RAF really needed the Beaufighters, particularly in the new but vital role of Airborne Interception “radar” equipped night fighters.



We were there

Of course, the most grievous losses were in human lives, both inside the factory and in the surrounding area. 131 people were killed or died of their injuries – civilian and military - of which 91 were BAC employees with more than 310 other casualties in the factory and surrounding area. The figure for those injured and requiring hospital attention quoted in the company minute book above is difficult to read – it looks like 218 but the numbers are muddled. One source says 147 were injured, with 12 visitors killed on company premises; two of the employees killed were outside the factory perimeter.

The biggest loss of life within the factory occurred when a shelter suffered a direct hit - other bombs fell close to, or between, other shelters, seriously damaging them with a large loss of life and many staff injured. Again, the exact breakdown of the casualty figures is not known. It is much more important to remember those whose lost their lives and the Roll of Honour will be shown later.

There are quite a large number of recollections of that day, both in terms of those who were there and others from stories passed down. I have tried to collect as many as I can – some were told to me directly by people I encountered during my 50+ years of association with the site, others come from a variety of other sources. As I cannot ask most of those who have told their own stories for their permission to use their memories – most have passed on - I have decided to keep most of them anonymous.

I discovered some of the stories on the BBC website 'WW2 People's War', an online archive of wartime memories contributed by members of the public and gathered by the BBC around 2005. The archive can be found at bbc.co.uk/ww2peopleswar and I recommend it although it is difficult to find local stories as the normal search commands do not seem to work. Where I have use material from the BBC, I have acknowledged it and the name of the person whose memories are quoted. But they are all real stories or, at least, as close as the vagaries of human memories permit. There are few photographs available to illustrate this part of the story, but perhaps imagination is better anyway.

The Memories and Stories

Perhaps I should start with a story I know well from the person who talked most to me about that day – my old friend **Harry North**, who passed away in 2015. Harry had been born on Bermuda in 1922 but had come to England aged 14, to a minor “lesser known” public school near Blackpool. Harry joined the Bristol Aeroplane Company as what we would now call a Technician Apprentice in April 1939 – this meant he used to go to the Bristol Technical College on day release for his formal education. He had started back at college early in September 1940 and the day he was released to attend was, very fortunately for him, on a Wednesday. Like every other employee he was allocated an air raid shelter – his was on the left-hand side of the road going down through the factory, near the top of the hill.

Being at college, Harry missed the actual raid, which was fortunate for him as his shelter was one of those severely damaged by bombs and in which there were many killed and injured. Whilst at college, he had heard the aircraft going over and knew that Filton was their target, but he didn't know what to expect when he got to work the following day. Recovery work was still going in the damaged shelters but to his everlasting relief, he didn't get involved but what he saw never left him. Work was still under way to recover the dead and, like many other production staff, he was told to return to work or, if that was not possible because of bomb damage, to go home. He thought he remembered that the most badly damaged shelter, with its grisly content of human remains, was simply covered over. There is a small wooded are

at the top of the hill and it is believed the remains lie underneath to this day. A few months later, a second raid completely destroyed the original Filton wind tunnel where Harry worked. That was a night raid, so he was at home and in bed. Fortunately, as he said, the Germans then stopped trying to get him and there was no third raid; Harry stayed working at Filton, in the Aerodynamics Department, until he retired in 1985.



Left, a tunnel-type brick and concrete shelter of the type built at Filton, although most of those at Filton were buried and grassed over.

The right-angled entrance allowed protection from those inside but the entrance was often left open to provide light and some air circulation. However, no shelter could protect its occupants from a direct hit.

The Filton shelters usually had two rows of benches running along the long walls, but were cramped, dark, damp and very claustrophobic. Factory shelters were only meant to provide cover for a short time whilst a raid was in progress; domestic shelters were smaller.

Other shelter designs had external steps down to the access door but all had an offset “dog-leg” internal wall at the entrance to stop debris bursting into the shelter. Other designs built at Filton did not have the style of entrance shown above, instead they had a small tower on one end with ladder access to the inside of the shelter, which must have been more difficult to get in and out of, especially in a hurry. Some of these were down at the Engine Division, a detail mentioned in the recollections of an unnamed **employee based in the Electrical Department** of the East Works (via BBC WW2 Peoples’ War)

“A card school was in full swing in the shelter, near the entrance. He climbed up the access ladder and looked out through the gap under the cover, over towards the West Works and the airfield. He saw a column of soil rise up from a bomb explosion, followed by a second and third. Wisely, he promptly jumped back down into the shelter - landing on the card game - before covering himself as best he could. He said the blast hit them, followed by “deafening silence”, except for the screams of the injured. He thought there were approximately 50 people in his shelter and he remembers there was a strange smell - someone shouted “gas”, so then there was “panic and a mad rush to put their gas masks on”; perhaps inevitably, many people did not have theirs, himself included.

Two men in a building with a 2” thick steel door were injured by flying shrapnel, which had gone straight through the closed door. Others were more seriously injured and were lying waiting to be taken away for medical attention; yet others were beyond the help of any medical attention. He made his way past No.2 shop, which had been hit by the bombs and where the big sliding doors were hanging open – he could see a fire in the electrical stores. There were handcarts from the fire department located between the workshops, one of which he wheeled towards the doorway. He ran out the hose and fitted it to a high pressure water standpipe, but the water could not be turned on because the 40 foot long hose would have “wriggled all over the place”. He had to wait until someone else came to help and who turned the water on. However, despite all his efforts, there was not much water because the mains had been damaged in the bombing.”

Other people recalled an unexploded bomb that had come down on one of the steel girders supporting the roof of one of the workshops, the force of the impact bending the beam. Later, this beam was cut out – after the bomb had been dealt with, but not before some gallows humourist had got hold of a pot of white paint and daubed “OUCH” under the bend. The girder still survives to this day in the collection of the Bristol Branch of the Rolls-Royce Heritage Trust which, unfortunately, is only rarely open to the public.



