AIRCRAFT OF WVII IN FULL COLOR



AKHIL KADIDAL

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PREFACE

his document has been created to illustrate my interest in the Second World War and of what can be achieved in the Adobe Creative Suite. All design and layout was accomplished within Adobe InDesign CS2; the artwork using Photoshop 7.0. While this volume is constricted to the aircraft of the Second World War, a topic chosen for its relative diversity. The aircraft of that conflict sported colors and schemes of a variety and aesthetic beauty rarely matched since.

Despite its martial bearing, this subject also lends itself to illustrating the cultural bearing of nations at the time. In many instances, the heraldry and badges carried are displayed next to the respective craft. In the case of the British, each of these official unit badges had to be personally approved by the sovereign of that age, and in the following examples, either by King George V or King George VI. Many of these badges represent traditions, past history or take their colors from a local coat of arms. Not only did this link a specific unit to the place of its inception, but served to impart an *esprit de corps* on its serving men and women.

Much of this work could not have been composed without Barry C. Wheeler's seminal *Guide to Military Aircraft Markings*, which sparked my interest in aircraft camouflage, coloring and more importantly, squadrons. Most of the Royal Air Force and Royal Navy aircraft profiles were created originally for still-to-be completed books on the RAF and the Fleet Air Arm during the Second World War. They were drawn with data taken from original photos or previously published profiles.

In the interest of keeping this file size low, all images have been rendered in medium resolution. Furthermore, I have elected to include only historically-significant examples at the cost of more visually-pleasing profiles.

Akhil Kadidal 2009



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THE ROYAL AIR FORCE

The Royal Air Force was formed on 1 April 1918 by amalgamating the Royal Flying Corps (RFC) and the Royal Naval Air Service (RNAS), during the thick of the First World War.

Before this, the RFC had been under the control of the Army, and the RNAS under the Navy. Not surprisingly, the amalgamation created several administrative problems. All previous army rank designations had to be replaced by new air force rank titles, and the government planned to introduce new Air Force medals. Yet the transition into the new Royal Air Force was smooth. On 3 June 1918, the first of the RAF's new medals were constituted and were the, Distinguished Flying Cross (DFC), the Air Force Cross (AFC), the Distinguished Flying Medal (DFM) and the Air Force Medal (AFM). By the end of the First World War on 11 November 1918, the RAF possessed a strength of 188 operational squadrons, 199 training squadrons, 12 squadrons temporarily attached to the Navy and 291 000 personnel.

By 1920, post-war reductions had forced the RAF into a shell of its former self. It now had only 25 operational, 11 training and 5 naval squadrons with a personnel strength of 28,200. In 1924, the RAF at Sea was renamed the Fleet Air Arm (FAA) and transferred to the Royal Navy in 1937. The Navy also took possession of most of the RAF's coastal patrol and maritime aircraft, but the RAF managed to hold on to Coastal Command.

By Mid-1934, an expansion of the RAF was begun in light of Germany's re-armament, and in 1936 the RAF was completely reorganized. Several new commands were created – divided between Home Command and Overseas Command. The first RAF squadron and unit badges were created during this time, with their basis taken from the unofficial badges adopted by RFC and RNAS squadrons during the First World War. (The reader should note that all RAF squadron badges were set within a crest approved by the king. I have removed these crests in several instances, purely in the interests of saving space).

By the onset of the Second World War on 3 September 1939, the RAF had 40 squadrons in Fighter Command, 34 in Bomber Command, 19 in Coastal Command, 13 in the Army-Cooperation Command and a mixture of other units that made up Training Command. In addition, some 26 other squadrons were strung out over the Empire from Egypt to Singapore.

Although this amounted to 122 operational squadrons, their equipment was far from comforting. Only Fighter Command with its modern Hurricanes and Spitfires could match the German Luftwaffe. In 1941, after Nazi plans for the invasion of England were thwarted, RAF commanders began to build up Overseas Command. New squadrons were created and others re-activated as Britain and her commonwealth allies mobilized for total war.

After several reverses in 1941-42, RAF fortunes began to soar as allied aircraft production and pilot training began to rapidly outstrip that of the enemy.

On 1 July 1944, the RAF reached its peak strength in personnel with 1,011,427 men and 174,406 women on active duty – ten times the number only five years ago. Peak aircraft strength was reached in 1945, with 55,496 machines, of which 9,200 were front-line aircraft. In all during the war, the Royal Air Force raised 530 operational squadrons, of which 130 were specially formed for non-Britons such as Poles, Canadians, Australians, New Zealanders, French, Czechs, Belgians, Norwegians, Greeks, Dutch, Yugoslav and Americans. In addition, there were also some 80-odd training and miscellaneous units and 20 other establishments and camps devoted to tactics development, advanced training and aircraft testing.

After final victory, the RAF was wound-down again. During this time of "demob," roughly 75 percent of the RAF's squadrons were disbanded. Many were reformed in the 1950's and 60's to face the Soviet threat during the Cold War. In the late 70's and the 80's, the RAF was reduced even further and is composed today of no more than 50 front-line squadrons – all with a rich history that dates back over eighty-five years, and through both World Wars.

For those unfamiliar with the unit coding system, two letters which indicated the squadron, were separated from a third - which indicated the aircraft identifying letter – by an RAF roundel. For example, in the code: BL-H, "BL" is the squadron code and "H," the invidual aircraft identifying letter.

The two-letter squadron code was introduced after the Munich Crisis of 1938. For those interested in accurate squadron identification, remember that same squadron codes, were on occasion, used to indicate two separate squadrons. Taking the above codes as an example: "BL" was used both on the Spitfires of No. 609 Squadron as well as the Lancaster bombers of No. 40 Squadron.

With regard to squadron names and titles, many RAF squadrons were given official names which reflected the financier of the unit, which could be a country, organization or a region. The "East India" Squadrons and the "Argentine-British" Squadrons are adequate exmples. British Auxilliary, Polish, French and Canadian squadrons were also provided names indicating the squadron's association with a home region or a specific mascot. Single aircraft were in some cases paid for by communities, companies or individuals, whose names were then stenciled on every respective aircraft.

AVRO LANCASTER



Avro Lancaster Mk I, No. 207 Squadron, RAF Bottesford, March 1942: This Lancaster has the A1-type fuselage roundel, indicating that it is an Early 1942 period aircraft. The Avro Lancaster was introduced to Bomber Command in March 1942 after the failure of the twinengined Manchester which made its debut with this squadron in November 1940. The Lancaster was a beautiful machine, hardy to battle damage, easy to fly and very adaptable.





