

The Memory Project Team

The children of St. Augustine's CE Junior School

Acknowledgements

Primarily, I must thank Lilian Van Mourik Project manager recovery Short Stirling BK716

Advisor on the National Programme for Aircraft recovery

Thanks also to those of the BK716 team for their support in creating this magazine and taking the time to attend the presentation the children gave.

Thanks also to Yannic Wethley, from the Stichting Luchtoorlog Onderzoek Drenthe (Drenthe Air War Foundation. www.slodrenthe.nl)
the assistance in getting the service files for the air crew is greatly appreciated.

Many thanks to St. Augustine's CE Junior School for allowing their students to take part in this project, thanks must also be extended to Nene Park Academy for allowing Harry to leave school early to be part of the project.

Finally, incredibly special thanks to Christian König who became our unexpected co-pilot and manged to steer us back on course when we lost our way a little. Integral parts of this story would be missing without your assistance and guidance.

Contents

Foreword

Preface

Introduction

Why Were we fighting?

World War Two

Taking to the Skies. Britain vs Germany

The Air War

Bomber Command

The Luftwaffe

The Wellington Bomber

The Messerschmitt Bf 110

The Crew of HE346

W.O Charles Alfred Mattress

Sgt. Alfred Mortimer

Sgt. John Peter Priestley

Sgt. Norman Ronald Parry

Sgt. Thomas Ball

What was the mission?

The mission of HE346

How were they seen and by who?

Terschelling Radar Position TIGER

Lichtenstein Radar System

Rudolf Sigmund

What happened?

The fateful encounter

Post Mission

The National Programme for Aircraft Recovery The Recovery Remembering their sacrifices Reflections from the Teacher Reflections from the children Epilogue Glossary Bibliography and Further Reading

Foreword

As a teacher, it is both a privilege and a responsibility to help young people understand the past—not just as a series of events, but as the stories of real people, their courage, their choices, and their sacrifices. This book is the product of an incredible journey of discovery undertaken by our pupils, as they explored the story of Wellington bomber HE346 and its brave crew.

For children today, the Second World War can feel like a distant chapter in a dusty history book. But by learning about the lives of individuals like the airmen in this book, that history becomes real and meaningful. The events of 1939–1945 shaped our world. They showed us the consequences of unchecked hatred and the power of unity, resilience, and sacrifice.

The current generation of children has grown up in a time of peace. That peace exists because of the bravery and determination of those who came before us. It is essential that we continue to tell these stories—not just to honour those who were lost, but to ensure that future generations learn from the past and strive to build a more compassionate and just world.

This book is more than a history project. It is an act of remembrance and respect. The children who helped create it have not only deepened their understanding of World War Two; they have helped to preserve its legacy. And in doing so, they remind us that the torch of memory must always be passed on.

Mr Brunt Headteacher.

St Augustine's CE Junior School

Preface

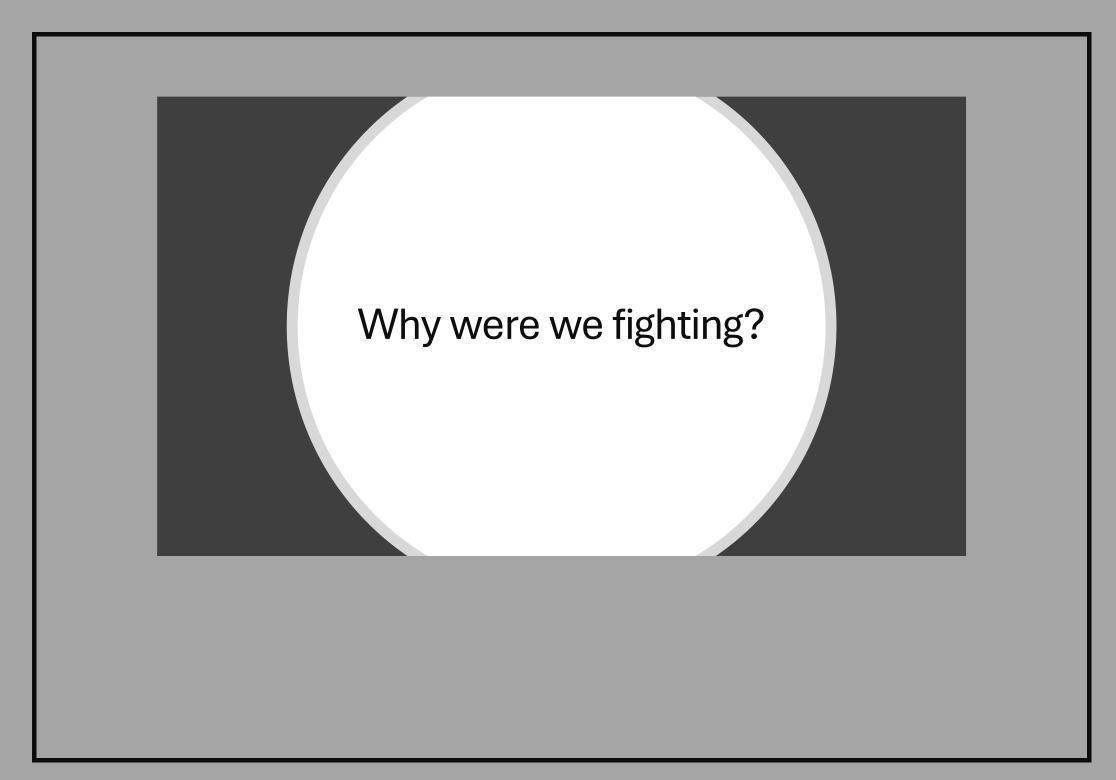
Learning about the events of the past can be exciting, thrilling and sometimes lots of fun, however, for every good event from history there is ultimately the opposite. There are times in history that has seen conflict among the world and the stories from these events can be difficult to comprehend. Sadly, this was one of those stories. We are fortunate that modernity now allows us to record, log or detail events for the future generations, and although there are some records available to aide us in the quest for historic knowledge, they can be difficult to obtain, be indeterminate of the truth or just not exist in the first place. These difficulties can cause a lack of answers to the questions we ask. Such is the case for the story of HE346 and the aircrew who lost their lives. Surviving relatives have waited decades to find out a fraction of what happened to their loved ones, and although it will bring some comfort, the knowledge of what has been discovered will also bring with it heartache. The narrative of any story of this nature is always going to be difficult to interpret. To remain objective, as well as subjective are difficult elements to combine, as is the ability to avoid laying blame on those perceived as the ones at fault. Forgetting that there are two sides to every story is one of the easiest mistakes to make. Those taking part in this project have researched the story from both the British and the German perspectives, and in doing so, have learned that both Allied and Axis aircrew fought primarily on the instruction of their country's leaders, whether they believed in those instructions is something unless documented we will probably never know, and we must acknowledge that. Whilst the general consensus to the study of history is to gain an insight into the past, we should also study history to learn from it, sadly, this is often not the case, and in doing projects like this, not only do we learn about the events of the past, it should also serve as a warning to not let history repeat itself.

Michelle Tasker

Introduction

World War Two is undoubtedly the greatest conflict that the world has seen in modern history. Fought for almost 6 years on Land, Sea and in the Air, countless battles, campaigns and bombing raids were conducted to ensure the future of the next generations. This story has been researched by a small group of children from St. Augustine's CE school in the UK. Many hours in an after-school club taught us how to research and discover events that occurred in the past. This story is in honour of the air crew of Vickers Wellington HE346, and how their story took almost 80 years to finally be told. By telling their story we have learnt that we do not always get to find out all the answers to the questions we ask, learnt that we must try to stop history repeating itself, but most importantly, we have learnt about these men and countless others that made the ultimate sacrifice to defend their country. We must never forget!

Harry Tasker



World War Two

The causes of World War II grew pace in the aftermath of World War I, particularly with the signing of the Treaty of Versailles in 1919. It was tended to ensure a lasting peace, however, the treaty instead imposed harsh terms on Germany:

- Massive reparations payments crippled the German economy.
- The loss of territory and colonial possessions humiliated the German population and caused resentment.
- Severe restrictions were placed on Germany's military capabilities and left many feeling vulnerable and powerless.

The treaty's measures created ground for nationalists and in their bitterness, many Germans sought leaders who promised restoration and revenge—an atmosphere that would prove ripe for the rise of Adolf Hitler and the Nazi Party.

Britain and France adopted a policy of appeasement toward Hitler's Germany in the 1930's. Still scarred by the trauma of World War I the Western democracies were reluctant to confront aggression. Britain and France hoped this would satisfy Hitler's ambitions and maintain peace, but instead, it emboldened him. Appeasement is now widely regarded as a mistake that enabled Hitler to grow ever bolder in his ambitions.

On September 1St 1939 Germany invaded Poland.

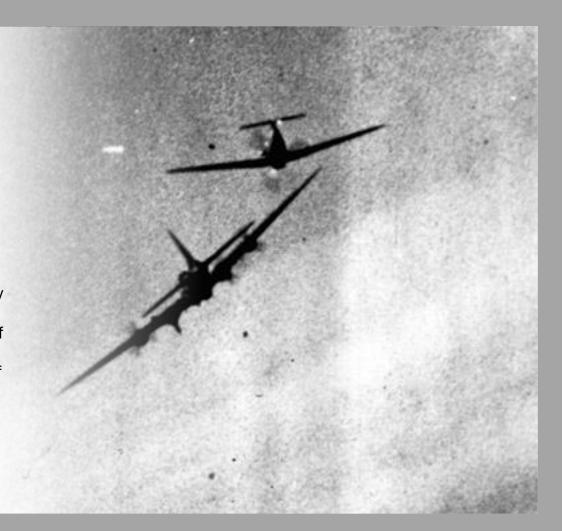
The British response to Germany invading Poland was swift and decisive. On September 3, 1939, just two days after the invasion, the U.K declared war on Germany. This declaration was made by Prime Minister Neville Chamberlain in a radio broadcast to the British public at 11:00 AM. Chamberlain explained that the British Ambassador in Berlin had handed the German Government a final note stating that unless Germany withdrew its troops from Poland by 11:00 AM, a state of war would exist between the two countries. As no such undertaking was received, Chamberlain announced that Britain was at war with Germany. Chamberlain expressed deep regret that all efforts to maintain peace had failed, but he emphasized that Hitler's actions left no other choice and that force was the only way to stop him.

This declaration of war marked the beginning of Britain's involvement in World War Two.



The Air War

Aerial combat in WWII was pivotal, with aircraft becoming a dominant force in battles. The Battle of Britain showcased the importance of air superiority, as the RAF defended against the Luftwaffe. Technological advancements, such as radar and improved aircraft design, significantly impacted strategies and outcomes, making air power a crucial element of WWII. Throughout the war, both the Allied and Axis powers had periods of being the dominant force in the air. It was a constant battle to gain complete supremacy.





Bomber Command

Bomber Command was one of the most significant arms of the Royal Air Force (RAF) during the Second World War. Established in 1936, its role was to conduct strategic bombing operations against enemy targets, with the hope of undermining both the Axis war effort and the civilian morale. When Bomber Command was formed, the belief was that "the bomber will always get through," In the opening months of WWII, Bomber Command's capabilities were limited by its relatively small fleet and outdated aircraft such as the Handley Page Hampden and the Armstrong Whitworth Whitley. Bomber Command played a vital role in the Allied war effort. The cost, however, was immense. Of the roughly 125,000 aircrew who served in Bomber Command, over 55,000 were killed. Many others were wounded or captured, Aircrews flew in darkness and uncertainty, facing death every time they climbed into their aircraft.