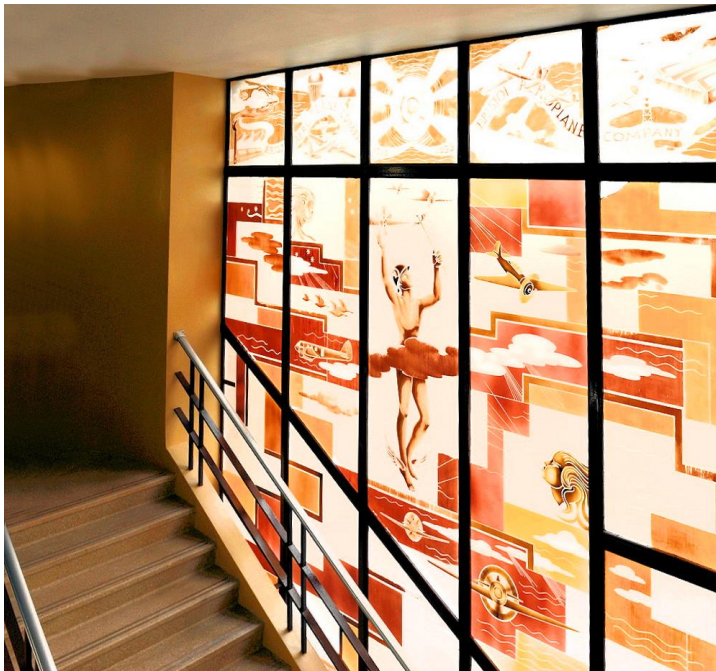
The girder damaged by an unexploded bomb in the East Works of the Engine Division on 25th September 1940. The shape of the bomb can easily be seen – if it had exploded, it would have done a lot of damage and caused serious delays in the production of vital Bristol engines needed for the war effort. This was the second stroke of luck for the Company that day.

Another chap I only know as **Norman** started work at Filton in September 1940. He remembered:

“On my first Wednesday the sirens went off at about eleven o’clock. As we went to the shelters along Golf (Course) Lane we could see the bombers in formation coming towards the airfield. We had only been in the shelters a short time when the bombs came down. The shelter shook and dust and smoke filled it. The call went out for First Aiders. We were ordered out of our shelter as the one next to us had been hit but the bomb was a delayed action. Rodney Works was ablaze. One shelter was hit so bad they later sealed it with the bodies inside and as far as I know the bodies are still there. Many people were killed, including soldiers who were marching along the A38 at the end of the runway. There were no fighters about and not much ack-ack fire.

Betty Pearce (via BBC WW2 Peoples’ War) was born in 1926; she was only fourteen years of age she started work at the Bristol Aeroplane Company, in 1940. In her memories, she gives some interesting insights what her working life involved – some of the “rules” she mentions were still in place when I stared at Filton in 1968 (noted in the text below by ***) and later. Her comments were written down by a third party in 2005.

*“Her first job as a messenger girl was to take messages around the offices. There were three staircases, two ordinary ones and one special one, which was oval in shape, this was strictly reserved for VIP’s only, it led down to the main foyer of the building. A concierge guarded the bottom of these stairs and if you were caught using them a strict disciplinary would result ***. You can imagine how tempting it was to use this when you were running all around the building all day.*



Top: the 1936 “special” staircase and the Jutta stained glass window in Filton House as Betty would have known it. Below: the beautiful “Zodiac” pavement in the foyer, complete with Commissionaires. In the centre of the picture is Lord Beswick, Chairman of British Aerospace, who re-opened the building after restoration in 2013. The chap behind him is Don Rowley, MD of the BAe Dynamics Group (or whatever they were called then!). The “special stairs” and window are out of the picture to the left.



There was a also a VIP lift, though you had to be eighteen years old before you were allowed to use it. There was a goods lift but you had to be sixteen years of age before you were allowed to use this, for insurance purposes, so Betty was constantly running up and down the stairs all day, at least it kept her fit! When Betty started work there were only twelve female secretaries. One of these was Miss Penny who worked for (Mr.) Verdon Smith. Betty used to go “in fear and trembling of these ladies”, no familiarity was allowed in those days, there was no such thing as using Christian names.*

The office staff had to wear Quaker blue (a light blue) overalls. Every fortnight you were provided with clean overalls from the laundry room. Girls had to wear stockings —thick lisle kept up with corsets, very hot and very uncomfortable during the hot weather. The war shortages meant that girls had to put gravy browning on their legs and draw a black line with a Rimmel pencil up the back to mock a seamed stocking. It was much cooler for them during the summer months.

War had started the previous September 1939 and Betty remembers that just a year later she was in Castle Street in Broadmead, Bristol on Saturday October 21st 1940, when there was an air raid. It was very frightening, this was to be one of many raids on central Bristol at this time, and this was then the main shopping area for Bristolians. Betty’s family lived in Callicroft Road, Patchway during this time she explained “Often mother and I were the only people in a bunker in Callicroft Road during an air raid. Some people drove to Rudgeway at 9pm to escape the raids. Presumably they slept

in their cars, providing they had petrol. Living so close to BAC meant that Betty's family could hear the air raid warning very clearly.

As time went on, one of Betty's tasks during these years was to keep records of equipment, MAP/Plant equipment. "Bostick Joe" had to glue the labels onto the equipment that Betty kept an inventory of. When the air raid sirens went off it meant that enemy aircraft were within a certain radius of Bristol (possibly 25 miles away) no one would take any notice, and they would carry on working. When they were within a certain radius of BAC they would play what was known as "The Bugles" which was the nickname they gave the music "Marching Through Georgia", then everyone would rush to their air raid shelters. When the All Clear was sounded they played "Colonel Bogey". Betty believes that the following Air Raid Shelter badge colours were correct.*

- *White badge for office staff at Head Office,*
- *Blue Badge for aircraft staff at Filton,*
- *Green badge for Engine department,*
- *Yellow badge for Rodney works.*

Of course, every time "the Bugles" sounded Betty had to load a trolley with office equipment and records and take them down to the basement of the building for safety. Then when the all clear was heard "Colonel Bogey" was played over the tannoy, although this could change again within half an hour and the whole performance would have to be repeated! The noise of the bombing was terrifying, yet still she battled on, like so many of them. Betty, like a lot of people even today, sometimes finds the sound of thunder reminds her of those years.

There was no union activity during the war years. The AEU (Associated Engineering Union) along with other unions outlawed strikes as it would have been against the "National Interest". Attitudes were geared towards a combined force to help the war effort. Men worked 56 hours a week during the war years at the factory. Betty worked Monday to Friday and Saturday mornings for which she was paid overtime."

Jean Ince's story (via BBC WW2 Peoples' War)

"I worked at Filton airplane company in the wages department, I was there when it was bombed. I was in the shelter next to the one that was bombed. It was very dramatic. We were told not to look right or left when we came out of the shelter.

When doing the wage cards we couldn't get up and leave them on the table, you had to pick them up and put them in the safe. We were usually last to get to the air raid shelters. We would go from Filton to have lunch and there was a plane above us fighting. We weren't aware it was quite so dangerous but we just went on with having lunch. The German pilot that led the raid on Filton had worked there before the war in 1937 and so knew where everything was. (DCG note: this is the only mention of Major Friedrich Kless having worked at Filton that I have ever come across; I have not been able to verify it).