Avro Lancaster Mk II, No. 115 Squadron, RAF Witchford, 1944: The Lancaster was the mainstay of Bomber command during the war years from 1943 to 1945. The Lancaster Mk II differed from the other variants by being equipped with four 1600 hp Bristol Hercules Mk VI radial engines, instead of the Rolls Royce Merlin in-line engines - owing to a critical shortage when the acceleration of Lancaster production outshot engine availability in late 1943. This aircraft is also provided with an enlarged bomb bay and a rare underside gun turret to deter attacks from beneath.

Avro Lancaster Mk X "Ropey," No. 419 (Moose) Squadron, Royal Canadian Air Force, RAF Middleton St. George, Late-1944: This example, "Ropey" is typical of a Lancaster in Canadian service. Most Royal



Canadian squadrons employed a variety of colorful motifs and markings (in stark contrast to the RAF). The Lancaster Mk X was a Canadian-built version of the British Lancaster Mk III fitted with Packard-built Merlin engines.

Avro Lancaster Mk III, No. 101 Squadron, No. 1 Group, RAF Ludford Magna, Late 1943: From early October 1943, this squadron began flying a specialized type of Lancaster equipped with the Airborne Cigar (ABC) Jammer. It was the only operational



squadron to use this equipment. As a result, the squadron was dispatched on raids that even the group was exempt from. It was little surprise then that the squadron took part in more bombing raids than any other Lancaster squadron within No. 1 Group. With an extra German-speaking crewmember aboard, the squadron aircraft mixed in with the bomber stream, jamming German night-fighter radio communications. All ABC aircraft like the above example also carried a normal bomb load.

Avro Lancaster Mk
III, No. 617 Squadron, RAF Scampton,
Lincolnshire, May
1943: AJ-G was flown
by master dambuster,
Guy Penrose Gibson
on the famous May
16th mission that won
him the VC. His crew
consisted of Pilot Of-



ficer H.T Taerum (RCAF-Navigator), Sgt J. Pulford (Flight Engineer), Pilot Officer F.M. Sparfford (Bombardier), Flight Lt. R.G. Hutchinson (Wireless Operator), Flight Sgt. G.A. Deering (RCAF-Front Gunner) and Flight Lt. R.D. Trevor-Roper (Rear Gunner).

GIBSON'S VICTORIA CROSS DETAILS

On 16/17 May 1943, over Germany, Wing Commander Gibson led the famous "Dambuster" raids on the Mohne Dam, descending to within a few feet of the water and taking the full brunt of the enemy defences. He delivered his attack with great accuracy and then began to circle very low for the next 30 minutes, drawing the enemy's fire on himself in order to allow the rest of his squadron to bomb without interference. He then led the remainder of his force to the Eder Dam where with complete disregard for his own safety, he repeated his tactics and once again drew the enemy fire so that the attack could be successfully completed.

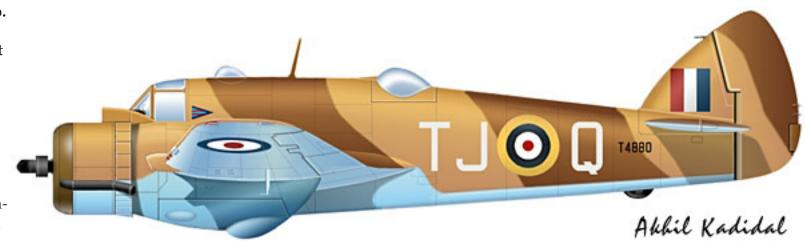


Gibson was a veteran of four tours of duty, with the "Dambuster" raid taking place just after the conclusion of his third tour. He subsequently went on to command No. 627 Squadron and served as a "Master Bomber," dropping flares for No. 5 Group. It was on one of these mission that he was killed. On 19 September 1944, while flying a Mosquito Mk XX, his aircraft was seen to burst into flames and crash in German-held territory. The cause for his loss is unknown, but he was probably shot down by flak or a marauding German night fighter.

As a fighter pilot, he had shot down three bombers and one night fighter while flying with No. 29 Squadron during his second tour. By the time of his death, in addition to the VC, Gibson had also been awarded the bar to both his DFC and DSO. (*Photo: IWM*)

BRISTOL BEAUFIGHTER

Beaufighter Mk IC, No. 272 Squadron, Gardabia, Egypt: This aircraft was flown by Wing Commander Bill Riley, when he was the temporary CO of the unit, pending the formation of No. 227 Squadron in Malta (which he had been earmarked to command). Before he could join his new command,



however, tragedy struck. On 16 July 1942, he led the squadron over the Mediteranean to intercept enemy transport aircraft flying from Crete. En-route to the engagement, he collided with a Beaufighter flown by Pilot Officer Deppe. Deppe and his navigator survived but Riley and his navigator, Sergeant Martin were killed. At the time of his death, Riley was credited with the destruction of nine aircraft, with another three shared destroyed. His Wing Comander's pennant can be seen painted behind the cockpit.



Beaufighter Mk X, No. 404 (Buffalo) Squadron, Royal Canadian Air Force, Davidstow Moor, June 1944: This Coastal Command Beaufighter Mk X is painted with standard D-Day invasion stripes.

Beaufighter TF Mk X, No. 489 (Royal New Zealand Air Force) Squadron, RAF Dallachy, Morayshire, April 1945: This version of the Beaufighter was capable of carrying Torpedoes or rockets. Most of them were employed in anti-shipping tasks. This specialized "Torbeau" is equipped with a thimble nose radome carrying the ASV (Air-Surface Vessel) radar. Note the four-character



code series: "P6" is the unit code, "F" the individual aircraft code and "1" indicates that the aircraft belonged to the squadron's "C" Flight. All RAF squadrons at this time had a standard strength of twenty-four aircraft, and as this squadron had in excess, instead of alphabets, numerals were used on the extra aircraft (in this case "1"). The orange colored fins on the torpedo were made of plywood, their purpose was to ensure that the weapon entered the water at the correct angle.

RAF COASTAL COMMAND

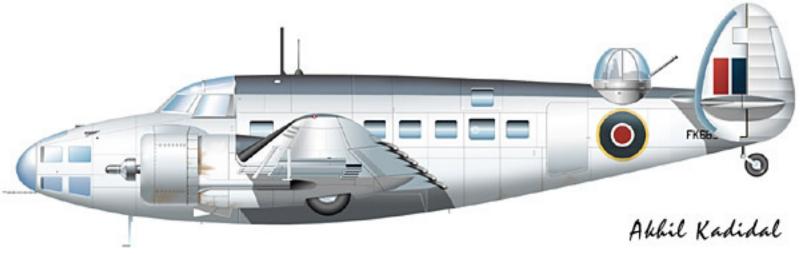
Boeing B-17E Fortress Mk IIA, No. 220 Squadron, RAF St. Eval, 1942: The B-17 Flying Fortress or the "Fortress" as the aircraft was known to the British, was used mainly as a long-range martitime reconnaissance aircraft by the RAF. The B-17E was a major redesign of the



earlier B, C and D versions, which were found to be sorely lacking, once in operational service. The B-17E was also the first variant of the Flying Fortress to be put into massed-scale production and was the first aircraft in the series to incorporate power-driven turrets and a tail gun position. British Fortress Mk IIA and Mk IIs (B-17Fs) served chiefly with Coastal Command in Britain.