Lancaster in flight Military Images.net. n.d

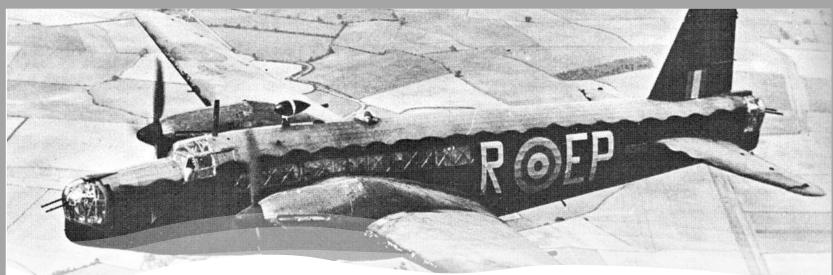
The Luftwaffe

During World War One. German aviation was part of the field army. Despite its many aces and victories claimed for the Fliegertruppe failed in gaining a competitive advantage over their enemies 1914-1918. While the Royal Army Flying Corps was subsequently transferred into the Royal Air Force, Germany's aviation was banned after the armistice and the Versailles Treaty. Throughout the 1920s and 1930s Germany secretly trained crews posing as private or commercial pilots and invented aircraft to be mass produced once this became possible again. With Adolf Hitler elected chancellor in 1933, Germany took a more offensive approach, not willing to deal with the Versailles Treaty restrictions any longer. A German Air Force called "Luftwaffe" was established in 1935. It was to play a critical role in Germany's military operations during World War II. To gain combat experience, aircraft and pilots flew in the Spanish Civil War 1936-1939 within a special unit called "Legion Condor". It was in Spain where Luftwaffe realised their Junkers Ju 87 Stukas had to undergo modifications to replace Henschel's Hs 123 dive attack bomber. It was also in Spain where Heinkel's He 51 fighter lost ground to Soviet Polikarpovs, which served as a push factor to introduce Bayerische Flugzeugwerke Bf 109 (better known as "Messerschmitt Me 109").

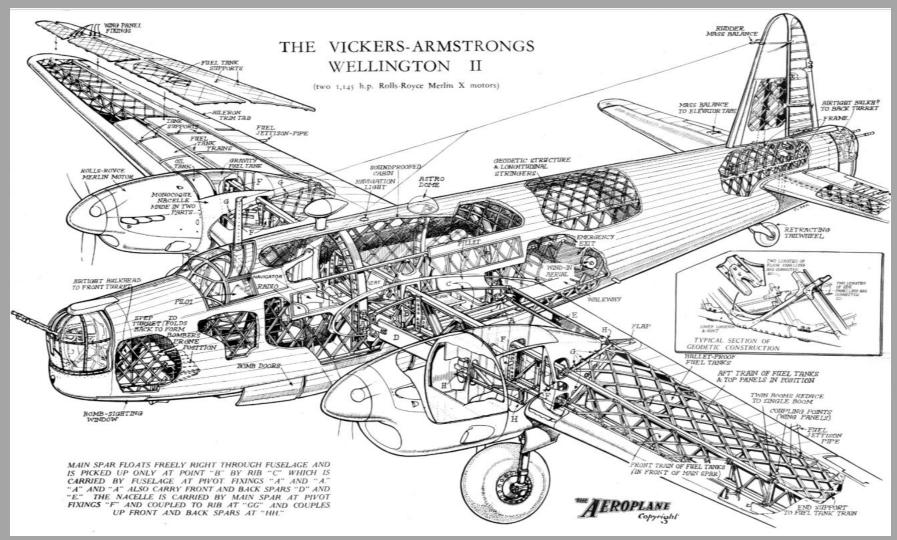


Focke-Wulf Fw 200 Condor. Artofit.org. n.d

The Wellington Bomber



The Wellington (nicknamed the Wimpy) is a British twin-engine, long range medium bomber. designed by Vickers-Armstrongs, which also featured a unique geodetic airframe structure designed by Barnes Wallis. This provided exceptional strength and durability and allowed the aircraft to enhance its operational range and bomb load capacity. The bomber was equipped with advanced navigation and bomb-aiming systems, making it a formidable asset during WWII for night-time and strategic bombing missions. Used as a night bomber in the early years of the war, it was one of the principal bombers used by bomber command. The Wellington was the only British bomber that was produced for the duration of the war and was produced in a greater quantity than any other British-built bomber.



Vickers-Armstrongs Wellington MKII design diagram.

Alamy.com Image ID: TY076B

Vickers W	ellington	Mk X
-----------	-----------	------

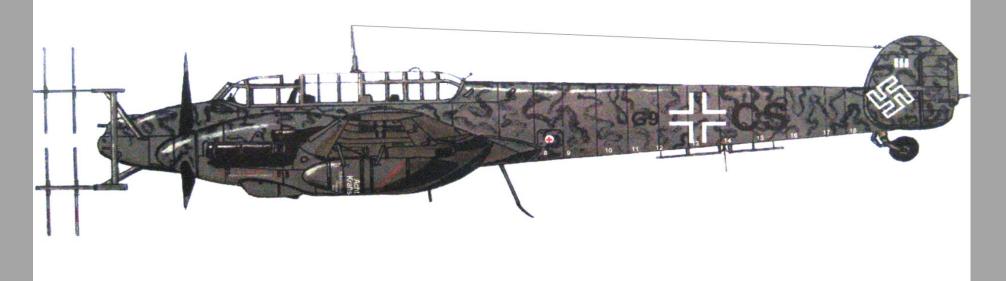
CREW	5/6
PROPULSION	2 Radial Engines
ENGINE MODEL	Bristol Hercules
ENGINE POWER (EACH)	1500hp
SPEED	254mph
SERVICE CEILING	c.23.000ft
RANGE	1540miles
EMPTY WEIGHT	18,555lbs
MAX TAKE-OFF WEIGHT	29,500lbs
WINGSPAN	86ft 2in
WING AREA	840ft ²
LENGTH	60ft10in
HEIGHT	17ft5in
FIRSTFLIGHT	15 th June 1936
ARMAMENT	6-8x Browning Mk III Machine guns
	4,500lb Bomb Load
TOTAL PRODUCTION (ALL VARIENTS)	11,461

Specifications of Vickers Wellington MK X.

Michelle Tasker. 2025

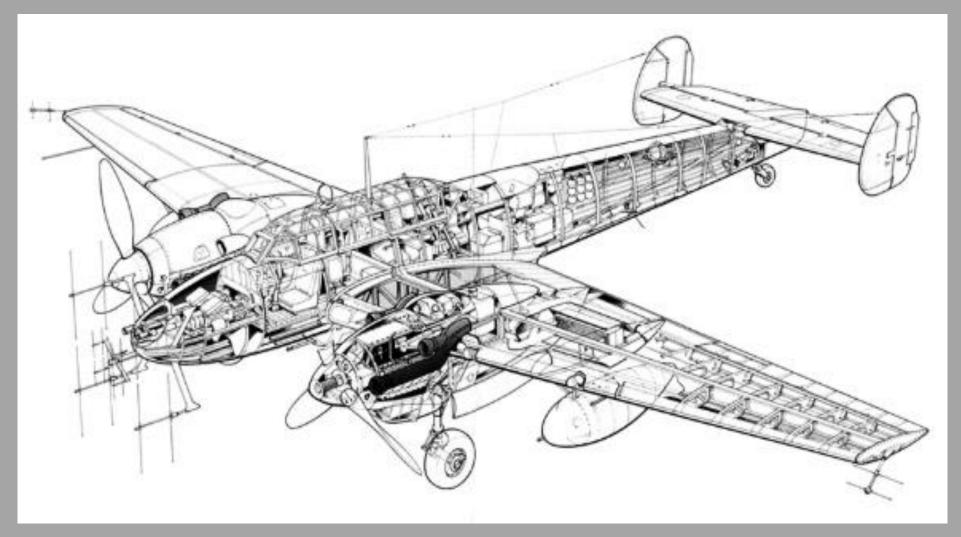
Messerschmitt Bf 110

The Messerschmitt (Bf) 110 was envisioned as a heavy twin engine fighter ("destroyer") in the 1930s. It was meant to safeguard bombers and defeat enemy fighters allegedly sporting an overwhelming fire power, range, and performance. By the outbreak of WW2 Messerschmitt (Bf) 110 crews were called the Luftwaffe's elite. But two fighter engines and a couple of weapons could not achieve air superiority. RAF fighters easily out-maneuvered Me 110s during the Battle of Britain. Their use as bombers failed as well. The aircraft was hastily withdrawn and then started a new and more prosperous life: As a night fighter. Flown by a two men crew (pilot, weapons officer) the 110 proved to be a deadly opponent for bombers. By adding more weapons and radar devices, taking aboard a third man as radar operator, and carrying external fuel tanks the 110 was developed in the nearly perfect night fighter which claimed thousands of RAF bombers shot down.



Messerschmitt Bf110 G-4.

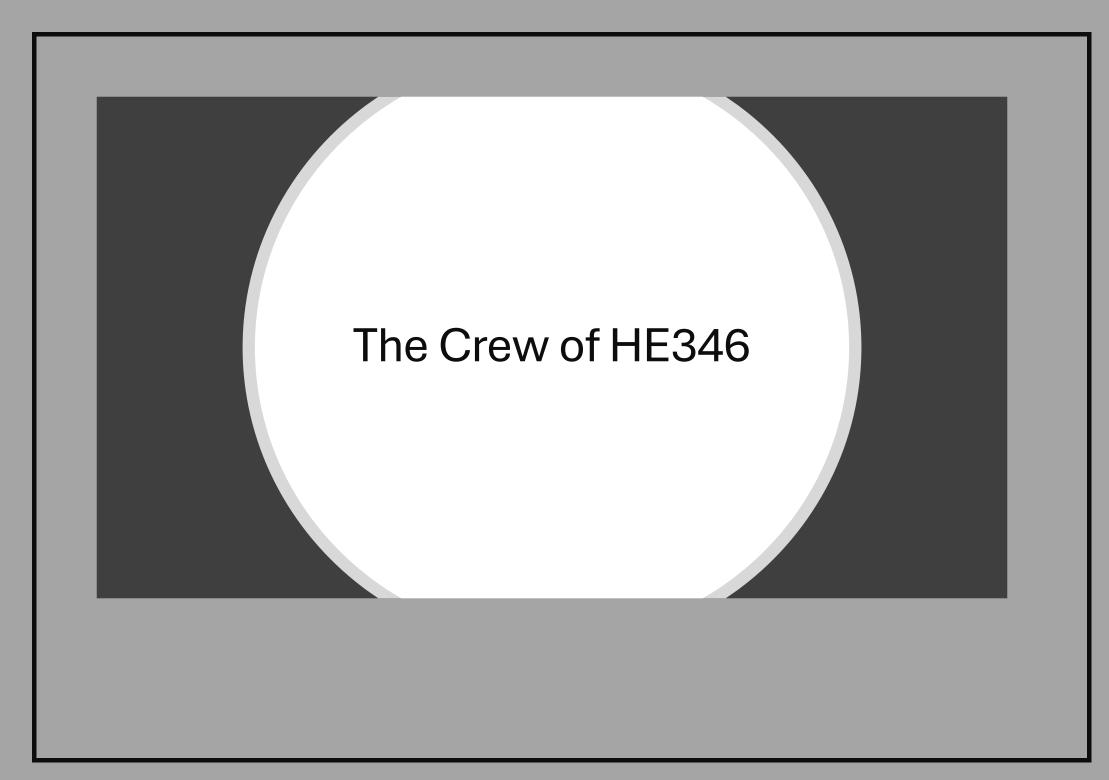
Image courtesy of Christian König. 2025



Bf 110 G-4 Cutaway. Warthunder (ed). 2025

Messerschmitt Bf 110 G-4

CREW	2/3
PROPULSION	2 PISTON ENGINES
ENGINE MODEL	DAIMLER-BENZ DB601 B1
ENGINE POWER (EACH)	1085hp
SPEED	348mph
SERVICE CEILING	c.33,000ft
RANGE	680miles
EMPTY WEIGHT	11,354lbs
MAX TAKE-OFF WEIGHT	14,881lbs
WINGSPAN	53ft 2in
WING AREA	414ft ²
LENGTH	39ft 8in
HEIGHT	13ft 7in
FIRST FLIGHT	12 th May 1936
ARMAMENT	2x MG151
	1x MG81Z.
	4x MG17 machine guns.
TOTAL PRODUCTION (ALL VARIENTS)	c.5800



The crew of Wellington HE 346 was an Anglo-Australian crew. The five crew members consisted of one Australian and four British aircrew. The men served in 166 squadron of the Royal Air Force and were based at RAF Kirmington in Lincolnshire. Service records show that all five of the crew joined 166 squadron on the 5^{th of} June 1943. Prior to becoming a full crew together, Charles Mattress, Ronald Parry, Thomas Ball and John Priestley flew a mission with two other aircrew in HE345. Alfred Mortimer flew with the crew of HE595. Both these aircraft undertook a gardening mission on 12th June 1943. The first time they all flew together in HE346 was on the 24^{th of} June 1943, on a bombing mission to Wüppertal, Germany. On the 25^{th of} June, the flew what was to be their second and final mission to Gelsenkirchen, Germany. The motto for 166 squadron was 'Tenacity' and indeed it certainly applies to this group of brave young men.