My father was an Air raid warden we lived behind a churchyard in Weston Super Mare. it was hit by incendiary bombs. My father had to put an incendiary bomb from the corner of the landing which was still burning and put it in a bucket of sand and put it outside. This happened about 1940. There were three girls living in the house including myself. We would get under the Morrison shelter together and sleep there at night. I was about 19 at the time. After the raid I was sent to Weston aircraft factory, I used to cycle to work. One morning I was cycling up the road and someone shouted at me to not move and the electrical wires had all been hit down and so I was directed through them all.

Phyllis Rudd (via BBC WW2 Peoples' War)

My parents worked in Bristol at the Filton Aircraft Factory. (My sister and I had been evacuated to Bideford) There was an air raid in Bristol and the workers had to go to the shelters. My mother, who was heading for one, changed her mind because a man who was paying her un-wanted attentions was going to the same shelter so, she went to a different one. During the raid the people in the first shelter were singing the popular song of the time "Somewhere over the rainbow". While they were singing this song, that shelter received a direct hit and everyone was killed. The head of one of mother's friends was in the lap of another worker. We children were never allowed to sing that song ever again, and when it came on the radio we had to turn it off, because if my mother heard it she always fainted.

Another more personal memory comes from an **unidentified lady** (via BBC WW2 Peoples' War) who also lived in Callicroft Road, Patchway. She had vivid memories of the raid and recalled:

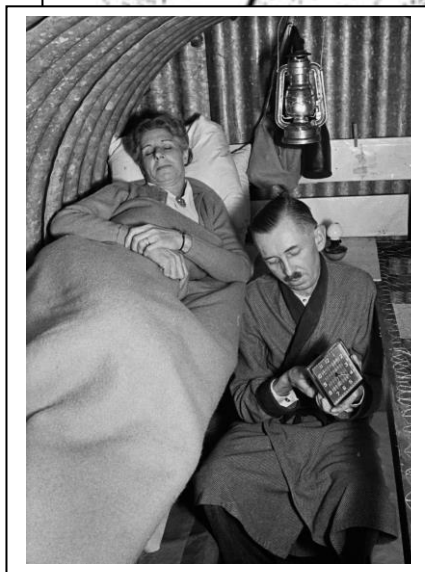
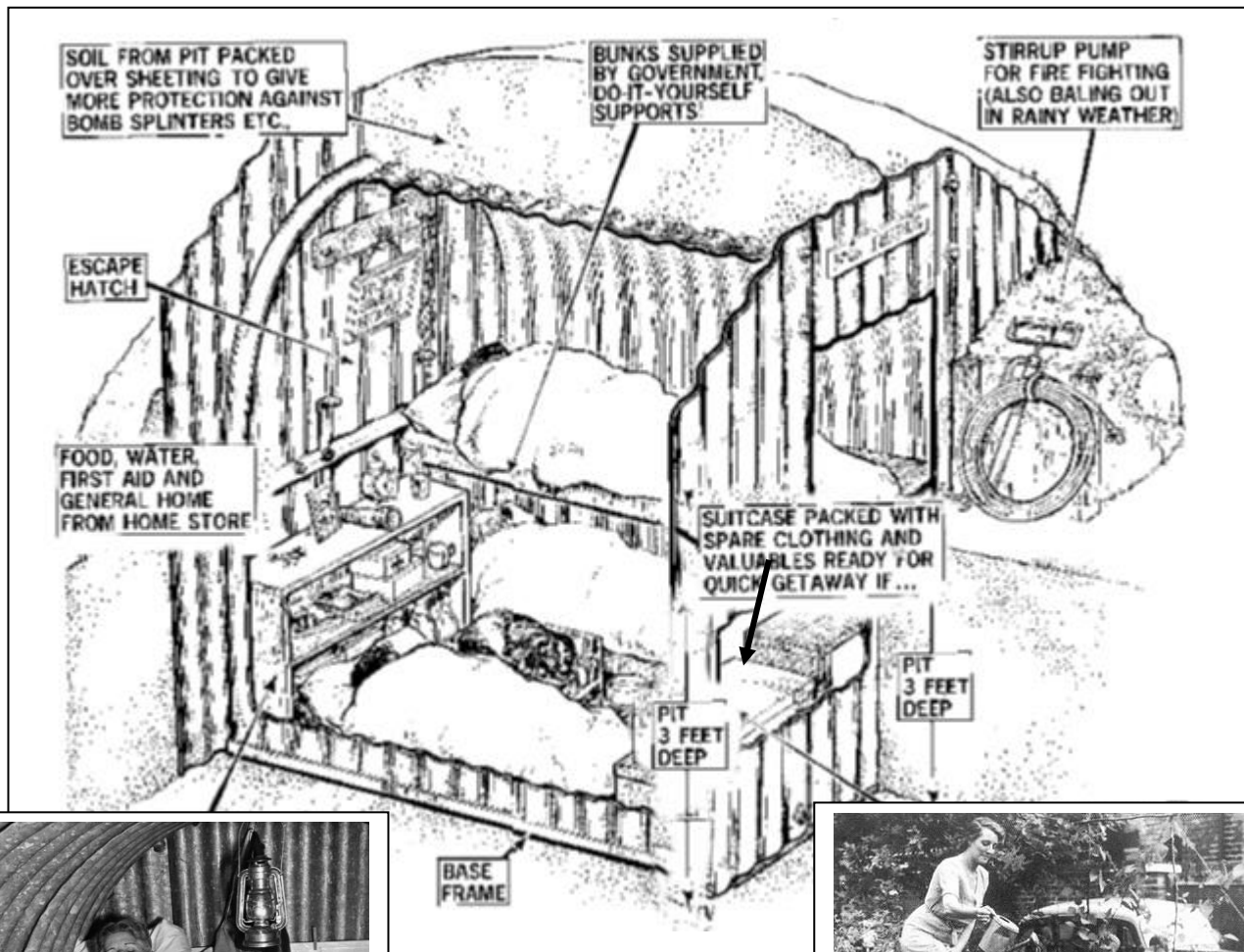


Barrage balloons were often sited close to residential areas to protect local factories and housing from low flying attacking aircraft. No photographs of the sites around Filton have been found, the image above comes from Gosport in Hampshire.

"... our Anderson shelter was not yet finished (so) we would use the RAF balloon site next door to our house During the Wednesday raid - we were all in the RAF Shelter when all hell was let loose. One of the airmen said the house nearest had been hit, my Mother must have been traumatised - that was ours! The all clear sounded and we came out, our house was still there but (there was) carnage in the field opposite, the bombs had killed a load of cows. The soldiers were digging out an UXB (unexploded bomb) and we all took turns in sitting on it. Heavy black smoke came up from the works and the airfield, the casualties I have since learned were vast.