Lockheed Hudson Mk VI, No. 608 (County of York) Squadron, Protville, Tunisia, Late 1943: This Hudson is seen typical late-war markings with Dark Green upper surfaces and white undersurfaces. The aircraft is also carrying rockets, and these were first used successfully against Uboats by No. 608 Squadron. An ASV radar-anten-

sink a U-boat with rockets.



na is also seen protruding from the front plexiglass nose. The squadron badge (displayed below) was of a fessed falcon leg.

No. 608 (COUNTY OF YORK & NORTH READING) SQUADRON

Motto: "OMNIBUS UNGULIS" (With all talons)

No. 608 was formed on 17 March 1930 at Thornaby-on-Tees, Yorkshire, tasked as a day bomber squadron, but was redesignated as a fighter squadron in January 1937. A further redesignation as a general reconnaissanace unit followed that summer, and by the outbreak of war in September 1939, the "County of York" Squadron was serving with Coastal Command, flying maritime operations, first from England and then in the Mediterranean from November 1942. In late 1942, a North African-based Hudson from No. 608 became the first aircraft to

The squadron was disbanded on 31 July 1944 in Italy, but

was reformed the next day in England on 1 August as 608 "North Reading" Squadron. Assigned to No. 8 (Pathfinder Force)

Group, No. 608 was equipped with Mosquitoes and served as the light bomber unit within No. 8 Group's Light Night Striking Force (LNSF) – remaining with the formation until the end of the war. By joining Bomber Command, No. 608 had become the sole Auxiliary Air

Force squadron to serve with that formation.

The squadron was later disbanded on 28 August 1945. During its time with No. 8 Group, the squadron flew 246 bombing raids (in 1,726 sorties)

and lost nine Mosquitoes on operations.



Short Sunderland Mk III, No. 330 (Norwegian) Squadron, RAF Sullom Voe, Scotland, 1943: This aircraft (serial number NJ188) was built by Blackburn Aircraft Co. at Dumbarton. The aircraft was powered by four 1066 hp Bristol Pegasus XVIII nine-cylinder radial engines, and had a maximum speed of 341 km/h (212 mph), a range of 4,830 kilometers (3,000 miles) at 233 km/h (145 mph) and an endurance of 20 hours. The crew typically numbered thirteen strong and the aircraft earned its "Porcupine" reputation by being well-armed with two 0.50 cal. machine-guns firing from waist hatches and another twelve 0.303-in. Browning machine guns in various other locations (including four forward firing fixed positions, two in nose turret, two in mid-upper turret, and four in the tail turret). The aircraft could also carry up to 4,960 lbs (2,250-kgs) of ordnanace. This ordnanace was usually carried within the fuselage and could be cranked out prior to attack - a case illustrated by the above aircraft which is seen carrying several bombs under the wing. The aircraft is also seen with antennas in the upper fuselage, which belies the existence of ASV radar.



Consolidated B-24J Liberator Mk VI, No. 547 Squadron, RAF Leuchars, Late 1944: The Liberator VI was used by Coastal Command as a long range general reconnaissance type. The aircraft was armed with two 0.50 cal machine guns in the nose and dorsal turrets, and four 0.303-in machine guns in a Boulton-Paul tail turret. The aircraft could carry upto 4,500 lbs of bombs or depth charges.

HAWKER TEMPEST



Tempest Mk V, The Fighter Interception Unit (FIU), RAF Newchurch, August 1944:

Flight Lt. Joseph "Joe" Berry DFC** flew ZQ-Y during August 1944. He accounted for 52½ V-1 flying bombs from June to August 1944, a remarkable achievement. Berry consequently held the record for being the fastest "V-1 Killer" in the RAF, as well as the highest scorer with a total of 60.4 flying bombs shot down. He later moved No. 501 Squadron when the FIU was absorbed by that unit and eventually rose to the rank of Squadron Leader. He was killed in action on 1 October 1944 when his Tempest was hit by small arms fire while attacking a train in Northern Germany. His last words made newspaper headlines the following day: "I've had it chaps; you go on." (*Photo: IWM*)



Tempest Mk V "Le Grand Charles," No. 3 Squadron, B.152 Fassberg, Germany, May 1945:

This was Flight Lt. Pierre Clostermann's Tempest Mk V. Closterman, who won both the DSO and the DFC★, was one of the most famous of the Free French pilots serving with the RAF. He joined the service in 1941 after fleeing his native France after the German invasion in 1940. During his service with No. 3 Squadron (April-May 1945), Clostermann flew four different Tempests, all coded JF-E. NV724 was the

last one that he flew before the war ended. Appropriately, on the nose is the Free French cross of Lorraine, and on the tail, a stylized version of the squadron badge. The victory tally under the cockpit shows a total of thirty-three victories; of these eleven were confirmed victories in air combat, two were probables, nine damaged in the air, and finally six destroyed and six

damaged on the ground. (Photo: US National Archives)

THE RAF IN INDIA



Curtiss P-36 Mohawk Mk IV, No. 5 Squadron, Dinjan, Northeastern India, August 1942:

The American-made P-36 (model 75) Mohawk was an obsolete machine by the war's beginning, but was used in quantity by the Far East squadrons which had little hope of replacements in the first two years of the Far Eastern war. In all, the RAF recieved 229 Hawks, mostly France-bound machines that were diverted to Britian after the fall of France. To this total, a few fighters were built by the Central Aircraft factory (later renamed Hindustan Aircraft) after the entire factory was moved from China to India.

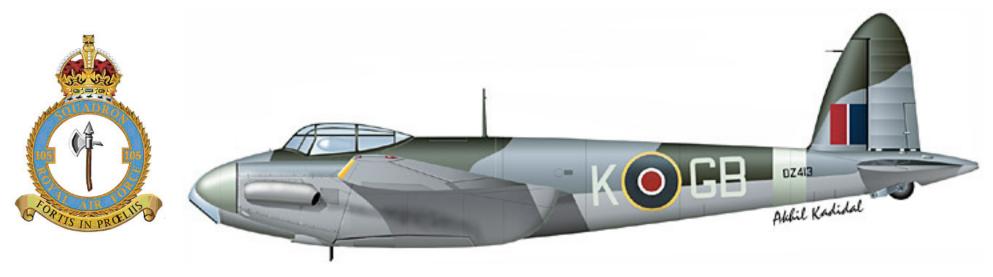
In any case, the RAF decided that the aircraft was usuitable for the European theatre, and most were shipped out to India where they served with Nos. 5 and 155 squadrons. Seventy-two others were later transferred to the South African Air Force. Once in India, antiquated machines like the above example had to hold the line against superior Japanese fighters. Yet, the situation was so desperate, that at one time, just eight Mohawks constituted the RAF's sole fighter defense in northeastern India. The aircraft weathered on in front-line service until December 1943. The squadron insignia is displayed (upper left) in the post-war fasion.