•

W.O Charles Alfred Mattress

DOB: 13.09.1917

Royal Australian Air Force

Pilot

Service No: 402531

Enlistment: 16.09.1940

Charles Alfred Mattress was born in 1918 to Frederick and Louisa Mattress. Charles was the only Australian airman in the crew. Prior to his enlistment, records show that Charles was a salesman. Charles was engaged to Miss R Gainsford. Whilst on route to England to join Bomber Command, the troop ship RMS Orcades carrying Charles was torpedoed by German submarine U-172, off the coast of South Africa. Charles made it to a lifeboat and was picked up a few hours later by polish vessel GRT Narwik who took the survivors back to Cape Town. Charles then took another troop ship to England.

Lia and Hazel



Mattress

Sgt. Alfred Mortimer

D.O.B 14.01.1917

Navigator

Royal Air Force volunteer Reserve

Service No: 1499905

Enlistment: 19.05.1941

Alfred Mortimer was born in Rotherham, South Yorkshire to Herbert and Lilley Mortimer. Alfred grew up in Wakefield, West Yorkshire. Alfred had two sisters. Alfred was married to Clara. It is believed that they lived in Thurnscoe, nr. Rotherham.

Adrianna and Taritra



Mortimer

Sgt. John Peter Priestley

D.O.B 17.07.1920

Royal Air Force Volunteer

Reserve

Bomb Aimer

Service No: 1517817

Enlistment: 25.06.1941

Not much is known about Sgt Priestley's background. His service file is heavily redacted. However, Sgt Priestley was the key airman in identifying the plane.

Jack



Priestley

Sgt. Norman Ronald Parry

D.O.B 09/06/1922

Royal Air Force Volunteer Reserve.

Radio Operator

Service No: 1383146

Enlistment: 21/12/1940

Very little information is available. The service file is heavily redacted. We know that he came from Charlton.

Jack



Parry

Sgt. Thomas Ball

D.O.B: 08.0.1922

Rear Gunner

Royal Air Force Volunteer Reserve

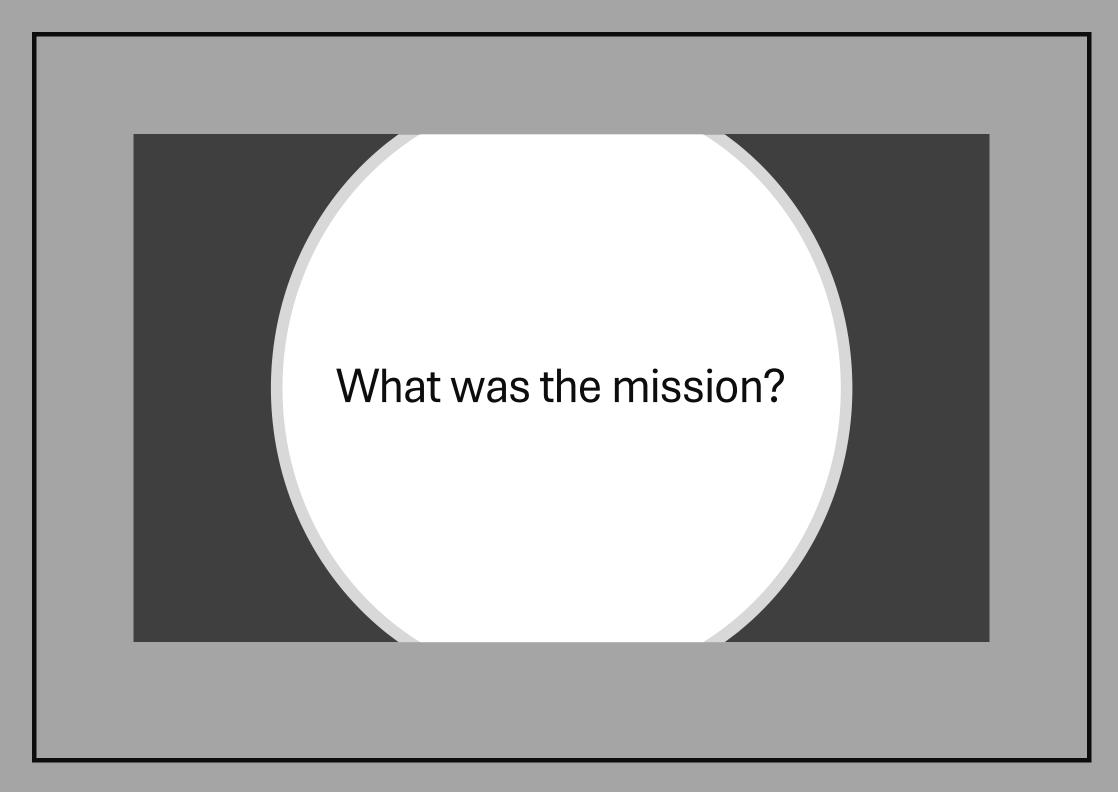
Service No: 1620011 Enlistment: 31.10.1941

Thomas Ball was born in Salford, Greater Manchester to Thomas and Edna Ball. There are very few records for Thomas and what is available have redacted areas. His service record shows that prior to joining bomber command, Thomas was a former member of the ATC.

Jack



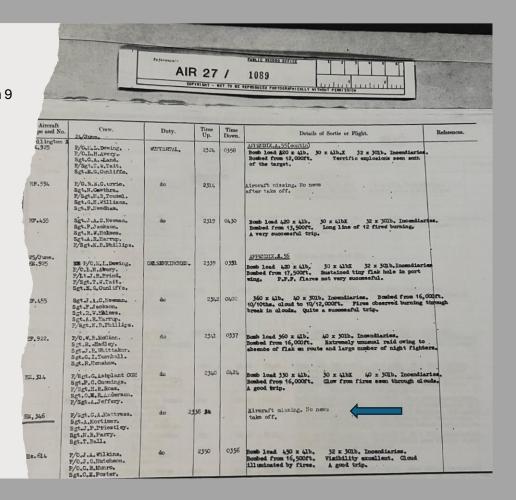
Ball

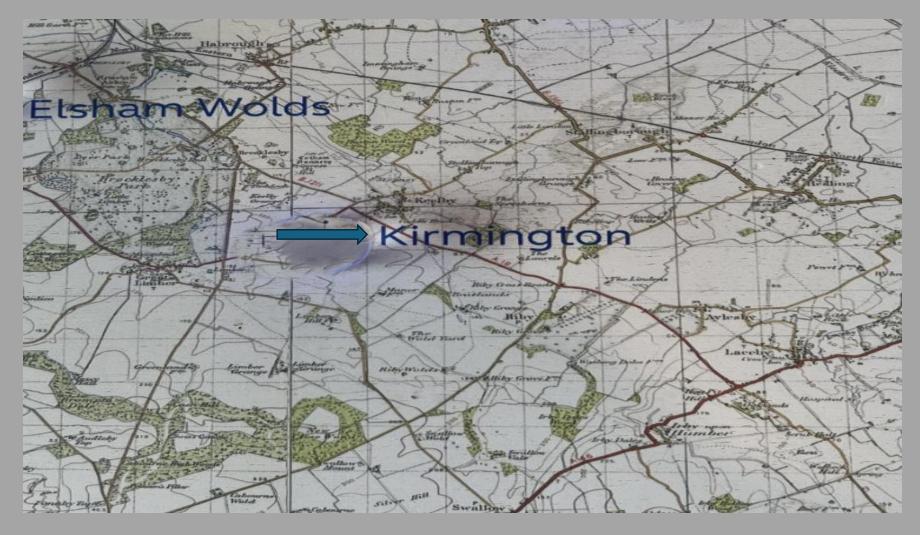


The Mission

On the 25th June 1943, HE346, along with 9 other aircraft from 166 squadron, took off from RAF Kirmington in Lincolnshire and were tasked with a bombing mission to Gelsenkirchen, Germany. This bombing raid was part of a series of missions that formed the Battle of the Ruhr campaign. Carried out over 5 months, the campaign saw bombing raids take place over the industrialised area of the Ruhr. Gelsenkirchen was bombed heavily and almost three quarters of the city was destroyed. HE 346 took off from RAF Kirmington at 2338 hours.

The operational Record Book to the right shows the information of the mission and how no news was received from HE346 after take off.

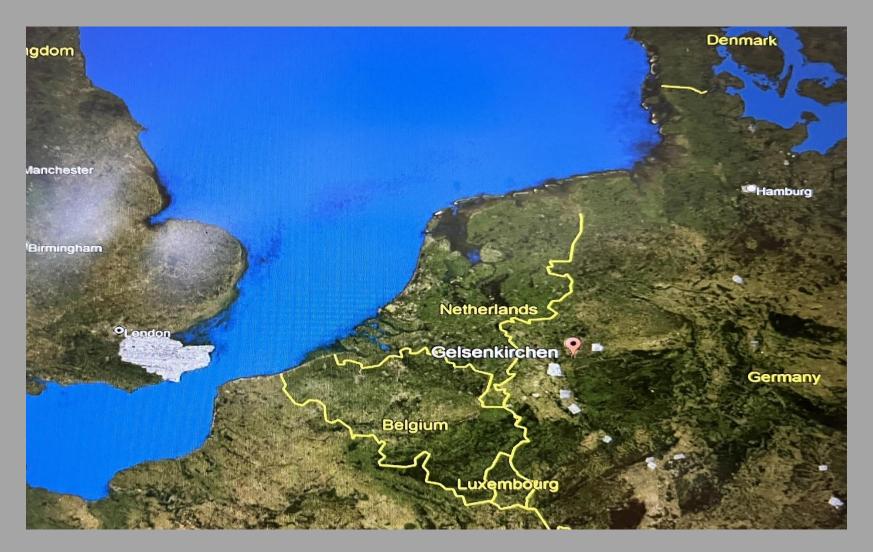




Historic map of RAF Kirmington, c.1942.