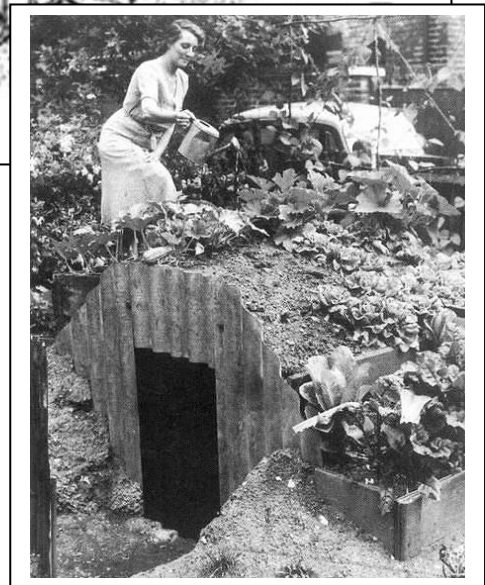
Another **unknown lady** (via BBC WW2 Peoples' War) who lived towards the city centre, remembered that she could hear the attack taking place, but until she was allowed to go home (from school?), she didn't know that there had been an attack on the Filton Works. Many of the local men who had not been called up worked there and their families were beside themselves with worry. She said *"there was no news and time dragged on. At long last, a trickle of workers started to arrive home, footsore, cold and weary. When they were questioned, the news was never good and, from their appearance, they had obviously been through a traumatic experience. My Aunt and Uncle were staying with us at the time and Uncle Bert had been at work there. We waited and at last he arrived home, still dazed by the sights he had seen. He had had to detour and walk miles out into the country before turning back into Bristol, wearing his working clothes and some old slippers. He was home just in time for the evening air raid and Mum served his dinner in the cellar."*

Many families – especially in the newer residential districts around Filton - built Anderson shelters in their gardens. Although they were fairly insubstantial affairs, they provided protection from most flying debris but not, obviously, from a direct hit. Below is a contemporary diagram of the principal features of the typical Anderson shelter – in this case, because the shelter was half-buried, entrance was via the small hatch by the pump.



Home-from-home – not! But it might save your life. The entrance was often only covered with a piece of heavy sacking. In prolonged wet weather, it might fill with rainwater – hence the need for the dual-purpose pump by the entrance. Many shelters served as garden sheds after the war.

Images via Google / Wikipedia.



For those who did not have space for an outside shelter, there was the Morrison shelter (as mentioned by Jean Ince on page 21) which could live in a ground floor room and even replace the kitchen or dining room table. The before and after images below show that these shelters perhaps provided more protection than at first might seem likely.



Images via Google/Wikipedia.

Roy Mockridge's story <https://www.bbc.co.uk/history/ww2peopleswar/stories/14/a4295414.shtml>

On 25th September, 1940, I was an apprentice at the BAC Filton, when 'Jerry' came over in the daylight. In my opinion the air raid shelters on site had been built a bit too close together, I guess because they had to get a lot of them in. But the bomb that got me landed right between two shelters, and just caved them in on both sides.

Normally I would have been sitting right in the middle, where everybody was killed, but I had a detective novel which my mum didn't like, I was 16 at the time, and so I used to take it there to read when we went down the shelters, and I had to sit by the door to read it, which saved my life.

We heard the bombers coming; our warden was standing outside looking up, and the last thing I remember is he jumped inside saying, 'Get down quick'; he had seen a stick of bombs coming, and then there was a huge bang. And I did what my father had told me to do, because I was young I could do it. I put my head down between my knees, and covered the back of my head with my hands. That saved my life, because if I had been sitting upright I would have been dead like a lot of the other guys, because the concrete was like shrapnel, it just cut them down. I lost several good friends, including our lodger, in there. But I just got injuries to the back of my arms and my head. I got hit in the head a couple of times. That trashy book saved my life.

Then I heard this big man come to the entrance of the door which was crumbling in, a great big guy, he just picked me up like a feather and carried me off to the First Aid Post, and I had wonderful treatment there. And the 'all-clear' went at BAC, and with it automatically came a tape, 'Marching through Georgia', so you could march back to work. But while I was at the First Aid Post they said, 'wait here a minute we will get transport for you', and a great big black Rolls-Royce drove up and they picked me up and took me home; that was really something.

We were lucky in our family. I had a sister working at Rodney Works on the site, on that day. I thought possibly she had had it, because quite a few buildings were down, but she was alright too. Poor old dad; they put the bodies in Filton Church and he had to go around and try to find me, that wasn't very nice. But he did find the lodger.

When I tried to go back to work, it was strange to me because there was nobody there that I knew. They brought people in off the night shift, so that the Tool Room must have been hit pretty hard. That shelter had sat fifty people, and only about four or five got out alive.

Margaret Uppington's story (via BBC WW2 Peoples' War)

It was a normal morning at Filton Avenue Junior School, Filton, Bristol. Boring mental arithmetic - my most hated lesson!. Suddenly there was the sound of the air-raid siren which was sited on top of the school. Good, no more mental arithmetic. The class was asked to stand and we all filed onto the playground where the shelters were. As we went we saw low flying aircraft coming towards us whereupon we all started to cheer. But wait, the sound was different and then we could see the markings of the black cross on the wings. They were German aircraft! We were made to run as fast as we could into the shelter and we soon heard the sound of explosions. The teachers decided we should have a sing-song, this was good fun. We all started singing at the tops of our voices. Firstly, the songs we sang at school- Cherry Ripe, Strawberry Fair, etc. When we had exhausted all of these we were still encouraged to sing and we thought it was great fun we were allowed to sing all the popular songs of the day. It certainly drowned out the noise that was going on just a few miles up the road.

Eventually the all clear siren sounded by which time it was lunch time. No school dinners then- we all went home for lunch. I only lived five minutes away and as I hopped and skipped down the road I was surprised to see all the women standing at their gates with very worried expressions. My mother was at our gate and when I asked what was wrong, the news had already reached them that Filton Aerodrome had been bombed. Most of the families living around us had husbands, fathers, brothers and sisters working there. I don't think I had any lunch that day.

We were lucky, both my father and brother were working there but they were safe. The dreadful thing was, of course, that they had missed the aircraft works they had come to destroy and most bombs had landed on the shelters. When my father came home he was extremely shaken and told of the awful sights he had seen. There were shelters that were so badly bombed they just had to seal them up. I am now in my 70's and can remember this tragedy very vividly. It has stayed with me all these years.



Another of the tragic incidents of the bombing was the loss of 13 troops from the 4th Battalion of the Royal Berkshire Regiment, who were marching along the Gloucester Road towards Filton. They were separated from the airfield only by a sturdy wire fence, which can be seen to the right in this picture. The Britannia Café was well-known to many BAC employees for many years until c.2014 – it was rated as food very good, service not so good!