Republic Thunderbolt Mk II (P-47D-28-RE), No. 79 (Madras Presidency) Squadron, Wangjing, Imphal, 1944:

The "Jug" or the "Juggernaut" as the Thunderbolt was known to its American pilots, was a formidable aircraft. It was the heaviest single-engined fighter of the Second World War and was capable taking enormous damage. The RAF took delivery of 585 P-47D Thunderbolts, the most widely produced variant of the series, and employed almost all of them at one time or another in fifteen British squadrons in the Far East. Here the Thunderbolt proved most valuable as a fighter-bomber, and with a maximum bomb load of upto two 1,000-lb and one 500-lb bombs and the standard armament of eight 0.50-in Browning M2 machine guns, they posed a formidable challenge for the Japanese Army in Burma. The squadron insignia (present in small on engine cowling) consist of a rampant Salamander surrounded by fire. The Salamander was, of course, fabled to live in and extinguish fire, and thus its representation in the squadron's badge. The animal was also chosen for its readiness to face danger - a trait thought befitting a fighter squadron.

DEHAVILLAND MOSQUITO



Mosquito B Mk IV, No. 105 Squadron, RAF Marham, 1943:

On 30 January 1943, Squadron Leader R. Reynolds and his navigator Flight Lt. Ted Sisimore led a section of three mosquitos to Berlin in a daring low-level raid designed to disrupt a Nazi party rally. The celebration was scheduled to begin at 11:00 am with a radio speech by Luftwaffe supremo Herman Göring. Reynolds was in command of the above aircraft (DZ413), and he and his flight bombed the radio station at the precise moment that Göring was due to make his address.

Sismore later remembered listening to a taped copy of the rally radio program just before the bombing: "They [the German broadcasters] announced that the Reich Marshal would make his speech, but he never said a word; there was a bang in the background, and the radio then played martial music. He never did make his speech." Göring himself was flabbergasted at the daring of the British and their new Mosquitos. "It makes me furious, when I see the Mosquito," he later raged to a committee of German aircraft manufacturers. "I turn green and yellow with envy. The British, who can afford aluminium better than we can, knock together a beautiful wooden aircraft.... What do you make of that! That is an aircraft that every piano factory over there is building."





Mosquito Mk IV, No. 109 Squadron, No. 8 (Pathfinder) Group, RAF Wyton, 1943: The above aircraft (DK333) employs an interesting colour scheme, Dark Green and Dark Sea Grey with black undersides. HS-F is also credited with completing twenty-nine bombing missions - the markings were painted on the nose and are obscured in this view; also obsured by this view was the "Grim Reaper" insignia, which was painted forward under the cockpit (*see top right*).

Another interesting quality about this machine is that it's forward plexiglass nose had been blacked out. The important "Oboe" radio navigational equipment was stored here, negating the standard bombardier position.



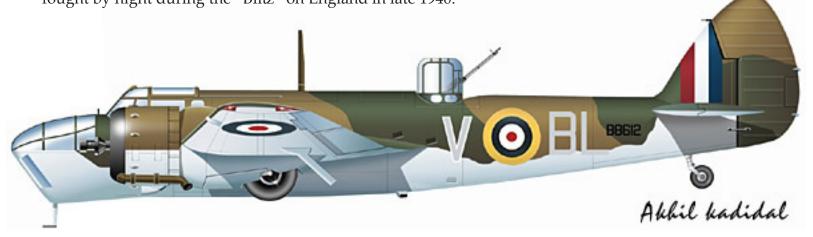
BRISTOL BLENHEIM



Squadron Badge: Consisted of a Death's Head moth – indicative of the squadron's fighting role.



Blenheim Mk IF, No. 219 (Mysore) Squadron, RAF Catterick, 1940: This fighter version of the Blenheim Mark I light bomber was armed with four 0.303-in. Browning machine-guns in an underfuselage gun tray (made by the Southern Railway workshop), a single 0.303-in. machine-gun in the port wing and finally one Vickers K gas-operated machine gun in the mid-upper turret. The squadron fought by night during the "Blitz" on England in late 1940.



Blenheim Mk IV, No. 40 Squadron, RAF Alconbury, Late 1940: The Mark IV Blenheim underwent a radical change from the previous marks. It had an elongated nose, was faster and heavier. It was manufactured as an improved version of the Mk I, but like its predecessor did not enjoy much success as a daylight bomber. Heavy losses over Europe prompted a change to night-time operations or withdrawal to second line units.

No. 40 SQUADRON

Motto: "HOSTEM A COELO EXPELLERE" (To drive the enemy from the sky)

The squadron was formed on 26 February 1916 at Gosport in Hampshire, and went to France in August as a fighter squadron. After WWI, the squadron moved to Tangmere in February 1919 and was disbanded on 4 July of that year.

Reformed on 1 April 1931 as a bomber squadron, the unit went to France at the outbreak of war, but returned to England in December 1940, where it re-quipped with Blenheims. It was then posted to No. 2 (Light Bomber) Group, but continued operations over France while based at Wyton. In November 1940, the unit became a night bombing squadron and received Wellington heavy bombers. No. 40 later moved to the Mediterranean and was disbanded in Egypt on 1 April 1947.

HAWKER HURRICANE





Squadron Badge: Consists of a cross potent quadrat in front of two swords in saltire, and charged with three seaxes fesswise in pale

Hurricane Mk I (Early), No. 111 Squadron, Villacoublay, France, 1938:

No. 111 Squadron was the first RAF squadron to be equipped with Hurricanes, taking charge of the first examples in December 1937 at RAF Northolt. But it was not until 11 February 1938, after a Hurricane flown by the unit CO, Squadron Leader J.W. Gillan travelled from Turnhouse, Scotland to Northholt (a distance of 327 miles) in 48 minutes at a speed of 658 km/h (409 mph), that the public's interest in the type was kindled.

From 1938 to 1940, detachments of No. 111 were based in France, the above example being based at Villacoublay airfield, France as part of that country's Bastille Day celebrations. The squadron number, instead of the unit codes (which were introduced in 1939) is displayed on the fuselage. The top half is painted light blue to indicate the colors of "B" Flight ("A" Flight was red). Also visible is a small squadron badge on the tail fin, which was painted on both sides.