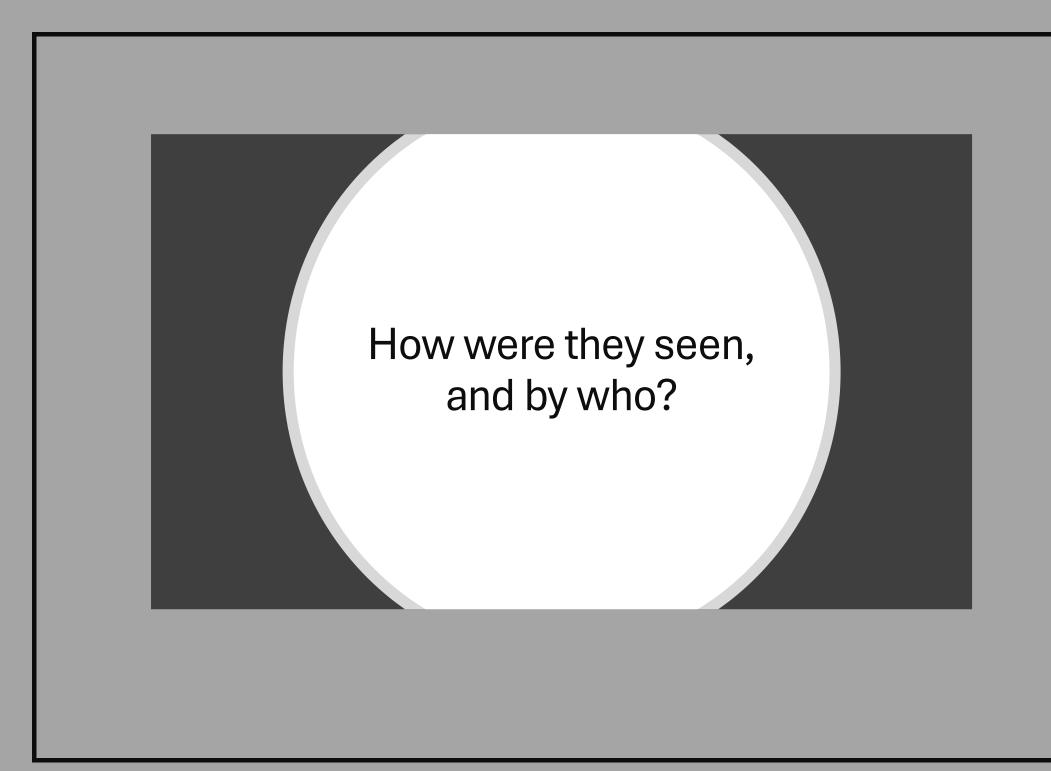
Michelle Tasker. 2025

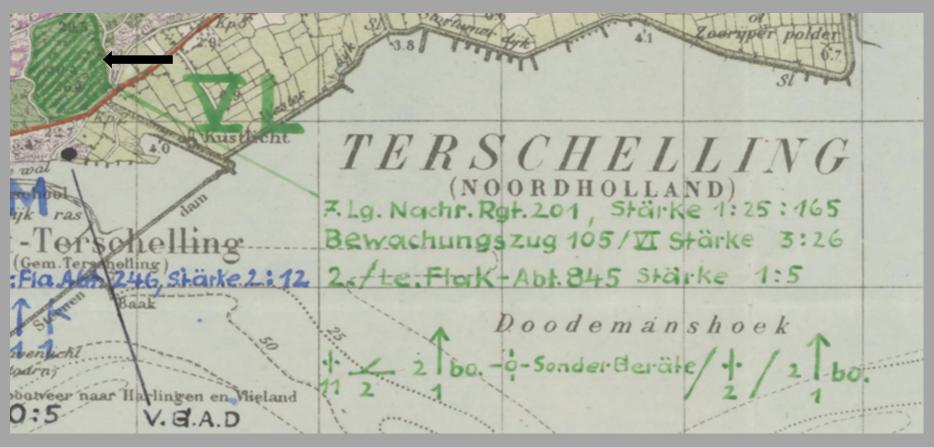
The above image is a section of a larger map showing the all the Royal Air Force bases in Britain during World War Two. The larger map is on display at the International Bomber Command Centre in Lincoln.



Map showing Gelsenkirchen. Target destination for HE346.

Google Earth. 2025

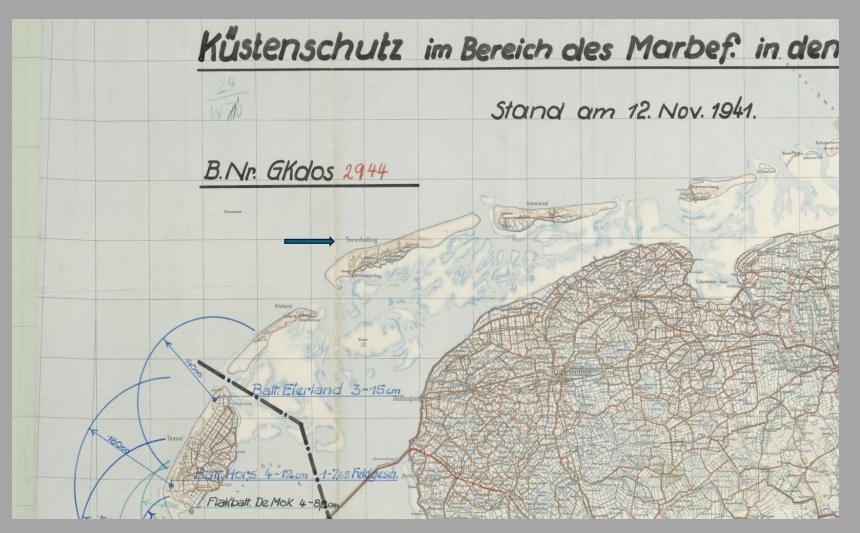




Coastal defence positions (21 April 1942 – 21 December 1942).

Bundesarchiv. 2025

The above map indicates radar position TIGER. This position was used by the Luftwaffe to surveil the coastal areas and guide German night fighters to intercept allied aircraft.



Historic map of Terschelling Island. Location of Würzburg Radar.

Bundesarchiv. 2025



Current map of Terschelling Island.

GPS Tracks Pro. 2025

Terschelling Radar Position TIGER

The island Terschelling is situated off the coast of Northern Holland. It was chosen for the installation of the radar position named TIGER. Its Würzburg Riese radar systems could detect aircraft up to 80 km away. Radar devices played a crucial role in night fighter tactics. Enemy aircraft approaching the Dutch coast could be detected and night fighter units could be alerted 15 minutes before the bombers reached the coastline. This way the night fighters could intercept the bombers. A chain of radar positions followed the bombers on their way in and out of Germany and constantly guided night fighters to intercept.



Würzburg Riese radar system (c.1941).

Nederlands Institute voor Militaire Historie. 2025



FuG 202 Lichtenstein radar fitted to Bf 110 G-4 (c.1942).

Nederlands Institute voor Militaire Historie. 2025

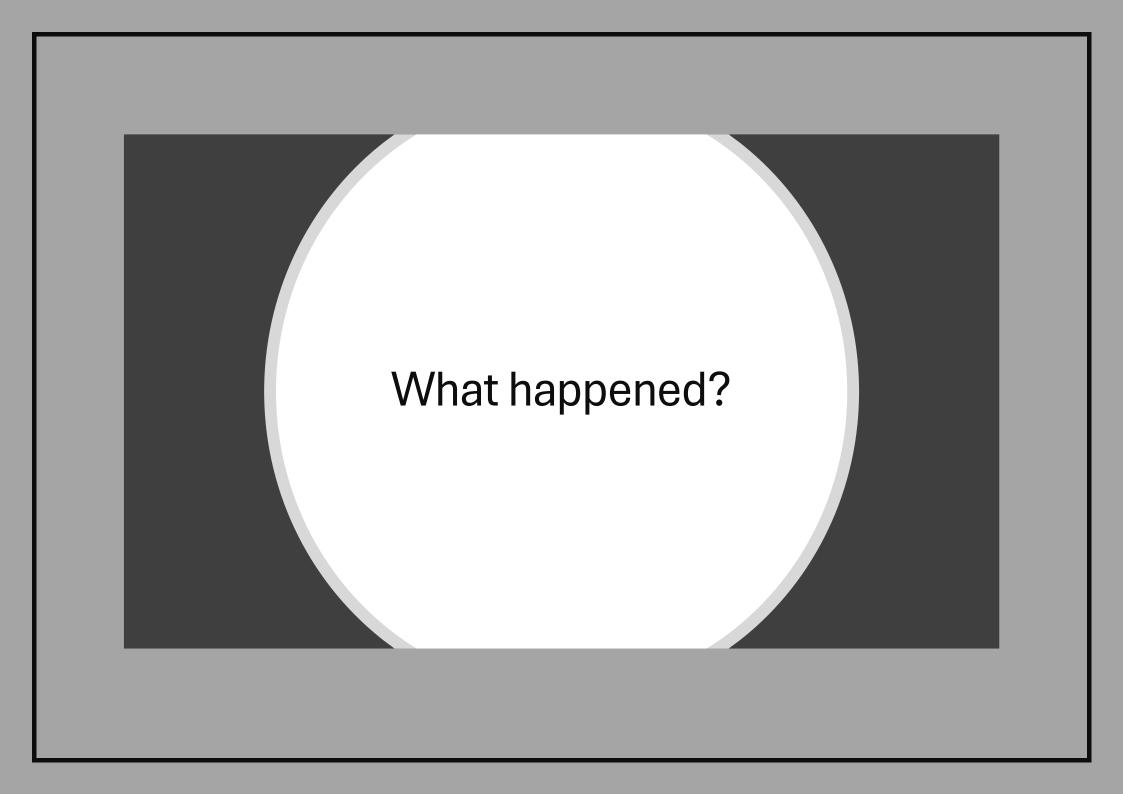
Rudolf Sigmund

Hauptmann (captain) Rudolf Sigmund was a skillful night fighter pilot who became an ace and was awarded many medals. Most notably was the Knights Cross of the Iron Cross, which was awarded to night fighter pilots after 10-15 confirmed victories at night. Sigmund flew a Messerschmitt (Bf) 110 G-4, which was most probably fitted with a Lichtenstein radar system. Below is the claim account for shooting down HE346. This was his 22nd confirmed claim of WW2.

Hptm. Rudolf Sigmund: 22 10./NJG1 Wellington Waddensea Holwerd/Ternaard (DL 91g, prob. Tiger): 4.800 m. 02.43 166 Sqn Wellington HE346

Sigmund found his enemy after being guided by local radar position TIGER based on Terschelling island.





The Fateful Encounter

Vickers Wellington S/N HE346 was tasked to bomb the Nordstern synthetic oil plant in Gelsenkirchen. The bomber dropped incendiary bombs; however, the attack was relatively unsuccessful. During their journey back to Britain HE346 and the other bombers involved did chose different flight paths. Some of them returned lucky and reported the absence of flak on route to the target. Others, according to the Operational Record Book, experienced heavy amounts of flak on the way to and from Gelsenkirchen. The heavy industry core of Germany was situated in the Ruhr valley. It was there that anti-aircraft artillery was heavily massed. In addition, there were many night fighters patrolling the skies. Chances were high that Allied aircraft were spotted and shot at. Flying into the industrial heartland of the enemy was always a game of hazard.

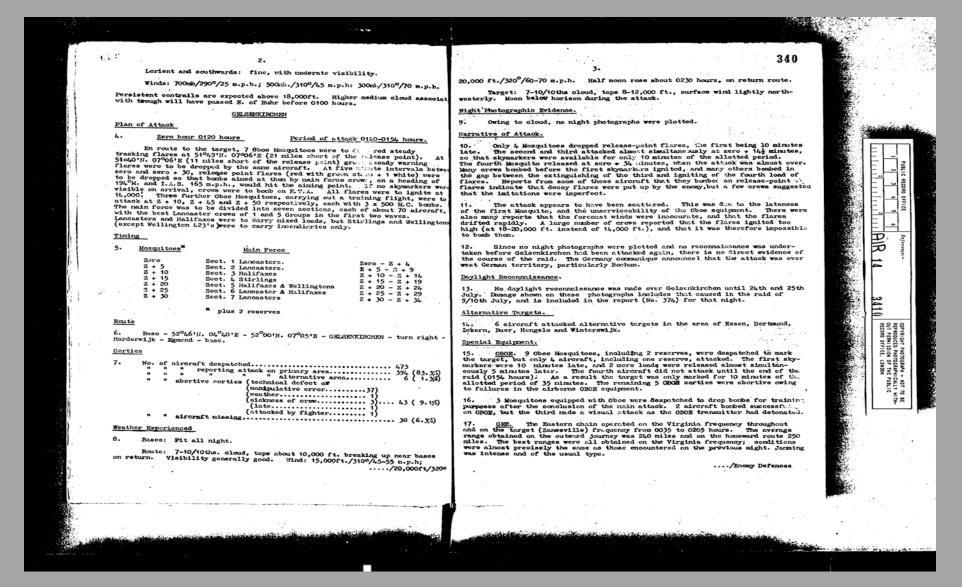
HE346 was encountered by night fighter Rudolf Sigmund while the bomber was already flying to the Northwest and flying over the North Sea. Sigmund approached the bomber from behind and below and aimed at his prey's engine nacelles and the fuel tanks just beside them. By moving his control column very gently his Bf 110 banked, causing the projectiles fired to literally walk from one side of the wing through the fuselage to the other side of the wing. By destroying the engines but most notably rupturing the fuel tanks and the bomber lost its propulsion. A safe method to down any aircraft. Unconfirmed reports stated that the Wellington was hit, set ablaze and began to lose height. It turned back and headed back to shore. This was contrary to the initial theory that HE346 had crashed into the IJsselmeer. In a letter to the Royal Australian Air Force from Alfred Mattress' father he states that he was informed by a reliable source that five parachutes were counted leaving the aircraft. Unfortunately, in response to the letter from the Royal Air Force, this claim could not be substantiated, nor was the reliable source ever knowingly identified. In 1991, evidence found at the site led to the aircraft officially being recognized as HE346, which all but confirmed that the initial report of HE346 turning back and heading inland was accurate. The wreckage remained buried deep in the ground until the National Program for Aircraft Recovery made the decision to recover the plane.