Harry Ward's story (via BBC WW2 Peoples' War)

I was employed there (Filton) building air raid shelters. There were many small raids and warnings there for which we didn't get paid, so to get round that they used to have a second warning and we used to work until the second warning. In September 1940 we were working very close to the main road - everyone else



The Gloucester Road running past the airfield, six of Harry's tunnel shelters can be clearly seen close to the road on this photograph from c.2000.

The Britannia Café is the light grey building to the right of the trees; the tall wire fence is still there along the edge of the A38 in 2020.

had gone to the shelter - and I was interested in the army going past on exercise. They were passing in 'sections' - 6 men on each side - and suddenly the noise of the guns started up. We looked up and the sky was full of planes. We all rushed into the shelter - which wasn't finished - and for a few seconds it was like hell let loose and when we came out of the shelters there was cars close by burning. But the sad story of this was that the bombing had gone right through the army and when we came out, there was many of them scattered around on the road. That was my first experience of heavy bombing."

Brenda Maitland's story (via BBC WW2 Peoples' War)

I was just ten years old at the start of the Second World War in 1939. I lived in Filton, just outside the city of Bristol, but within the county of Gloucestershire. At first life went on as normal. Then people started making preparations for an onslaught from the air. We were all issued with gas masks which we had to carry with us at all times.

The major event of the first year for those of us at home was the digging of shelters in which we were to take refuge during air-raids. School fields were dug up to provide long tunnel-like shelters designed to take the children of both primary and junior schools, and we had to practise going to sit in them.

At first we didn't have a shelter at home. We were advised by the Government to get under the dining room table in the event of an air-raid warning. When the siren sounded, warning of approaching enemy aircraft, four of us, my parents, my sister and myself, had to get under the table, which was very difficult for my mother, who insisted on dressing first. It was obvious that this arrangement would not work. Our neighbours had put up an Anderson Shelter and offered to share it with us. The Anderson was not much more than a strip of corrugated iron bent over, supported by earth. It was very cold and damp and barely able to hold more than three or four people, standing up. We accepted this offer once or twice, but it was obvious this could not be the solution.

My father decided to spend £250, a lot of money then, on having a brick- built shelter constructed in the garden. A large hole was cut in the lawn. The shelter was to be partly below ground and partly above, with earth which had been dug out of the ground heaped up on the sides. We planned to sleep in the shelter and have wooden bunk beds installed for four.

Unfortunately, while the work was only just beginning and there was just a one foot deep hole in the ground, we suffered a disastrous daylight air-raid, on September 25th, 1940. Although my parents' house was close to open fields and the South Gloucestershire countryside, it was also uncomfortably close to a rapidly expanding aircraft construction factory, which proved to become a prime target for German bombers. On this particular Wednesday in September a squadron of 80 German bombers aimed at this factory, in Filton, at 12 noon, just as the aircraft factory workers were leaving the buildings to walk about in their lunch hour. The sky became black with low flying planes and the noise was deafening. The two men working on the hole in the lawn which was to be our shelter, shouted to my mother and to me to come out of the house, in case it was bombed. The men almost threw us into the hole, which was concreted, and to their credit, spread their arms over the top of us. We all crouched together with our heads down, as bombs rained around us. In a few minutes it was all over. The planes turned and left. Ninety one people had been killed, some in their air-raid shelters.

Work proceeded on the shelter and by November we were sleeping in it nearly every night. It was cold and damp. The spiders on the ceiling frightened me more than the bombs did. Bristol, four miles away, was being attacked nightly from the air and one night we stood in the garden watching the horrible red glow in the sky which was Bristol's main shopping thoroughfare on fire.

Night after night we spent in the shelter, listening to the sound of anti-aircraft guns, the steady throb of German planes going overhead, and the awful piercing whistle of a bomb coming down. One night a bomb screamed towards us, with a deafening whistle. It seemed to take forever before it reached the ground and then, silence. We clutched each other in terror. It had not exploded. Terrified we tiptoed back to the house when the raid was over, and were relieved to hear that a huge crater was in a neighbour's garden. The army bomb disposal men had to deal with that.

By now we had reached Christmas, 1940 , and we viewed with dread the prospect of spending two more winter months in the shelter. People were beginning to move out of Bristol at night, as the German planes always came under cover of darkness. On moonlit nights they followed the silver ribbon of the river Avon right to the heart of Bristol.

We began to hear of families in the countryside outside Bristol offering accommodation to people from the city. We made enquiries and found that my mother and I could rent two rooms from an elderly couple in a village the other side of the city where there were no military targets. Life was very simple there. We got our drinking water from a well, and our washing water from a pump. We had a non-flushing earth toilet. However, we felt safe, and in the peace and quiet of the countryside were able to sleep at nights at last. My father and sister stayed at the family home. They were "fire-watchers", having to stay up at night to check that no incendiary bombs had fallen on the roof of our or other people's houses. This was done on a rota with other neighbours.

I stayed in these country lodgings for a year, attending the local Grammar School. We then decided that it was probably safe to return home .The Germans were bombing other British cities, like Birmingham, Coventry and Liverpool. As we lay in bed at night we heard the throb of them "going over". They came back once more to bomb Bristol, at Easter 1941.

Four more years elapsed before the War was over.

Finally, **Alex Moulton's** story.

Alex had a school friend who was the godson of Roy Fedden, Chief Engineer of the Bristol Engine Company and, after Marlborough College and Kings College, Cambridge, being too impatient to wait for several months before being considered for the RAF as a pilot, went to Filton to try to get an interview with the great engineer. Suffice it to say he was successful and he started as a student in the Research Department of the Engine Division. By 1940, he was a junior technical assistant working, six days a week on developments of the Hercules and Centaurus engines. At night he was a firewatcher and a member of the Home Guard in Westbury-on-Trym, where he lodged with Fedden's godson's family.

He referred to the raid as "the main event in my life at Bristol" – his shelter was at the top (north) end of the East Works and he recalled the raid clearly (*reference 2, page 257*):

"My shelter was at the very north end of the works. We were in the shelter looking out to see, to my absolute aghast, coming this way, a whole squadron, a whole lot of He. 111s low enough that you could easily identify them ... so I darted back into the shelter. Then the bombs started and the bombing was pretty accurate and it was obviously on the main works. The shelter was a reinforced concrete thing so it moved in the earth. As the bombs fell, we could feel the shelter move, so we were just crouching down, waiting for the next one to hit us. People were frightened but remember, they were all grown-ups, all male I think. So they passed through. Lots of noise.

We all got out of the shelter and rushed over towards the works, where the damage had been done. It was all very interesting how well organised it was; there were staff volunteers rushing to help us if they could. Several shelters, more than one, had had direct hits so very terrible conditions. I was relieved to see one of our staff who was in another shelter, not in our own which hadn't been hit, so it was a relief to see a mate, as it were, coming out of there.