Hurricane Mk I "Kicked off Hitler," No. 242 (Canadian) Squadron, RAF Coltishall, UK, Mid 1940: In 1931, a flying accident and the subsequent amputation of both legs prematurely ended Douglas Bader's career as an RAF pilot. Undaunted, Bader reapplied in 1939, and by now walking on wooden legs, was accepted and eventually rose to command 242 Squadron a year later during the Battle of Britain. The "Wooden Wonder," as Bader was known, flew LE-D (V7467) during the battle, his squadron leader's bars are visible under the cockpit as is his personal motif on the nose. Bader later reached the rank of Wing Commander and became the CO of the famed Tangmere Wing in March 1941.

He was downed in combat over France and taken prisoner in August 1941 by which time his tally had risen to 23 confirmed victories, 1 probable and 11 damaged. Bader returned to England after the war and won a knighthood for his work with the disabled. (*Photo: IWM*)







Hurricane Mk I, No. 249 (Gold Coast) Squadron, RAF Boscombe Down, 16 May 1940:

This aircraft belonged to Fighter Command's sole VC winner, James B. Nicholson. "Nick" was posted to 249 Squadron on 15 May 1940 as acting flight commander, and was flying a defensive patrol on the fateful 16th May mission when he was savagely razed by cannon fire from a flight of German fighters. Baling out of the crippled machine, Nicholson was later taken to the hospital at Southampton, where the doctors did not give him more than 24 hours to live. But make it he did. Later, on 15 November, when he was a patient at the convalescent Palace "Hotel" Hospital, he received a telegram informing him that he had been awarded the Victoria Cross. Stunned, Nicholson could only mutter, "My God, now I'll have to earn it" (*Photo: IWM*)

NICHOLSON'S VICTORIA CROSS

n Friday, 16 August 1940, 23-year-old Flight Lieutenant James Nicolson of No. 249 Squadron scrambled from Boscombe Down, Wiltshire, flying Hurricane P3576 of Red Section with Squadron Leader Eric King and Pilot Officer Martyn King. The pilots had orders to attack several Me110's approaching Southampton from Gosport where a large raid was building up. The British pilots failed to find the Me110s, but soon spotted four Junker Ju88 bombers above them, in the distance.

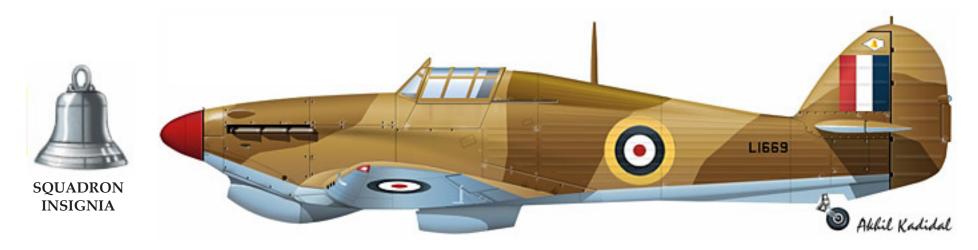
Turning to make their attack, the British pilots failed to notice a squadron of enemy Me109 fighters closing on their tails. Nicholson was intent on his targets that he didn't notice the German fighters until they were pumping bullets into his Hurricane. All three British planes were struck by the barrage.

Squadron Leader King, the least badly hit of the trio, broke off his attack and dived away from the fight. He later returned to Boscombe Down. Pilot Officer King, however, abandoned his burning Hurricane and baled out, only to perish when his parachute failed to open. Meantime, four cannon shells had hit Nicolson's aircraft. One had destroyed the perspex hood subsequently damaging his left eye and temporarily blinding him with blood. The reserve petrol tank had also been struck along with his left leg. The Hurricane was now ablaze with the instrument panel melting. As Nicholson struggled to escape the blazing aircraft, the

Messerschmitt flashed past him. At that moment, his head filled with thoughts of revenge. He slid back into his seat and followed the enemy. Closing in, he opened fire until the German fighter crashed into the sea.

Now, for the first time, Nicholson realised that his hands were on fire. The whole cockpit was ablaze. With almost superhuman effort, he managed to open the blistering canopy and bailed out at a height of 12,000 ft. As his parachute opened, another Me109 flew towards to him investigate. Nicholson quickly pretended to be dead by slumping in his harness. the Messerschmitt flew off but a new danger arose - the Local Home Guard opened fire on the descending pilot. He landed safely in a field, a British bullet in his rump, and so badly burnt that he was unable to even undo his parchute harness.

He later returned to active duty in late 1941, but was tragically killed on 2 May 1945 when his B-24 Liberator transport was lost in the Bay of Bengal.





Hurricane Mk I, No. 80 Squadron, Greece, Early 1941: This aircraft was the mount of Wing Commander Marmaduke St. John "Pat" Pattle - the RAF's highest scoring ace of the war with *atleast* 51 victories. During the withdrawal of the RAF from Greece in Mid-1941, records were lost or badly maintained in the first place, and because of such maladies, Pattle was originally credited with 34 victories. Recent research indicates that he may have destroyed as many as 60 or 62 enemy aircraft by the time of his death on 20 April 1941.

Pattle died in a period of especially hectic activity when his squadron (No. 33) was engaged in a desperate battle against superior enemy numbers. On April 20, suffering from influenza and fatigue, "Pat" insisted on leading a combined force of Nos. 33 and 80 Squadrons against a large German raid over the Eleusis Bay in what was his third sortie of the day. In the ensuing dogfight, he was seen to shoot down a Me110 that had been attacking Flight Lt. Timber Woods. But soon after, two other Me110s attacked Pattle from behind, and the great ace was seen slumped over the control panel as the flaming Hurricane fell into the sea. Woods was also shot down and killed only moments later. (*Photo: IWM*)





Hurricane PR Mk I, No. 69 Squadron, Luqa airfield, Malta, July 1941:

This Hurricane was flown by the highest-scoring RAF reconnaissance ace, the-then Flying Officer Adrian "Warby" Warburton. Warburton eventually rose to command No. 69 Squadron, followed by No. 683 Squadron. He went missing in action on 12 April 1944 while serving as a Wing Commander in Britain with No. 336 Wing. Warburton's body, missing for over fifty-years, was later found in Egling, Germany in 2002. His aircraft, an American P-38 Lightning was buried under two meters of earth. Later forensic tests revealed the pilot's identity. Note the above aircraft's PRU (Photo-reconaissance Unit) Blue color scheme. (*Photo: IWM*)





Hawker Hurricane Mk IIC (Intruder) "Night Reaper," No. 1 Squadron, RAF Tangmere, Early 1942: Flight Lt. Karel Kuttelwascher flew this aircraft. The Czechoslovakian Kuttelwascher was one of the highest-scoring single-engined intruder pilots. He shot down fifteen planes on fifteen night missions with another five damaged. This intruder version of the Hurricane carried two 200 litres fuel tanks under the wings in addition to the 300 litres in the main internal fuel tank, increasing the range of the aircraft and allowing it fly for 3 to 5 hours at 270 k/mph. The above machine is armed with six 20mm Hispano cannons including two in underwing gunpods. The pilot's personal insignia is under the engine exhausts, and consists of of a scyth set behind a red banner, reading: "Night Reaper." (*Photo: IWM*)

Hawker Hurricane Mk IID, No. 274 Squadron, Tunisia, January 1943: This version was armed with two 40mm Vickers anti-tank cannons and two 0.303 caliber machine guns filled with tracer ammuntion, as an aiming guide. The "Hurribomber" was a dedicated fighter-bomber and its primary



targets were armored vehicles. Note the large squadron flash marking on the fuselage of this machine - although this is red, blue was also sometimes used. Also visible is the large Vokes sand filter on the chin, which despite reducing performance, was a necessity in tropical areas.