Post Mission

The document displayed is an extract from the Operational Record book (Air 27/1089). The comments shown are those made by crews involved in the Gelsenkirchen mission. The numbers in columns 4 and 5 indicate take off and return times for the aircraft. The crew of HE925 reported P.F.F flares not very successful. The Path Finder Force (P.F.F) navigated the route to the target area dropping markers/coloured flares for the rest of the flights to follow. As stated, these were not very successful on this mission.

25/June.					AFFEIDIX.A.56
EE.925	P/O.H.A. Aberry. P/Lt.J. P. Brind. P/Sgt. 7. S. Tait.	GM_SENKIRCHEN.	2559	0351	Bomb load 420 x 41b, 50 x 41bX 32 x 301b, Incendiaries Bombed from 17,500ft. Sustained tiny flak hole in port wing. P.F.F. flares not very successful.
F.455	Sgt.E.S.Cunliffe. Sgt.J.A.C.Newman. Sgt.F.Jackson. Sgt.R.W.Halmes. Sgt.A.R.Harrup. F/Sgt.K.B.Fhillips.	åo	2342	0402	360 x 41b. A0 x 301b. Incendiaries. Bombed from 16,000ft. 10/10ths. cloud to 10/12,000ft. Fires observed burning throughreak in clouds. Quite a successful trip.
P. 922.	P/O.W.B.McGinn. Sgt.R. Hadley. Sgt.J.P. Whittaker. Sgt.G.I.Turnbull. Sgt.R.Henshaw.	do	2341	0557	Bomb load 360 x 41b. 40 x 301b. Incendiaries. Bombed from 16,000ft. Extremely unusual raid owing to absence of flak on route and large number of night fighters.
. 114	F/Egt.G. Ashplant CCM Sgt.P.C. Curnings. F/Sgt.H. R. Ross. Sgt.C.M. R. Anderson. F/Sgt.A. Jeffery.	do	2340	0424	Bombed from 16,000ft. Clow from fires seen through clouds. A good trip.
, 346	F/Sgt.C.A.Mattress. Sgt.A.Mortimer. Sgt.J.P.Priestley. Sgt.N.R.Parry. Sgt.T.Ball.	do 23	38 34		Aircraft missing. No news take off.
(e.614	F/O.J.A. Wilkins. F/O.J.G.Hutcheon. P/O.G.R.Mmro. Sgt.C.E.Foster.	do	2350	0356	Bomb load 450 x 41b. 32 x 301b. Incendiaries. Bombed from 16,500ft. Vimibility excellent. Cloud illuminated by fires. A good trip.

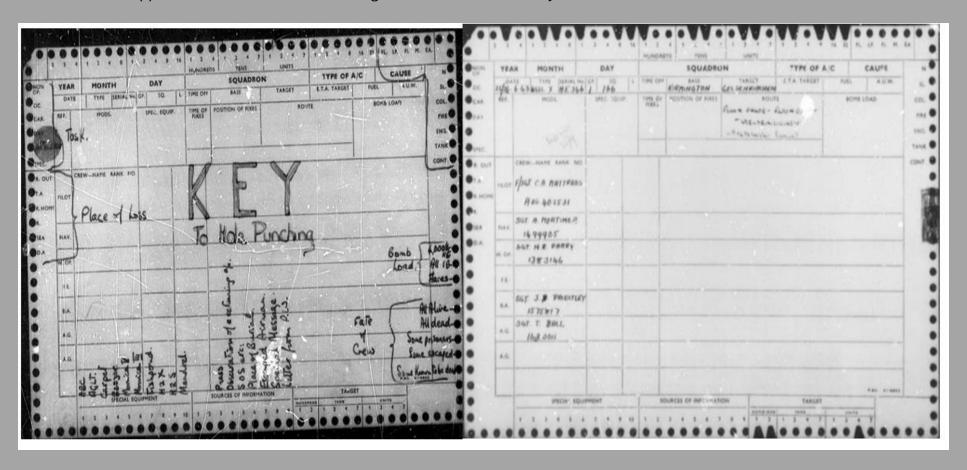
339



618	341	
Enemy Defences.	5.	
18. Plak and Searchlights. Intense heavy flak was reported at Gelsenkirg and over the Rahr, initially accurate predicted fire, and later an intense barrage round sky-markers. A small amount of flak was also encountered at Amsterdam, Iswiden, Den Helder, and Egond. In the target area cloud rendered the searchlights ineffective, and only a few were scene in reute, nostly at Amsterdam, where comes of 7 to 20 beans were working in co-operation with hear and the searchlights ineffective, and only a few were scene in reute, nostly at Large musber was almost certainly due to barrage fire concentrated around the sky markers. 19. Pighters. Intercepted Wireleas Traffic revealed considerable control night fighter activity, mainly during the late stages of the raid. Patrols of the patrols were reported, but there were 22 claims of victories in the areas of Bergen/Alksman Arnhos /Delon (2), Twente/Enschede (5), Vanlo (3) and Gilse/Rijon (7). Gt it coptions were reported, including 22 attacks, (5 cutdound, 5 over the target and 15 homebox and 29 approaches (6 unbound, 14, over the target and 9 homebox and 29 approaches (6 unbound, 14, over the target and 9 homebox and 29 approaches (6 unbound, 14, over the target and 9 homebox and 29 approaches (6 unbound, 14, over the target and 9 homebox and 20 and 15	### 1. Pathfinder Force. Attacked within the prescribed period (0120-0154)	FRILLE SECTION OFFICE Infrance:
Encay wireless traffic and observations by crews suggest that 5 airon vere shot down by flak and at least 20 by fighters. The flak leases occurred Amsterdam (2), in Dutch coastal areas (2) and over the target (1). Leases to fighters were nainly on the return route. 2 Ju.88, one Me.109 and one unider fled oncay airoraft were shot down.	EMP/IA3. RG/S.2634,2/1/ORS.3. 1 a 18th September, 1943.	3410
Minelaying. 21. 8 Wellingtons of 1 Group successfully laid 16 mines off the Prisian Islands, without incident.		RICHT PHOTODUCED PHOTODUCED PHOTODUCED PHOTODUCED PHOTOGRAM (SSION OFFICE, AND
22. 3 Group desputched 7 Stirlings and 2 Lancasters to lay mines off La Fallios and in the Gironde Estuar. A tytul of 28 mines was laid by 8 aircr but the minth (a Lancaster) was missing without trace. The other Lancaster was intercepted by an energ mirraft, but no combat developed.	· af	MORPHICE PROPERTY OF THE PROPE
23. 14 Wellingtons, out of 16 despatched by 4 Group, laid 28 mines off Lorient and St. Nasaire. 2 aircraft returned early, and one was damaged by	ru e	CE CHAIR
····/AFFFEDIX		
New year of the control of the second of the control of the contro	The second secon	
The state of the s		Side to a control of the control
	والمنافضين والمنافض الحاور والمراور المراج والمنافض والمن	The second second second second second

7	TARGET	GROUP	TYPE	- diame	A/C R	EPORTING	LBORT	VE SORTIES	MISSING		WGE		INTERCE		RESULTS Tons of Bom
1			2.9	7	PRIM- AREA	ALT. AREA	OVER ENEMY TERR.	NOT OVER ENEMY THER		FLAK	TER	NOT ENEMY ACTION	ED ED	NOT ATTACK- ED-	н.е.
ì	GELSEN-	8 P.F.F.	Mosq.IV	12×	7.		5			1		-	-		P. 587.8 7
*	KIRCHEN-	1	Lanc.I Lanc.III Well.X	64	18 52 8	2	=	. 8	2	1 AC 2 AG+4	Ξ	=	1	6	M. 42-0 Heavy Bomb
		3	Stir-III Stir-III	66 12	58 9	=	=	3	1 5 1	+7 2	1 AC	1×AC	3	12	P. 8 1
		4	Hal.II & V		75	-	2	7	3	3 nC+9	-	1E +x	5	8 2	<u>M. 1</u>
. 1		5	Well.X Lang.I	37	19 31	-	-	1	2	1E + 8	-	=	2	- 8	
		6	Hel.I & V	77	23	2	-	8	3	2AC+15	-	1 ^B ,¢	3	6	
	GELSENKIRCHIS	N TOTAL	Well. X	473	. 8	- 6	8	35	30	1E+8AC	1 B	1E+19	22	62	
	MINKLAYING	1 1	Well.X	8	8	-	-			+ 52	24.C +1.+1.B	3C+1	-		16 mines
	PRISTANS LA PALLICE	3	Stir.I Stir.III	1 2	1 1	=	-	=	=	=	=	Ξ	=	-	6 minos 3 minos 6 minos
	GIRONDE R	3	Stir.I Stir.III	1 3	3	=	=		=	Ξ	Ξ	Ξ	=	-	3 mines 10 mines 12 mines
	LORIENT ST. NAZAIRE	4-	Well.X Well.X	8	8	=				1	=	_=			16 mines
**	MINELLYING ?	TOTAL		33	30	_	-	2	1	1	-	-	-	1	72 minos
	TOT	A L		506	424	6	8	37	31	1F+P \0 + 53	1B+ 2AC+1	1E+1B 3AC+1	22	63	
			3 On traini		k - 1nc			olumn.	3403-124JF			e e e e e e e e e e e e e e e e e e e			Arren per
				PUBLIC FORLY WIT	H OF THE H OO HOOM	PERMISSION	0038 0038 0	341	11	BIE	9	e_	₩ €	z	Ξ,

The document below right is the Loss Card completed for missing aircraw. The punch holes around the edges are amended if and when details of what happened becomes known. The image to the left shows the key to how the details were recorded.



Loss card key and Loss card for the crew of HE346.

Lancasterbombers.net. 2025

Aircraft Movement Form 78.

These were completed to detail the movement of an aircraft during its time in service. The card shows that HE346 arrived at RAF Kirmington on the 1st of June 1943 as a new aircraft. Reported as category E Missing (from an operational sortie) on 25/26th June 1943 and then subsequently signed off commission (SoC) on the 26th of June 1943. This means that the aircraft had officially been declared no longer with the squadron.