But the organised helpers on duty were in action and they didn't want people messing about. We were told "we don't want any help, we're dealing with it". So we were told to go away – get off the site and don't come back; come back next day.

Adrian Squire (Fedden's PA) ... had been killed in the raid. I was called to Mr. Fedden's office. He said "Moulton, you'll take the place of Adrian Squire Your job is to be available seven days a week. You'll be instantly available whenever I want you ..."

Alex Moulton left the company after the war and returned to Bradford-on-Avon, where he focussed on vehicle suspension systems in his family business, Spencer-Moulton Ltd. He later invented the small-wheel, rubber suspension "Moulton" bicycle and worked closely with his friend Alex Issigonis, creator of the Mini car, for which he developed the conical rubber spring suspension, which was later improved on to the Hydragas and Hydrolastic suspension units used by all BMC and British Leyland cars for many years.

He died on 9th December 2012 in Bath, by which time he was Dr. Alex Moulton, CBE and a Fellow of the Royal Academy of Engineering.

In Memoriam



The memorial to the victims of the air raid on 25th September 1940 in St. Peter's Church, Filton.

ALEXANDER, F. ANDERSON, B.V. ASH, E.W. ASHMEAD, R.E. ASPINALL, G.H. BABER, A.S. BAILEY, A. BARNETT, M. BAYFORD, D.H. BAYNTON, J. BIRD, G. BISHOP, G. BONE, R. BOULTER, J. [#] BOYCE, R.C. BRITTON, Florence N. BROWNE-COLE, G. BURT, E.W. CHENOWETH, Kathleen E.M. [#] COATES, Dorothy E. COLES, Phyllis W. COLSTON, R.W. COOK, D.A.W.	COOK, Joan L. COURT, L.G. EAST, F.E. EXTON, J.A. FISHER, A. FORD, J. [*] GRANT, G.B. GREEN, G. GREEN, G.R.F. HAINES, F.C. HARRIS, S. HEK, G.L.F. HILL, G.F.E. HOBBS, Mary E. HOLLISTER, W.C. HOLLOWAY, F.W. [*] HOPTON, Elsie M. HORNBY, S.G. [#] HOYLE, C.L. JONES, G. [*] LANGDON, C.F. [*] LATHAM, Kathleen J. LEWIS, H.	LEY, F.E. [#] LUCK, E. MANLEY, T.A. MULLENS, R.P. MYERS, Hilda [#] NOTTON, R.T. OLLIS, S.W. OWENS, E. OXLEY, R.S. PACKER, F.W.E. PARRY, J. PLUNKETT, A.G.W. PREWETT, M.G. PUGH, T.S. RATCHFORD, J.J. REES, T.H. RHYMES, F.J. ROBERTS, V.L. ROSSITER, W.A. [*] SCOTT, Rosemary K. SHORT, E. [*] SHORTMAN, G.T. [*] SILCOCK, J. [*]	SKIPPON, H. SMITH, S.D.C. SQUIRE, A.M. [*] STADDON, Muriel M. STEPHENS, T. [*] STEPHENS, W.I. STRADLING, W.T. TAYLOR, R.H.L. TUTCHER, R.B. VICKERY, Barbara J. WALLER, A.H. WARING, Iris A. WASHINGTON, A. WATKINS, A.J. WEBB, S.J. [*] WEBB, W.H. [*] WELLS, Muriel B.E. WESTLAKE, Millicent E. WHITE, C.C. WHITE, J.T. WOOD, G.C. YOUNG, E.G.
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BROWNE-COLE, G is listed elsewhere as COLE, G.B.

PREWETT, M.G. is listed elsewhere as PREWETT, G.M.W.

^{*} Private, 13th Gloucestershire (City of Bristol) Battalion, Home Guard

^{*} Constable, Bristol Special Constabulary.

[#] Rodney Works

4th Battalion Royal Berkshire Regiment.

The Regimental Diary only makes the following comment about the 4th Battalion's time as a defensive unit defending Avonmouth Docks and Filton Airfield. (Via Google)

May 1940: *Evacuated from the beaches near La Panne, (Dunkirk Evacuation), France and returned to the UK.*

June 1940: *.... went onto Frome in Somerset and remained unallotted to a field formation. They then carried out defensive operations at Avonmouth docks and the Filton aerodrome where they lost a number of men to German bombing.*



Eye witnesses recorded that the officer in charge of the group of soldiers marching along the Gloucester Road towards Filton were not able to take cover from the falling bombs, one even suggested that the officer in question actually ordered the men not to break ranks so as to take cover. However, reading a letter written by one of the survivors (see Reference 1, page 45 quoted below), this appears to be not the case – indeed it would be surprising if it were.

5339343 Private Bert Fairchild of A Company, 4th Battalion Royal Berkshire Regiment, wrote the following words to his mother, although he signs himself as Jack and perhaps surprisingly, his graphic account did not seem to offend the censor.

"A' Company was out on a route march yesterday morning ... marching along a road running through Filton Aeroplane Works ... when over Jerry came. The siren had gone a quarter of an hour before, but of course we didn't take much notice and we were laughing at the hundreds of workers pouring out of the factories.

It was all so sudden, we heard a droning row and a swish and we just had time to lay flat on our faces on the paths and by gum, was it hell? They dropped between forty and fifty bombs right across the works, the road where we were and the car park.

It was terrific explosions, the ground shook and iron railings, cars and debris were flying everywhere. I think it must have been over in three minutes but it seemed like hours. I looked up through the smoke and dust, it was a ghastly site, bodies strewn all around.

'Taffy' Collins and myself were the only two to get up in our section of ten and we all lay head to toe alongside the railings on the path. (This is the fence referred to and shown in the piece about the Britannia Café above). Our Officer, Sergeant and about eight privates killed and about twenty-five injured.

Besides all this, one bomb caved in a shelter and there were dozens of workers buried there. I dunno how many casualties this caused I'm sure, I saw them digging some of them out. It was like a dead house in our hut, out of forty beds there were eleven occupied I'm positive if there had been an ordinary ditch there like on the country roads, there wouldn't have been a casualty.

This is where we come to one of the confusions of the raid – at least in my mind. Many years ago, someone who remembered the event told me that one of the shelters “down the bottom” by the Gloucester Road had been badly knocked about by a bomb. He said that more damage would have been done were it not for the marshy ground, which absorbed a lot of the energy of the explosions. Private Fairchild's comments brought this back to me and, as he would not have been able to see the effects of the bombs on top of

the hill from where his troop was bombed, is he repeating later hearsay or was there a second shelter struck? The other point is that the top of the hill was solid ground – admittedly with a number of natural fresh water springs – but the bottom of the hill was (still is) very boggy because all the water runs off the hill and collects at the bottom, either side of the railway. I would be fascinated to learn the truth, but I doubt if anyone is left who can answer my question.