Hawker Hurricane Mk IV, No. 42 Squadron, Burma, 1945: The Hurricane Mark IV was the final production variant of Britain's famous fighter. It incorporated a "universal wing" that accepted weapon combinations. The normal armament was two 0.303-in machine guns, with a combination of two 40mm Vickers cannons, eight 60 lb rockets (which the above aircraft is seen carrying), or lastly, two 250 lb or 500 lb bombs. For its ground attack role, the aircraft was heavily protected by 350 lbs of armour.

SUPERMARINE SPITFIRE







Spitfire Mk I "Kiwi," No. 54 Squadron, RAF Hornchurch, Mid 1940: This Spitfire embodies the color and spirit of the Battle of Britain. It was the mount of Flight Lt. Alan C. Deere, DFC who shot down 15 enemy aircraft whilst serving with this Squadron. Under the cockpit is Deere's personel insignia, a Kiwi, the national bird of his country, New Zealand. Deere is perhaps the best known of all the New Zealand aces.

He flew this aircraft (P9398) during the Dunkirk evacuations during which he was credited with seven victories in five days. On 9 July 1940, as the Battle of Britain entered full swing, Deere was caught in a massive dogfight with Messerschmitt Me109s from II/JG51. His plane (the above machine) was badly damaged in the combat but Deere luckily crash-landed to safety at Manston. He had survived but was too badly burned to return to the battle. He later returned to active service in 1941 and skillfully led several squadrons. His final kill tally stood at 22 confirmed victories. (*Photo: New Zealand Fighter Pilots Museum*)



Spitfire Mk Vb, No. 121 (American Eagle) Squadron, RAF Southend-on-Sea, Mid 1942: This aircraft was flown by Pilot Officer Donald A. Young who scored a single victory - a Ju88 in September 1942 - while with this squadron. The "American Eagle Squadron" emblem is presented below on the right. The emblem was taken from the United States Coat of Arms and consists of an eagle clutching arrows in one leg and a bushel of laurels in the other.

Young would eventually become an ace with a total of six victories (1 with the RAF, 2½ with the US 4th Fighter Group and 3 with the US 52nd FG in the Mediterranean). He would finsh the war as a US Lt Colonel. After the war, he flew as a Delta Airlines captain. (*Photo: US National Archives*)



EAGLE SQUADRON BADGE Spitfire Mk Vb, No. 302 (City of Poznan)
Polish Squadron,
RAF Church Stanton,
August 1942: This
Spitfire is seen with
unusual white bands
painted on the engine
cowling - these were
a temporary identification measure used
during the Anglo-Ca-



nadian commando raid on Dieppe in August 1942. The Spitfire V was considered the cream of allied fighters in 1941-42.





Spitfire Mk Vb (Trop), No. 145 Squadron, Tunisia, March 1943: Squadron Leader Lance Wade acquired this aircraft after he took command of the unit in January 1943. He subsequently shot down two Me109's with it over Tunisia before converting to the Spitfire Mk IX on 29 March 1943.

Wade was the highest scoring American pilot in the RAF. Sent to North Africa in early 1941, he scored 15 kills with 33 Squadron. Later, in January1943, he joined No. 145 Squadron (*see badge, right*), becoming its CO at the end of that month. He was later killed in a plane crash at Foggia, Italy. (*Photo: IWM*)







Spitfire Mk Vb, No. 616 (County of York) Squadron, RAF Westhampnett, August 1941: Flight Lt. J.E. "Johnnie" Johnson flew this Spitfire during his tenure with No. 616 Squadron in mid-1941. Johnson was the RAF's highest scoring Spitfire ace and the second greatest scoring ace in the RAF after Pattle. Johnson began his career under the wings of Douglas Bader, learning quickly the brutal nature of the dogfight. After Bader was shot down and captured on 9 August 1941, Johnson penned a slogan on his fighter reading: "Bader's Bus Co. still running" to indicate that Bader's teachings were alive and well. (*Photo: IWM*)



Spitfire Mk IXb, No. 341 (Alsace) Free French Squadron, B.8 Sommervieu, Normandy, France, August 1944: Squadron Leader Pierre Montet flew this Spitfire during the Normandy campaign. Montet was also known by the name "Martell." Whether this is an alias or a second name is not known. Montet joined the Free French Air Force in April 1942, taking command of No. 341 Squadron on 25 September 1943. He was killed in an air crash after the cessation of hostilities in Europe on 31 August 1945.



Spitfire Mk VIII, No. 136 Squadron, Rumkhapalong, Burma, February 1944: The Spitfire Mk VIII was custom built for the tropics and was one of the most powerful variants of the aircraft produced. The aircraft went into service in 1943, predominately in the Mediterranean and the Far East, and was armed with two 20 mm cannons and four 0.50-in. machine guns. The green propeller spinner is a unit indicator and was derived from the squadron badge. Red was another color used.



Spitfire Mk VIII, No. 80 (Fighter) Wing, Royal Australian Air Force, Morotai, March 1945: This aircraft (A58-484) displays the second most common type of camouflage employed on the Mark VIII aside from the previous example. This aircraft was also one of three such fighters to be allocated to Wing Commander Clive Caldwell, DSO, DFC, during his tenure with the 80th Wing. Caldwell's scoreboard and rank pennant are painted on the nose. He ended the war with the rank of Group Captain and 28 confirmed victories, making him the highest scoring RAAF ace. (*Photo: Australian War Memorial*)



Spitfire Mk XIVe, No. 2 Squadron, B.77 Gilze-Rijen, Netherlands, 1945:

No. 2 Squadron began using the new Spitfire XIV from 1944. Note the F.24 oblique camera in the fuselage (behind the cockpit). This was used for low-level Photographic reconnaissance missions. The Mk XIVe version had a completely redesigned airframe from the Mk XIVc (see below), having a cut down rear fuselage, teardrop canopy, clipped wings and larger fuel tanks. The squadron badge, displayed on the top left, has a wake knot over an RAF roundel.