Type of Aircraft		Mark R.A.	F. Number
WELLING	TON:	X HE.	346
Vicker blester		Maker's air	er an
Unit or Station or Cat'y Cause Contractor	Date	Authority	Gp. Allot.
166 ogd-	15 25 1	1623/120	1
cert 5 min	- 26/1	A0347	
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		26401	de

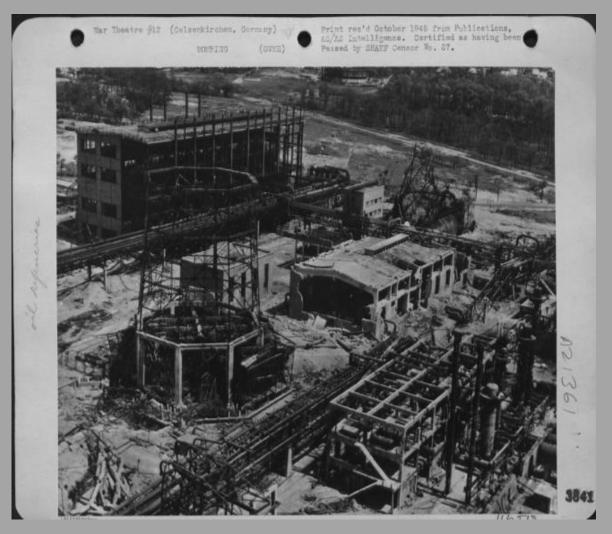
A.M. Form 78			

Lancasterbombers.net. 2025

APPENDIX. A.70. No.166 Squadron, R.A.P. Kirmington 25/26 July. HE.544 Wellington I 00.56 . Target area. Pairly dark, good visibility with slight haze. No searchlight or ground co-operation observed. No unusual phenomena. 1 (One) JU.88 . No lights carried. . Gums situated in enemy aircraft nose. Type: Machine guns. . Enougy aircraft first seen by rear gunner dead astern and on the same level as our own aircraft at 200 yards range. 10. Attack from dead astern level, breaking away immediately below our 11. Our aircraft corkscrewed. R/G gave the evasive order "Prepare to corkscrew" as soon as enemy aircraft was sighted and was immediately carried out by our pilot on the execution word "Go" from the R/G. 12. The E/A opened fire at 200 yards range. The E/G replied immediately in a continuous burst until K/A disappeared below our aircraft. 13. The R/G's tracer appeared to pass close to the E/A nose. Damage to our aircraft consisted of bullet holes through bomb doors and mandrel aerial. No casualties. 14. 500 rounds. No stoppages, no turret trouble. 15. Rear Gunner 1216360 Sgt. Hepworth. Trained at 30 CTU and 9 APU. 16. Monica fitted. Warning not received. 17. Correct evasive action was carried out by this crew for the type of attack committed, and the correct evasive orders were given by the rear gunner. The long burst with which the R/G opened fire at this range did much to throw the enemy pilot off his sighting. A good concentration of tracer was soon built up around the E/A. Sgd. P.H. Fitton. P/Lt. Squadron Gunnery Leader,

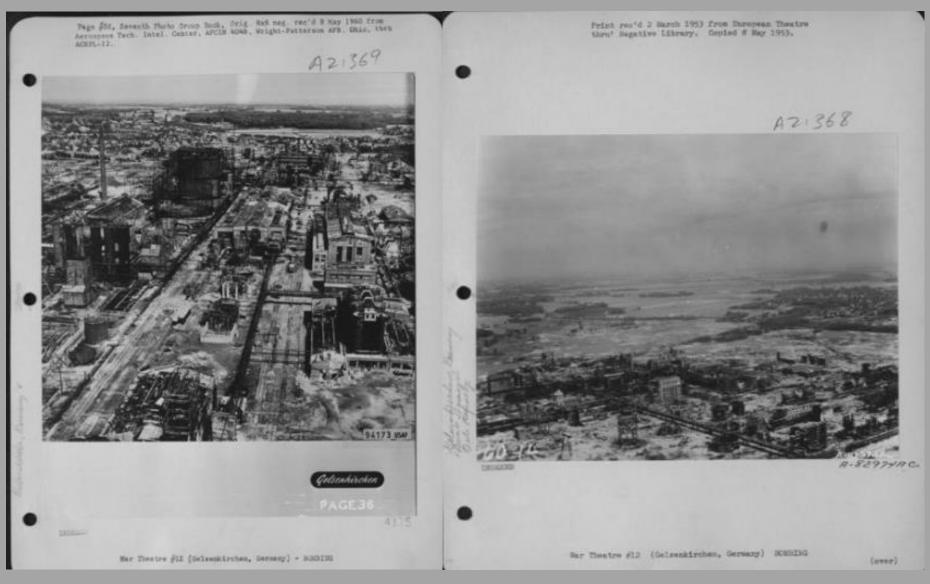
This Combat report was written by Flight Leftenant F.H Fritton of Wellington HE544. In his report he gives a detailed account of the mission, weather conditions and enemy contact. He also documented the evasive manoeuvres that he and he crew had to take to avoid being shot down. Although, it is a different aircraft, the report from F/Lt. Fritton highlights what aircrews endured in the skies above Europe. We can only speculate, however, it is likely that the crew of HE346 would have had a similar experience.

Gelsenkirchener Bergwerks-AG (Gelsenberg), Nordstern and others used coal as a raw material to produce artificial gasoline. They were amongst the top targets for both the RAF and the USAAC/USAAF since Germany lacked high quality crude oil (apart from Ploesti). By destroying the Gelsenkirchen plants the German armed forces were left dry. In the due course of this, the Luftwaffe had horses and bulls tow aircraft to the runways where a few months earlier pilots would idle and taxi across the fields. The Americans documented what they did to the targets, however, the British would have caused damage like these images show.



Nordstern Synthetic oil plant.

National Archives Catalog. 2025



Bomb damaged Gelsenkirchen.

National Archives Catalog. 2025

The image below was also taken by US aerial reconnaissance aircraft. The image was captured in October 1944, several months after the Gelsenkirchen raid. The darker area to the right is where the Nordstern synthetic oil factory was located.



National Archives Catalog. 2025

The National Programme for Aircraft Recovery

During the Second World War, over 5,500 aircraft came down in the Netherlands, both Allied and German aircraft. A few of the airmen were lucky to survive the crash, but many others were not and sadly lost their lives.

In many cases the deceased airmen were found on land or washed up on the Dutch shores and were buried. But some of the airmen went down with the aircraft and have never been found; they were listed as Missing in Action (MIA). The aircraft crashed with enormous force and pierced deep into the soil – sometimes meters down- making them impossible to recover. The airmen's families were left with great uncertainty and grief. They never received answers about what happened to their loved ones, who never returned.

After the war, the Netherlands was rebuilt and life moved on. Yet for the families of these airmen, the loss remained unresolved. That is why the Dutch government established the National Programme for Aircraft Recovery: to fulfil the heartfelt wish of surviving relatives to bury their loved ones and to finally gain certainty about what happened to them.

To this day, 1,085 airmen are still missing in the Netherlands—young men, most of them in their twenties or early thirties. They lie hidden in some 400 aircraft wrecks scattered across land, lakes, and sea. Research by the Study Group Air War has shown that it may still be technically possible to recover 30 to 50 of these aircraft, with a good chance of finding the remains of missing airmen.

The National Programme was set up in 2019 and aims to recover these aircraft over the next decade. In this way, we hope to write the airmen's last chapter: to recover their remains so they may finally receive a proper burial. In doing so, we also hope to offer the families both closure and a place of remembrance—a grave they can visit, honour, and keep their memory alive.

So far, nine recoveries have already been carried out and remains have been found. The airmen have been buried, surrounded by their families. In September 2025, the tenth recovery will begin.

In 2025, we celebrate 80 years of freedom—a powerful reminder of how precious freedom is and how easily it can be taken away. It is crucial that we continue to remember and commemorate the Second World War, in the hope that what happened then will never happen again.

That is why we must pass on the stories of the war, even when they are difficult stories of loss, suffering, and sacrifice. We can learn from our past and use it to build a better future. The stories of the lost airmen must never be forgotten. Each crew has their own story to tell, and we owe it to them to ensure their memory lives on in the next generation. It is the least we can do.

The HE346 magazine, created by schoolchildren, is an incredible project. Here, the story is passed on to the next generation—by the next generation. The magazine is a heartfelt tribute to the downed crew. It shows us, that we must always remind ourselves that freedom should never be taken for granted. Lest we forget.

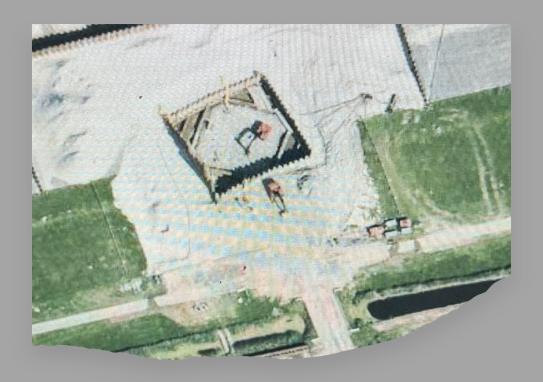
Lilian van Mourik.

Municipality of Almere, thet Netherlands

Project manager recovery Short Stirling BK716

Advisor on the National Programme for Aircraft recovery

The Recovery



Aerial image of recovery area.

Leemans Speciaalwerken. 2024

The recovery of HE346 did not take place until July 2024, however, at various time points since the crash, there has been evidence to suggest that it was a British aircraft. The timeline below shows how the aircraft was finally identified.

- **26**th **June 1943** Local residents visited the crash site which was a deep muddy crater. A glove with Sgt. Priestley written inside was recovered and handed to the local Berger meister, however, the glove was lost.
- 1977 Workers unearthed aircraft fragments. This led to further excavations where human remains, and more aircraft fragments were found. The aircraft was so deeply buried in the ground, the decision was made to leave it where it was.
- 1978 From the fragments of wreckage, the aircraft was confirmed to be British, however, there was no confirmation of the plane being HE346 at this point. The remains that were recovered were buried in Groesbeek Canadian War Cemetery.
- 1991 Dutch metal detectorists discovered a signet ring engraved with the initials JP. The ring was shown to the widow of Sgt John Priestley, who confirmed that the ring did belong to him. The confirmation of this led to the crash site to be officially declared that of Vickers Wellington HE346.
- 29th July 2024 Recovery of the aircraft begins. Recovery must be completed before the October storm season begins.
- **September 2024** Recovery of the aircraft is complete. Human remains and several personal artefacts, including a leather flying cap and oxygen mask were found. Also recovered were engines, gun turrets and landing gear.

At the time of writing, work is still ongoing on the artefacts recovered.



Historic map of Holwerd. Resting place of He346.

Bundesarchiv. 2025



Crash Recovery Area. Holwerd. Netherlands.

Leemans Speciaalwerken. 2024



Crash Recovery Area. Holwerd. Netherlands.

Leemans Specialwerken. 2024



Crash Recovery Area. Holwerd. Netherlands.

Leemans Specialwerken. 2024



Memorial to HE346 aircrew. Holwerd. Netherlands.

Traces of War. n.d



The Memorial Spire shown here is located in the centre of the Wall of Names at the International Bomber Command Centre. The IBCC is the only place in the world that lists all 58,000 personnel that died during their service with Bomber Command. The number of losses in Bomber Command during World War 2 is greater than those in the current Royal Air Force. Created from weathered steel. Each panel has the names of those who died, and does not recognise rank or honours awarded, just simply the names of the deceased.

Bomber Command Memorial. IBCC

Michelle Tasker, 2025

The story of HE346 is sadly not the only type of this kind. We must also remember that stories like this are far and wide, and families of all nationalities involved in World War 2 lost loved ones. Further research on other aircraft that have been listed in documents throughout this magazine has shown that the crew of HZ314 were also sadly killed in action and a further 2 crew members from HF922 were injured.

Luftwaffe pilot Rudolf Sigmund was also sadly killed in action. Luftwaffe historian Christian König explains what happened to him.

On October 3, 1943, Hauptmann Rudolf Sigmund, as group commander of III./NJG 3, shot down an Avro Lancaster with registration DV222 (squadron code GH-P), which crashed into Lake Walchensee (a lake in Bavaria). It was his 28th kill. One night later, he took off in his Bf 110 G-4 (serial number 5560, D5+AD) for another mission, which he would not survive. In the greater Kassel area, Sigmund's destroyer was hit by its own flak and crashed near Göttingen. Hauptmann Sigmund, along with Fw Hugo Bauer and Uffz Johannes Dittrich, met their deaths.







We must remember them all!

Reflections from the Teacher

Involvement in this project has provided the children with numerous opportunities to take time to ponder, to exercise curiosity, to make connections and to question various aspects of World War II. It is with great pride that I have witnessed their steadfast desire to seek further information, pursue greater understanding, and acknowledge the atrocities and advantages that this war brought about. On the one hand, the project enabled the children to develop a wider global view of war by considering the relationships between countries, government rule and leadership, and economics; yet it also encouraged much thought about individuals and the impact of the war on them.