Casualty List (from Forces War Records)

•	SWG Bingay	2 nd /Lieutenant	Killed in Action	25/09/1940	94148	Goring (Oxfordshire)
•	FTF Lovegrove	Serjeant	Died of Wounds	26/09/1940	5333884	Wallingford (Berks)
•	AJ Chambers	L/Corporal	Killed in Action	25/09/1940	5340022	Bristol (Canford)
•	JHG Chamberlain	Private	Killed in Action	25/09/1940	5337862	Ramsbury (Wilts)
•	GP Clements	Private	Killed in Action	25/09/1940	5339862	Dunsden (Oxfordshire)
•	R Cornell	Private	Killed in Action	25/09/1940	6022446	Bristol (Canford)
•	FC Forrest	Private	Killed in Action	25/09/1940	6022470	Bristol (Canford)
•	RCM Gould	Private	Died of Wounds	09/11/1940	5342340	Bristol (Canford)
•	A Hostler	Private	Killed in Action	25/09/1940	5340267	Record not found
•	A Morgan	Private	Died of Wounds	25/09/1940	6022547	Wandsworth (London)
•	BF Paul	Private	Died of Wounds	09/10/1940	5339227	Littleworth (Berks)
•	WE Stone	Private	Died of Wounds	01/10/1940	6020262	Quarndon (Derbyshire)

Notes: **2nd Lieutenant Bingay** had been previously wounded in France, 27/05/1940

Pte Arthur Morgan served in WW1, listed in Princess Charlotte of Wales's Reg (Royal Berkshire Regiment).

Pte Arthur Joseph Hostler served in WW1 listed in Princess Charlotte of Wales's Reg, (Royal Berkshire Regiment); he was wounded in France on 12/06/1940 and his Forces War Record (wrongly?) reports him as having been killed in action on 25th November 1940.

Sgt Richard Whichello, 5334550 – no record of this name/number is held in the Forces War Records.

Other known casualties.

Barrage Balloon Site: AC1 S.T.PARNALL, 865570, No. 935 (Balloon) Squadron, RAF.

Dazzle Defence Site, Stoke Gifford: Gnr A. TAYLOR, 2038490, 345 Battery, 39th Searchlight Regiment, RA.

Visitors to BAC, Filton: ADMAN, H.A; COPLEY, J.W; LAYTON, ?; LUMB, A; MANLEY, Mrs C;
(All killed) McPHERSON, G.R; MITCHELL, J.P; MILTON, T.F; MORGAN, A; PEARCE, W;
ROBBINS, A.H; STANLEY, E.P.

Killed in Filton : GARBUTT, W.H; HORNSBY, S.G (BAC employee, on Company Memorial);
LOVELL, E; JONES, Carol. N; BULL, W.R; TURTON, Dorothy I; WILKINS, Margaret J;
WILKINS, R; DAVIES, Ann D; WALTERS, B.T; WEAVER, Joan E.

Killed in Southmead: KERSLAKE, Mary. A.

Killed at Henleaze: ASHMEAD R.E. (BAC Employee, on Company Memorial)

Killed at Westbury-on-Trym: GREENSLADE, Eliza S; LAMB, Rhoda E.

The arrival of 504 Squadron, 26th September 1940.

No. 504 "County of Nottingham" Squadron had similar origins as Filton's own No. 501 "County of Gloucester" Squadron, also being raised as one of the Special Reserve Squadrons of the Auxiliary Air Force, although in March 1928. As we have already seen, the raid on Filton was carried with the Luftwaffe having full knowledge that there was no fighter defence to stand in their way. However, on the following day, No. 504 Squadron moved in by air and stayed at Filton until December 1940.

They were ready when the German Air Force returned on 27th September 1940 to bomb the Parnall factory at Yate, a few miles east of Filton. (Note: this raid had Yate as its primary target, despite the beliefs of many local people then and since.) This time the Germans did not have things their own way, some ten aircraft being destroyed or damaged by the RAF, several by the pilots of 504 Squadron; the combat record summaries are as below (*Reference b*).

Filton was spared any further major attacks although it suffered a number of smaller raids.



Bf 110D-3, Wnr.3378, **S9+DH** of St/Epr Gr 210

Attacked and badly damaged by a number of pilots. Believed finally shot down by F/L. A.H. Rook in a Hurricane of 504 Sq. (Filton). Crashed at Busseys Stool Farm, Tarrant Gunville, Dorset at 12.00 hrs.

Bf 110D-0, Wnr.4270, **S9+DU** of 2/Epr Gr 210

Port engine disabled in attacks by F/L. A.H. Rook in a Hurricane of and starboard engine damaged in attacks by P/O. M.H. Constable-Maxwell in a Hurricane of 56 Sq. (Boscombe Down). Force-landed at The Beeches, Preston Hill, Iwerne Minster, Dorset at 12.00 hrs.

Bf 110D-3, Wnr.3888, **S9+JH** of 1/Epr Gr 210

Engaged by Hurricanes of 504 Sq. (Filton), finally shot down by P/O. B.E.G. White. Dived vertically into the ground and burned out at Bradle Row, Kimmeridge, Dorset c.12.00 hrs.



*A Hawker Hurricane Mk.I in 504 Squadron markings.
Pilot Officer B.E.G. White, Filton, September 1940.*

Bf 110D-0, Wnr.2248, **S9+GK** of 2/Epr Gr 210
Crashed into the sea off the Dorset coast following combat with RAF fighters c.12.00 hrs.

Bf 110C-4, Wnr.2162, **U8+FK** of 2/ZG 26

Both engines set alight in an attack by F/O. M.E.A. Royce in a Hurricane of 504 Sq. (Filton). Exploded at the Stapleton Institution, Fishponds, Bristol at 11.45 hrs. The crew are buried in Greenbank Cemetery, Bristol.

Bf 110C-4, Wnr.3352, **U8+GL** of 3/ZG 26

Engaged head-on and petrol tank set on fire. Probably that attacked by Sgt. H.D.B. Jones in a Hurricane of 504 Sq. (Filton) but possibly that claimed by F/O. T.H.T. Forshaw in a Spitfire of 609 Sq. (Middle Wallop). Abandoned aircraft crashed at Haydon Farm, Radstock, Somerset at 11.45 hrs.

Bf 110C-7, Wnr.3629, **3U+IM** of 4/ZG 26

Both engines disabled in attacks by P/O. M.E. Staples in a Spitfire of 609 Sq. (Middle Wallop); further attacked by P/O. A.R. Watson in a Spitfire of 152 Sq. (Warmwell). Exploded over Salters Wood, Middle Bere Farm, near Arne, Dorset at 11.45 hrs

Bf 110C-4, Wnr.3297, **3U+FT** of 9/ZG 26

Collided with Spitfire X4107 of 609 Sq. (Middle Wallop) which crashed at Chesilbourne near Piddlehinton, Dorset killing P/O. R.F.G. Miller. The Bf 110 came down at Bellamy's Farm, Piddletrenthide, Dorset at 11.45 hrs.