Spitfire Mk XIVc, No. 152 (Hyderabad) Squadron, India, 1946: This aircraft displays standard SEAC (South East Asia Command) markings. The regular C1-type roundel was discontinued in this theatre from



1943 because at long ranges it was easily mistaken for the Japanese red "Meatball." Also displayed is the squadron's unofficial *Black Panther* insignia, which was used from 1944.



Supermarine Spitfire PR Mk XIX, No. 681 (PRU) Squadron, Mingaladon, Burma, August 1945:

The Spitfire Mk XIX entered service at the closing months of the war and was the photographic-reconnaissance version of the Spitfire Mk XIV with wings modified to hold extra fuel. The aircraft was armed with two 20 mm cannons and had a top speed of 736 kmh (460 mph), a ceiling of over 43,000 ft and a range of 2,400 kilometers (1,500 miles).

NORTH AMERICAN MUSTANG



Mustang Mk I, No. 613 (County of Manchester) Squadron, RAF Twinwood Farm, Berdfordshire, July 1942: Flown by an unidentified pilot, this Mustang carries a small Panda head marking on the nose and is the individual pilot's marking. Contrary to orders, this aircraft still carries a Dark Green/Dark Earth camouflage a whole year after instructions to switch to Grey/Green colors.



Mustang Mk III, No. 122 (Bombay) Squadron, RAF Andrews Field, Essex, October 1944: The Mark III was the first variant of Mustang to house a Merlin engine, leading to the famous collaboration. A total of 910 Mark IIIs (274 P-51Bs & 636 P-51Cs) were taken on by the RAF, and fitted to British standards, including the installation of the Malcom bubble canopy. This Mustang caries a 409 liter (108 US Gallon) British fuel tank. The squadron badge was of Leopard in front of a mullet, indicative of the squadron's Indian benificators.

Mustang Mk IV, No. 154 (Motor Industries) Squadron, RAF Hunsdon, 1945: The US P-51D and P-51K Mustangs became the Mark IV in RAF service. This aircraft presents a natural metal finish (rare for the normally totalitarian RAF) with a strip of olive drab in the top to reduce glare.





two 1050 hp Bristol Pegasus XVIII engines and armed with two double-gun turrets. Defense for attacks from the beam were nonexistant, although a ventral "dustbin" turret offered some protection from underside attacks.

Wellington Mk IA,



Wellington Mk IC, No. 311 (Czechoslovakian) Squadron, RAF East Wretham, 1941: This "Wimpy" has an interesting roundel - the white in the standard A1-Type RAF roundel has been painted out to reduce visibility in night-time forays over enemy territory. The Wellington Mark IC was crewed by six men (the pilot, navigator/bombardier, radio operator, observer/nose gunner, tail gunner and the waist gunner). It had a top speed of 235 mph (376 km/h), a range of 1,805 miles (2904 kilometres) and a ceiling of 19,000 ft. It could 4,500lbs of bombs. The squadron badge was a thrasher and a morning star in saltire, with the hafts fracted.



Wellington Mk X, No. 99 (Madras Presidency) Squadron, Jessore, India, 1944: This Wellington is seen in standard RAF heavy bomber colors, but with SEAC (RAF South East Asia Command) markings and extensive yellow identification strips. The Mark X was the most widely used version of the Wellington during the latter half of the war. The aircraft had a top speed of 410 kilometers (255 mph) at operational height, a maximum range of 3,354 kilometers (2,085 miles) and a bomb-load of 4,000 lbs (1,814 kgs). The squadron badge was of a Puma.



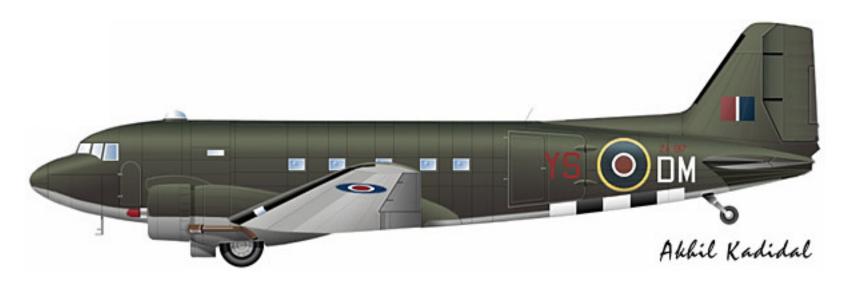
Douglas A-20C Boston Mk IIIA, No. 342 (Lorraine) Free French Squadron, 2nd Tactical Air Force, RAF Hartford Bridge, September 1944: This colorful Boston carries a variety of markings. The D-Day invasion stripes are still present in the underwing and lower-fuse-lage portions as are a number of colorful badges. On the tail is the squadron badge while under the cockpit is the Free French shield with the white Free French cross of Lorraine.



Gloster Meteor Mk III, No. 263 (Fellowship of the Bellows, Argentina) Squadron, Fighter Command, UK, Late-1945: The Meteor was the first allied jet-fighter to go operational during the war. It saw initial service with No. 616 Squadron in July 1944 but flourished in post-war squadrons immediately afterwards. The Mark III was the second and last variant of the aircraft to see service during the war. The aircraft had a top speed of 415 mph (669 km/h) at 10,000 ft, a service ceiling of 40,000 ft and a maximum range of 1,000 miles (1,610 kilometers) on internal fuel. It was armed with four 20 mm Hispano cannons.



North American Mitchell Mk II, No. 320 (Netherlands) Squadron, 2nd Tactical Air Force, RAF Dunsfold, Surrey, April 1944: The Mitchell was well-loved by its pilots for its ease in the air. The above aircraft carries six mission symbols on the nose along with an inverted orange triangle - the pre-war insignia of the Dutch *Luctvaartafdeling* (Air Force).



Douglas C-47 Dakota Mk III, No. 271 Squadron, Transport Command, RAF Down Ampney, Gloucestershire, 19 September 1944: Flight Lt. David S.A. Lord's Dakota at the time of his fateful flight on 19 September. The underfuselage stripes are the remnants of the Normandy invasion; the original fuselage and underwing stripes had been removed just days before. Note the windows, they have small orifices through which the paratroops could fire their small-arms.