Whilst the children developed their knowledge of World War II, especially regarding aviation, and learnt about the process of research and recovery, the most striking impact of the project for me was the emotional connection to the airmen it generated in the children. It was incredible to see their compassion for the airmen, their wives and close relatives and the range of emotions they experienced as they placed themselves in their shoes, wondering 'What would it be like for me now if my dad, brother, uncle, or cousin, went off to fight and never, ever came back?' I know the children have developed greater empathy, and are full of admiration, thankfulness, and respect for the service and ultimate sacrifice the airmen paid.

It has been fascinating to listen to Michelle sharing her vast knowledge and experience; I have definitely learnt a great deal alongside the children! I am truly thankful for all the time, effort and care she gave to planning and preparing the weekly sessions and leading them with a genuine desire to support each child's learning and encouraging their full involvement in the project. Michelle managed the children's questions and conversations brilliantly, even though we often went off on a tangent following the children's interests and lines

of enquiry! She pitched her responses perfectly, introducing new vocabulary and knowledge thoughtfully. Harry's dedication to the project, his passion for history and his willingness to teach others were very impressive; he has been an inspiration to the younger members of the group.

It has been a real pleasure to meet Christian, Lilian and other members of the team, and a privilege to benefit from their extensive expertise and experience. I am in awe of their remarkable recovery projects. I would like to thank them for willingly giving up their time to support us, for their kindness and support, and for being a perfect audience for our presentation. I really hope we can work together again in the future.

Mrs. Bird

Class Teacher/History Lead

St Augustine's CE Junior School

Reflections From the Children.

I learned more about WW2 and the Luftwaffe. I learnt lots from my teammates. Michelle also told us lots about the war. Christian gave us lots of information on the Luftwaffe and explained some of the reasons why war broke out. It was nice to find out about both sides of the war. I had a fear of war and didn't like hearing about the past as I was frightened it would happen again. This project has helped me over come my fear as I know things are different now and that we can learn about things not to do. I feel very proud to have taken part in this project. I got to work with people I knew and met new people too. I had fun learning with a group of smart, brave, and caring people, who shared the same interest. I looked forward to learning new things every week.

Hazel, aged 8.

I became more knowledgeable about the technology of the war. I was also pleased to learn more about the Luftwaffe from Christian. His knowledge is incredible. It was hard to find records of the crew, but Michelle managed to get them for us. The project did sometimes make me feel a bit sad, but I have also gained a lot of respect for the all the men who served. I enjoyed everything about the project and would love to do a project about a German plane.

Edmund, aged 11.

I learnt a lot about WW2, I didn't really know anything when I started and was curious. I wanted to challenge myself to learn something new. It was very interesting to learn what we did. I struggled with some of the words, but Harry used to sit with me and help me find out about the crew. We could ask Michelle any questions we wanted and if she didn't know straight away, she would find out for us, or if it was about the Luftwaffe, she would ask Christian and he would tell her what to tell us, so that was good too. I liked learning about it all.

Taritra, aged 8.

I really enjoyed the project. I learnt a lot about the crew. I was scared to read in front of people for the presentation, but Christian sent us an email before we done it and said we had done really well and that he had confidence that it would be a success, so I felt a lot better, and I am proud of myself for speaking on the presentation. I would like to do another project with Michelle.

Zainab, aged 8.

I enjoyed learning about the RAF during WW2 and how brave they were. I learnt a lot of new information about WW2, things like the German radars that Christian told Harry about. It was good to work as a team because we could talk about things we didn't understand, and Michelle would explain it a bit more, so we got to understand it. She's really nice and very kind. We could not have done anything like this without her guidance, knowledge, and support.

Sudhindra, aged 10.

I like doing the project because I want to learn more about WW2. Michelle is my mum and done a project about BK716, so I wanted to do this with her. It was good learning about the planes, and I really liked the stuff Christian told us about the Luftwaffe, he's really cool. I found it a challenge at times, getting information was hard, but we worked as a team and managed to do it. I had never done a presentation before, and it was a bit scary, but I am pleased I done it.

Jack, aged 10.

I wanted to do this project because I was one of the children that Michelle introduced to the BK716 project, and we presented it to the school last year. Michelle is my mum and when she said this was going to be done, I asked Mr Brunt if could take part. I go to secondary school now, so I came from my school to help with the research. I chose to do to the parts on the Luftwaffe. I had never done anything on them before and it was a challenge, but Christian helped me a lot and I have learnt lots from him. I also enjoyed working with the team doing research. I was able to help the younger ones find out what they needed. Learning about what happened during WW2 can be quite difficult to hear, but it made me realise that we must do it so that we can learn from it. It was really challenging to learn some of the German terminology but at the same time it was interesting to learn the German perspective too. I would like to investigate the German plane that crashed near HE346.

Harry, aged 12.

I learnt about WWII and how to work with people that are not my age and because of this I became more knowledgeable. My challenge was to write and find out the person I chose to research. Something that I had never done before. I overcame it by persevering and trying my very best. It made me feel part of something very important and the work was hard sometimes, but because I carried on and it made it worthwhile. We also had Christian join us online and he was very good. He explained a lot of things to us about the German Luftwaffe. It made it a lot better to have both sides of the story to tell, he is a great guy. This made me even more knowledgeable.

Lia, Aged 8.

Epilogue

One of the most noteworthy aspects of this project is the diverse participation. With a mixture of boys and girls that span years 3-6 it is truly remarkable what you have put together. I am impressed that you are only aged between 6 and 11 years old. To undertake an in-depth project at such young ages highlights how much you believe in what you are doing. Not only this, but it also showcases the impressive range and talent within your larger school community.

I also find it fantastic that Harry, despite being a bit older and currently attending Nene Park Academy, as a year 7 student joined the project. As a former student of St Augustine's and his previous involvement with the Stirling BK716 project at the school, Harry's involvement has allowed all of you to explore topics from different perspectives. His assistance with research has indeed accelerated your development and contributed to the project's success. Once again, it is truly amazing his school has allowed him to take part in this project.

I must acknowledge the outstanding efforts you have all put into this project. Across the Channel, I understand that your teacher, Mrs. Bird, and historian Michelle Tasker played a significant role in lecturing, and you kids have excelled in learning and storytelling. Projects like yours are quite uncommon in Germany and should be thoroughly reviewed and appreciated. Your dedication and the outstanding results you have showcased in your research studies are truly commendable.

I feel honoured to have been a part of this project.

Christian König

Luftwaffe Historian

Glossary

Aircrew Individuals that flew in aircraft, regularly maintaining the same crew members for each aircraft.

Allied Powers (Major) Great Britain (and all its Colonies and Dominions). France, Australia, New Zealand, Canada. United

States of America (from December 1941).

Appeasement A diplomatic strategy of applying concessions by politicians to avoid war with a foreign power or

country.

Axis Powers (Major) Germany, Italy (until October 1943), Soviet Union (until June 1941). Japan (Asia-Pacific only).

Battle of Britain Fought between 10th July 1940 and 31st July 1940, although German historians date this as July 1940 –

May 1941 as this also overlaps the blitz. The Battle of Britain was the first major military campaign to be fought entirely in the air. Air battles took place between the Royal Air Force, Fleet Air Arm of the Royal Navy and the German Luftwaffe and Italian Corpo Aero Italiano. Under Führer directive number 17, the Luftwaffe were to achieve air supremacy over the Royal Air Force. The Luftwaffe failed, and

this became Germany's first major defeat of World War II.

Battle of the Ruhr Located in the North Rhine - Westphalia region of Germany, The Ruhr Valley was a large industrial

area that was thought to be the centre of German heavy industry. From the 5^{th of} March to 31st July

1943, RAF bomber command carried out a series of bombing missions to destroy factories,

transportation, and synthetic oil plants. Targets of the Ruhr Valley included Gelsenkirchen, Essen, and Düsseldorf. Cities such as Cologne were also bombed as part of the wider area of the Rhine Ruhr

region.

Berger Meister Mayor.

Bomb Aimer Responsible for targeting and releasing of bombs from the aircraft.

Campaign Conducted by military forces, a campaign is a series of tactical and interconnected offensives with a

common goal or objective. These are usually carried out during times of war or conflict in a specific

region or area.

Chamberlain, Neville British Prime Minister from May 1937 – May 1940, Chamberlain was one of the politicians that

established the foreign policy of appearement. After declaring war on Germany in September 1939,

Chamberlain resigned in May 1940 after just 8 months of conflict. Chamberlain's policy of

appeasement has been the subject of much debate, with many arguing that it was a mistake and that

Chamberlain was weak as Prime Minister for allowing Hitler to continue to break the rules of the

Treaty of Versailles.

Churchill, Winston Successor to Neville Chamberlain and British Prime Minister for the rest of World War II. Initially

unpopular with his Conservative party peers, Churchill eventually won them over and became a

successful leader. His first act was to form a War Cabinet, a coalition government that ruled for most of the war years. Churchill is considered to be one of the greatest leaders in the history of Great

Britain. His accomplishments during World War II led to him receiving a knighthood in 1953.

Dijk Embankment.

Fliegertruppe Air arm of the German Imperial Army.

FuG 202 Used to approach targets. Distance, altitude and lateral position would be measured. Antennas

fitted in the cockpit, and the outer aircraft gave a maximum range of approximately 6km.

Gardening Mission Usually carried as the first mission of a new crew. It was an airborne operation that involved mines

being dropped from the aircraft into the sea, ports, harbours, and prominent shipping lanes. The mines were dropped in rows, similar to how seeds are sown in a field or a garden, hence the term

'gardening.'

Gelsenkirchen City in the Ruhr valley and target destination of HE346, which carried out a bombing raid on the

Nordstern synthetic oil plant.

Geodetic Airframe Designed by Barnes Wallis, but not the first-time an aircraft had been built using this type of frame. In

1909 the Schütte Lanze Airship SL 6 and the Latécoère 6 French biplane in the early 1920's both carried this design. The geodetic airframe was built in a basket weave design from spiralled metal and then two sections arced and joined to cancel out the individual strain. This type of airframe created more strength along the fuselage of an aircraft. Vickers Wellington used this type of airframe

on the Wellington, Wellesley, Warwick, and the Windsor.

Hitler, Adolf Elected Chancellor in 1933 and becoming the leader of the Nazi Party, Hitler assumed the title of

Führer in 1934 and wanted Germany to become the Third Reich. As Führer, Hitler re armed Germany and created new alliances. Hitler's regime was responsible for many atrocities during the war,

including the holocaust.

Ijsselmeer Fresh water lake in Central Netherlands. Bordering the provinces of Friesland and Flevoland, North

Holland.

Incendiary Designed as weapons to start fires. Often referred to as bombs, incendiary devices do not actually

explode. Filled with materials such as white phosphorus. magnesium powder and napalm to name a few. The outer casing would open upon release from the aircraft, and a fitted explosive charge would ignite a fire. A series of chemical reactions would slowly occur to create ignition, not detonation causing raging and destructive fires all over the target areas. Several different types of incendiary

devices were used during World War II.

Knights Cross The highest military award in the German Luftwaffe. Awarded for gallantry, the wearer of this medal

would have often been considered ad a hero. Awarded for 10-15 victories claimed by a night fighter.

Lichtenstein Radar Developed by Telefunken, a German radio and television producer, the Lichtenstein radar was the

first radar to be used exclusively for the purpose or airborne interception. Fitted to the nose of the Bf 110 was a Matratze aerial set. Working in conjunction with the Würzburg Reise radar system, the

night fighter would be able to intercept enemy aircraft.

Luftwaffe Translates to Air war. Aerial branch of Germany's military force during World War II.

Mission Usually a specific instruction to a military force to complete an assigned task of extreme importance.

Often conducted overseas.

Nacelle Streamlined casing on the outside of an aircraft, particularly one that houses engines.

Nazi Party Formally known as Nationalsozialistische Deutsche Arbeiterpartei (NSDAP), the Nazi party were a

far-right political party. Formed from extremist German nationalists, the party wanted to veer away from communism and work towards nationalism. The ideologies of the Nazi party were clear, anti-Marxist, anti-bourgeoise and antisemitic are just some examples. Through eugenics, the Nazi party wanted to create the 'Aryan Master Race' and to strengthen this they sought to exterminate Jews, physically and mentally disabled individuals, plus many more, in short, anyone that did not fit the

criteria they had set.