Bf 110C-4, Wnr.2168, **3U+BD** of St.III/ZG 26

Shot down into the sea off the Dorset coast during fighter combat at 11.50 hrs.

Bf 110C-4, Wnr.3290, **3U+DS** of 8/ZG 26

One engine disabled and set alight in attacks by P/O. A.R. Watson in a Spitfire of 152 Sq. (Warmwell). Force-landed 1 mile SW of Kimmeridge, Dorset at 11.45 hrs.

It is interesting to note that the entire fleet of attacking aircraft were the Messerschmitt Me110 C and D twin-engined fighter-bomber aircraft, not the heavier Heinkel He.111 as bombed Filton. The Me.110 D *Zerstörer* aircraft usually had a crew of two and a load of 2,200 lbs (1,000 kg); their operational range could be extended by 900 litre belly tanks and/or wing drop tanks. They carried four forward facing offensive and one rearward-facing defensive machine guns.

Several years ago, I discovered a number of rather poor photographs of 504 Squadron while based at Filton. A few of these are shown below and, from memory, were sourced via Google.



The houses in the background were in Callicroft Road, Patchway as referred to in some of the memories above.



*The airfield must have been a huge attraction to the local children of all ages, here we see a group gathered near the perimeter fence. The pilots are waiting to be sent into action – date not known.
The pilot facing left just to the right of centre is Flight Lieutenant A.H. Rook.*



A mock scramble for the benefit of the camera – the caption names the pilots as Hunt, Royce, Rook, Parsons, Haw and Heywood. The crew hut no longer stands, but was located to the north and behind the 3-bay hangar which contains the entrance to Aerospace Bristol. Pilots from left are: Hunt, Royce, Rook, Parsons, Haw and Haywood.



Two views of the crew room; the only identifiable pilot is Flight Lieutenant A.H. Rook, below middle, with glasses, moustache and large flying boots.



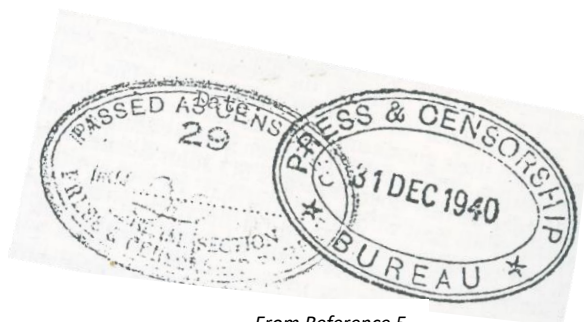
References and Reading List.

Readers interested in reading more about the events in this issue will find the following books helpful.

1. **Remembering Filton**; published 2010; Filton Parish Church with Filton Community History.
ISBN 978-0-9557701-3-5.
2. **Workmanship at its Best**; published 2011; Filton Community History
ISBN 978-0-9557701-4-2
3. **Luftwaffe Encore**; Kenneth Wakefield; published 1980; HarperCollins;
ISBN 978-0-7183007-7-7
4. **Bristol Blitz Diary**; John Dike; published 1982; Redcliffe Press, Bristol;
ISBN 978-0-90544593-6-3.
5. **Bristol Blitz, the untold story**; Helen Reid; published 1988; Redcliffe Press, Bristol;
ISBN 0-948265-82-5-82-5
6. **Bristol under Siege**; Helen Reid; published 2005; Redcliffe Press, Bristol;
ISBN: 978-1-9045372-5-0
7. **Filton Voices**; Jackie & Stan Sims; published 2003; Tempus Publishing Limited, Stroud;
ISBN: 978-0-7524-3097-1
8. **Luftwaffe Operations over Bristol 1940/44**; John Penny; published 2001;
Bristol Branch, Historical Association ISSN 1362 7759

Online sources.

- a) <http://www.bbc.co.uk/history/ww2peopleswar/>
Compiled 1995-2005; records of memories of WW2 across the UK.
- b) <http://humanities.uwe.ac.uk/bhr/Main/ww2/8.htm>
List of Luftwaffe casualties on missions to bomb Bristol and its surrounding area, or when overflying the area on their way to other locations.
- c) <https://battleofbritain1940.com/entry/wednesday-25-september-1940/>
- d) <https://battleofbritain1940.com/nos-401-601-squadrons/>
- e) Forces War Records – Members only.

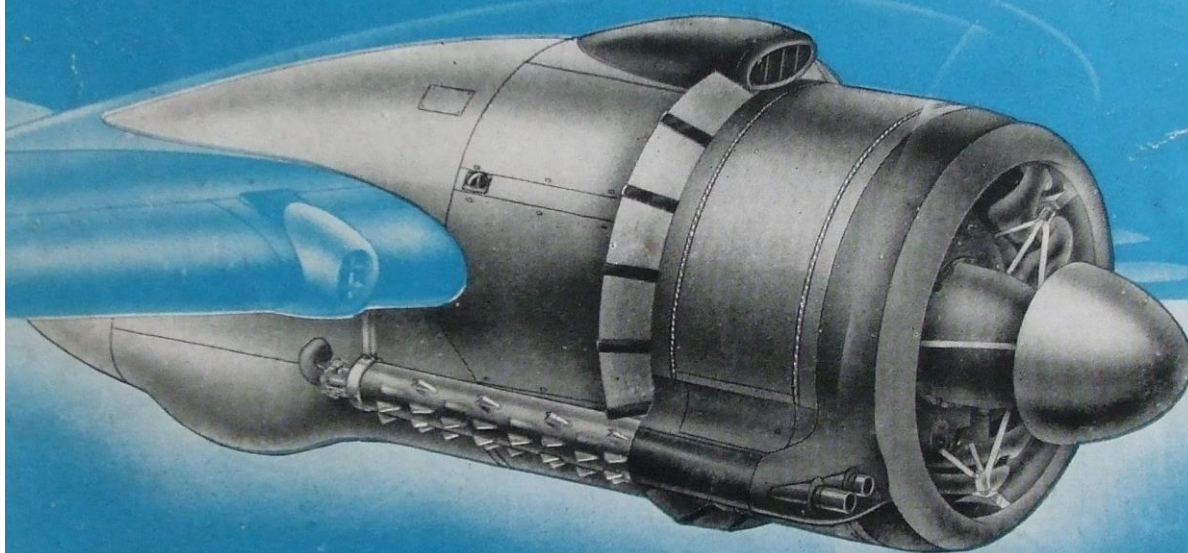


From Reference 5

FEATURES OF THE

413.A

Bristol Beaufighter



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