Navigator Responsible for keeping the aircraft on the right course during a mission.

Night Fighter Fighter or interceptor aircraft. Purpose built or heavy fighter/light bomber aircraft, designed or

adapted to be purposely used at night, such as the Bf 110.

Operational Record Book Logbook held by all squadrons in the Royal air Force detailing events, crews, target destinations and

outcome of a specific mission.

Path Finder Force Chosen from the best crews, the Path Finder Force were a specialist unit within Bomber Command.

Dedicated to target-marking for the rest of Bomber Command which was known as Main Force. Its crews acted not only as target-markers, but as guides and leaders on the long routes to the targets.

The Path Finder Force motto was clear "we guide to strike."

Pilot Individual who flew the aircraft to and from a mission. Also, in charge of the crew and required skill to

fly an aircraft under attack.

Ploesti Oil fields in Romania used by the Germans for their oil supply.

Plotting Table Based in an Operations room or centre, a person called a plotter would be positioned around a large

map called the Main Plotting map. This map was to show enemy aircraft and its position. Plotters

would be in contact with the filter room via radio, and constantly re plot the map as new information came in. The principle is similar for both the Allied and Axis powers; however, Allied plotters were predominately female and members of the Women's Auxiliary Air Force (WAAF).

Polikarpov Soviet single seater fighter aircraft.

RAF Royal Air Force. Air arm of the British Forces.

RAAF Royal Australian Air Force.

RAFVR Royal Air Force Volunteer Reserve. Unit within the Royal Air Force, however, all members joined

voluntarily. All members of bomber command were part of the Royal Air Force Volunteer Reserve.

Radio Operator Maintaining contact with ground bases where possible. Also responsible for obtaining a fix on

position if navigation failed.

Rear gunner Responsible for protecting the rear of the aircraft from attacking fighters.

Reparations Payments made by a defeated country to another after a period of war. Usually, to compensate for

war damage.

Squadron Applies to both nonflying ground units and flying units of the Royal Air Force. In respect of flying units,

a squadron would normally consist of 12-24 aircraft. Dependant on the type and/or size of the

aircraft the squadron may further be split into 3-4 flights.

TIGER sector German defensive bunker along the Atlantic Wall in the Wadden area.

Tenacity Means to have quality or be very determined.

Treaty of Versailles Designed as a peace treaty, The Treaty of Versailles was signed at the Palace of Versailles, France, on

28th June 1919, the treaty ended World War I between Germany and most of the Allied powers.
Separate treaties were signed with the other central powers who aligned with and fought on the German side. The treaty made Germany subject to harsh rules and ultimately laid blame for the conflict something that Germany did not wholly accept. Stipulations of the treaty meant that

Germany had to disarm, were limited to a military force of 100,000 men. An air force was completely forbidden under the treaty. Along with these and many other rules, Germany also had to pay reparations to the triple entente. The triple entente (meaning friendship, understanding and agreement) were Great Britain and Ireland, The French Third Republic, and the Russian Empire. Continuous violations of the treaty made by Germany are the major factors that led to the outbreak of World War II in 1939.

Waddenzee Wadden Sea - Area of peripheral sea located between the North Sea and the Netherlands mainland.

'Wimpy' Formally named after Arthur Wellesley,1st Duke of Wellington, the aircraft earned its nickname 'Wimpy' by its crews after a character in the Popeye cartoons. The Wellington was one of two aircraft named after the duke, the other aircraft being the Vickers-Wellesley.

Wireless Operator Within a Bf 110 the back seater was a wireless operator, cared about navigation and also served as gunner. Early G-4s forced the w/o also in the radar operation. Later variants carried a third man

specialized in radar only.

Würzburg Radar

Used by the Luftwaffe and the Kriegsmarine (German Navy), the Würzburg radar was the primary ground-based tracking radar for the Wehrmacht (armed forces of the Nazi party). The radar was developed prior to the start of the war; however, it did not enter service until 1940. Several models of the Würzburg were developed. The model featured in this document in the Würzburg-Riese or giant Würzburg. Post war, the Würzburg was used by the Dutch in the development of early radio

astronomy.

Bibliography and Further Reading

Cover Image: Vickers Wellington (B) MkII, S/N W5461 of No. 104 Squadron, Royal Air Force.

(Information kindly supplied by Christian König)

A.M Form 78.1943. Aircraft Movement Form 78. [Online]. Available at: www.Lancasterbombers.net [Accessed 20 August 2025].

Ancestry UK. 2025. Alfred Mortimer. [Online]. Available at: https://www.ancestry.co.uk [Accessed March 2025].

Ancestry UK. 2025. Ronald Parry. [Online]. Available at: https://www.ancestry.co.uk [Accessed February 2025].

Ancestry UK. 2025. *Thomas Ball*. [Online]. Available at: https://www.ancestry.co.uk [Accessed February 2025].

Boiten. T. E. W., 2008. The Nachtjagd War Diaries. Volume I: September 1939 - March 1944. Lampeter: Red Kite Publishing Ltd.

BArch. 2025. *Terschelling map of Coastal Defense positions (21 April 1942 – 21 Dec 1942)*. *RH – 88/137*. [Online]. Available at: https://invenio - The Federal Archive [Accessed June 2025].

BArch. 2025. *Map of Holwerd. HE346 Crash Location (12 November 1941)*. *RH24-88/132*. [Online]. Available at: https://invenio-TheFederal Archive [Accessed August 2025].

BArch. 2025. *Map indicating Terschelling Island. Location Of Würzburg Radar (12 November 1941). RH24-88-132.* [Online]. Available at: https://invenio-The Federal Archive [Accessed August 2025].

Campbell. J. L., 1977. Messerschmitt Bf 110 Zerstörer in Action. Carrollton: Squadron/Signal Publications.

Collins and Brown. 1995. The History Today Companion to British History. British Library. London. Pp 828-831.

Dargie. R., 2018. The History of Britain. From Neolithic times to the 21st Century. Baker and Taylor (UK) Ltd. Oxfordshire.

DeZeng IV, Henry L, and Stankey, Douglas G. (April 2024). *Luftwaffe Officer Career Summaries Section S-Z Version*. [Online]. Available at: https://www.ww2.dk/Lw%20Offz%20-%20S-Z%20Apr%202024.pdf [Accessed July 2025].

Fritton. F. H (F/Lt). 1943. Combat Report. [Online]. Available at: > Air Historical Branch | Royal Air Force [Accessed 21 August 2025].

Google Earth. 2025. Gelsenkirchen map. [Online]. Available at: https://earth.google.com/web/ [Accessed July 2025].

James. L., 1994. The Rise and Fall of the British Empire. Little, Brown, and Company. London. Pp 438-511

Hitler. A., 2022. *Mein Kampf (86th ed)*. Jaico Publishing House. Delhi. Pp 257-300

IBBC., 2025. John Peter Priestley. [Online]. Available at: https://internationalbcc.co.uk [Accessed April 2025].

IBBC., 2025. Wellington He346. [Online]. Available at: https://internationalbcc.co.uk [Accessed April 2025].

Loss Card. c1943. Loss card and Key to punch holes for Loss card. [Online]. Available at: www.lancasterbombers.net [Accessed 20 August 2025].

Killeit. H.P., König. C., and Schuh. H. 2024. Flak – Waffe und Truppe im Luftkrieg. Translated by C. König. Netteverlag. Nettetal.

König. C., 2025. III. Gruppe/Nachtjagdgeschwader 1(1941 – 1945). Netteverlag. Nettetal.

Leemans Speciaalwerken. 2024. *Crash Recovery area images*. [Online]. Available at:// <u>Successful Recovery of Vickers Wellington Completed by Leemans Special Works? - Leemans [Accessed June 2025].</u>

Lettens, J. November 2020. *Wellington X HE346 (+1943)*. [online]. Available at: https://wrecksite.eu/wreck.aspx?298987 [Accessed July 2025].

Matthews, R. 2009. RAF Bomber Command at War. Hale Books. London. Pp. 126-155.

Ministry Of Defence. Ap3003., 2004. A Brief History of the Royal Air Force. Her Majesty's Stationary Office. Norwich.

Mondey. D., 2006. British Aircraft of World War II. Aerospace Publishing. London. Pp 217.

Murray. W., 1983. Strategy for Defeat: The Luftwaffe 1935–1945. Maxwell AFB: Air Power Research Institute.

National Archives Catalog. c1944. *Image of Bomb-Damaged Gelsenkirchen*. [Online]. Available at: https://catalog.archives.gov/id/204904236 [Accessed 25 August 2025].

National Archives Catalog. c1944. *Image of Bomb-Damaged Gelsenkirchen*. [Online]. Available at: https://catalog.archives.gov/id/204904239 [Accessed 25 August 2025].

National Archives Catalog. c1944. *Bomb-Damaged Nordstern Synthetic oil plant at Gelsenkirchen*. [Online]. Available at: https://catalog.archives.gov/id/204904221 [Accessed 25 August 2025].

National Archives Catalog. c1944. *Aerial image of Nordstern Synthetic oil plant at Gelsenkirchen*. [Online]. Available at: https://catalog.archives.gov/id/313354075 [Accessed 25 August 2025].

Night Raid Report. (Pp339-342) 1943. *Bomber Command report on night operations*. 25/26th June 1943-Gelsenkirchen. [Online]. Available at:< Bomber Command, AIR 14 | The National Archives [Accessed 20 August 2025].

NIMH. 2025. Würzburg Riese Radar. Objectnummer 2002_N000131 – 03. [Online]. Available at:// https Home van Nederlands Instituut voor Militaire Historie | Nederlands Institut voor Mili

NIMH. 2025. *Bf 110 G -4 with Lichtenstein Radar. Objectnummer 2189-004-007-04.* [Online]. Available at:// <u>Home van Nederlands Instituut voor Militaire Historie</u> [Accessed July 2025].

NJG 1 Logo. c1940. *Nachtjagdgeschwader 1 Night Fighter Wing Logo*. [Online]. Available at: < <u>Wappen_der_Nachtjagdgeschwader_der_Luftwaffe.png</u> [Accessed 31 August 2025]

Overy. R., 2009.1939. Countdown to War. Penguin Books. London.

Price. A., 1971. Messerschmitt Bf 110 Night Fighters. Aircraft in Profile-Series No. 207. Profile Publications Ltd. Windsor.

Price. A., 1986. 1939-1945 Luftwaffe Handbook (2nd ed). Profile Publications Ltd. Windsor.

The National Archives. 2025. *Operational Record Book. Air 27*. [Online]. Available at: https://www.nationalarchives.gov.uk [Accessed April 2025].

The National Archives of Australia. 2025. *Charles Alfred Mattress, RAAF.* [Online]. Available at: < https://www.naa.gov.au [Accessed May 2025].

Nowarra.H. J., 1993. Die Deutsche Luftrüstung 1933–1945. Vol.3... Bernard & Graefe Verlag. Koblenz.

Quinault. R., 1987. Winston Churchill. In: Stone. N. (ed). The Makers of English History. Guild Publishing. London.

Reider. F., 1981. The Order of the SS. Foulsham. Hong Kong. Pp 7

Traces of War. 2025. Sigmund, Rudolf. [Online]. Available at:< https://www.tracesofwar.com/persons/26895/Sigmund-Rudolf.htm [Accessed 20 July 2025].

Traces of War. 2025. Crash location and memorial images of Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: < Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. Available at: Crash Location Wellington HE346. [Online]. [Online]. [Online]. [Online]. [Online]. [Online]. [Online]. [Online]. [Online]. [Online

Treadwell. T. C., 2005. Messerschmitt Bf 110. Cerberus Publishing Ltd. Bristol.

Warthunder. 2014. Bf110 G-4 Cutaway. (ed). [Online]. Available at: < Bf-110 G-4 Cutaway.: r/Warthunder. Accessed 25 August 2025.

Windrow. M.C., 1968. German Air Force Fighters of World War Two. Volume 1. Doubleday and Company inc. New York.

166 Squadron and Bomber Command logos obtained from the Ministry of Defence.



Lest We Forget