FLIGHT LT. DAVID LORD'S VICTORIA CROSS DETAILS

On 19 September 1944, during Operation "Market Garden," the airborne operation involving the capture of several bridges in Holland, the British 1st Airborne Division was in desperate need of supplies. It was the third day of "Market-Garden," and No. 271 Squadron was dispatched to airdrop supplies to the fighting paratroops outside Arnhem. Flying Dakota "YS-DM" (ZA917) on that fateful mission, Flight Lt. Lord and his crew took off from their Gloucester base and headed towards Holland. To prevent heavy casualties over the battle-zone, the squadron commander had ordered his aircraft to fly at 1,000 ft feet because the LZ (Landing Zone) had been ringed by German flak. Reasoning that flying at a higher altitude would give him the best chance of dropping his supplies accurately, Lord approached Arnhem at 1,500 ft. The sky began to fill with intense AA fire. Within minutes, the



Dakota had been struck twice in the starboard wing. With crucial damage to the wing, Lord would have been justified if he had aborted the run-in. But on learning that his crew was uninjured and that the LZ was just three minutes away, Lord decided to press on.

By now, the starboard engine had caught fire and was flaming furiously. The stricken engine caused his aircraft to lose altitude, falling down to 900 ft. The smoking Dakota quickly became a prime target for German anti-aircraft gunners. Undaunted, Lord held his course, and unloaded his payload on the LZ. His dispatchers informed him that there were still two containers onboard. Aware that his starboard wing, which was being eaten away by the flames, might collapse at any moment, Lord rejoined the circuit to make another pass. Eight nail-biting minutes passed before Lord completed his second run-in, with the German ack-ack blazing away. The remaining containers were dispatched. Now came the time to save his crew.

Ordering his crew to bail out, Lord stayed at the controls to hold the aircraft steady. By now, the flaming Dakota had fallen to 500 feet. Before the crew could escape, the wing broke away. Only one man managed to get away. Pilot Officer Harry King (the navigator) was flung out while helping other crewmembers with their parachutes. Lord, two crewmembers and four army dispatchers, whose job it was to actually drop the supplies were all killed. Lord's courage was rewarded with a posthumous VC, transport command's only Victoria Cross of the war.

Lord and his crew were buried in the cemetery at Oosterbeeck. (*Photo: IWM*)

THE UNITED STATES EIGHTH AIR FORCE

At the height of the war, in the spring of 1943, a neophytic army in England was preparing for battle. The American Eighth Air Force was the US Army Air Force's newest progeny, but it had been bred since its inception on 1 February 1942 with a single purpose: sustain the primary American air effort against Nazi Germany and in the process validate the controversial pre-war concept of air warfare known as strategic bombing.

In comparison to tactical air power, long tested on the

battlefields of France in the last World War, strategic warfare was a relatively new idea. As US historians later put it: "Strategic bombing bears the same relationship to tactical bombing as a cow does to the pail of milk. To deny immediate aid and comfort to the enemy, tactical considerations dictate upsetting the bucket. To ensure eventual starvation, the strategic move is to kill the cow." The Eighth Air Force thus had a singular objective, incapacitate Germany by air before the first American soldiers

set foot in occupied Europe.

It was a tremendous obligation. Worry became commonplace as the "Mighty Eighth" (a name that fledgling air force would soon earn in combat) sat the war out in England during the Summer and Autumn of 1942, awaiting the beginning of their campaign. The real action was set to begin in 1943. Several small-scale raids were already flown against targets in western France and the low-countries in the last months of 1942, under the protective gaze of the British Royal Air Force (RAF), but encounters with the enemy had been far and few. American aircrews fresh from flying schools in the United States were itching for action. But combat-experienced crews soon found their enthusiasm misplaced.

On one early mission on 4 March, American bomber-men conducting a deep raid on the city of Hamm, nestled well inside the Ruhr valley (the home of German armaments), discovered the tenacity of the defenders. The target was a sprawling marshalling yard and the bombers found and hit the target easily enough, but also blundered into the enemy. Thirteen fortresses were hacked down by the Luftwaffe. Another, skippered by a young pilot, Lt. Aaron Cuddeback, was shot up by flak over the target. Cuddeback, who had just weeks before had been enjoying the peace as a college student, struggled to keep the "Fort" airborne. He nursed the bomber to the North Sea but was forced to ditch there. Taking to their rafts, Cuddeback and his crew awaited rescue, but none ever came. They were some of Eighth Air Force's first fatalities of the war. Their final fates would ultimately be shared by over 26,000 other Americans by the war's end.

In the end, the strategic air campaign against Nazi Germany deviated far from its intended path. For one, while it has been widely accepted that bombers were the prominent devices of victory in such a campaign, it is important to note the equally instrumental role that fighters played. In the end, the air campaign was not one merely of bombers, but also that of the fighters and their pilots who together attempted to carry out the strategic aims of their leaders back in Washington.

Originally activated at Savannah, Georgia, on 28 January 1942, the Eighth would soon grow in one of the largest overseas air forces deployed by the United States during the Second World War. It was made up of three main com-

ponents: VIII Bomber Command (BC), VIII Fighter Command (FC), and VIII Ground-Air Services Command (GASC).

From May 1942 to July 1945, the Eighth planned and executed America's daylight strategic bombing campaign against Nazi-occupied Europe, and in doing assembled an impressive war record and a horrifying casualty rate. In all, the Eighth suffered about half of the US Army Air Force's casualties of the war (47,483 out of 115,332), including more than 26,000 dead. It's men earned 17 Medals of Honor, 220 Distinguished Service Crosses, and 442,000 Air Medals. About 261 fighter aces were produced,

with 31 having 15 or more victories. Over 440,000 bomber sorties were mounted to drop 697,000 tons of bombs, and over 5,100 aircraft were lost. In return, the men of the Eighth claimed 11,200 aerial victories.

After the war in Europe, the Eighth moved to Okinawa in July 1945, where it trained new bomber groups for combat against Japan. But before the Eighth could fly its first combat mmission, Japan surrendered. The air force is currently active today, with it's headquarters at Barksdale, Louisiana. Its current roster includes units flying the B-2 Stealth bomber.

Like the RAF, the Eighth employed the two-code aircraft designation system, with one set of characters denoting the squadron, and a third identifying the aircraft number within the squadron. In addition, fighter groups also employed a rich color scheme to identify the respective group. The bombers followed a similar squadron code system (although specific colors were sometimes used instead). The three Air Divisions within VIII Bomber Command also used a unique system of alphabets set within shapes to identify groups. \triangle designated the First Air Division, \bigcirc identified the Second Air Division and a \square indicated the Third Air Division.

NORTH AMERICAN P-51 MUSTANG



P-51B "BOISE BEE," 334th Squadron, 4th Fighter Group, Debden, England, Early 1944: Major Duane Beeson, born 1921, Boise, Idaho was one of the great American fighter pilots in Europe. He would undoubtedly gone on to become America's top ace in the ETO if the German ack-ack had not got him on 5 April 1944, while strafing Luftwaffe airfields. The "Bee" as he was known in his group, lived up to the nickname by adopting a gun-slinging bee as his personal motif. It adorned his aircraft from early 1943.

Akhil Kadidal

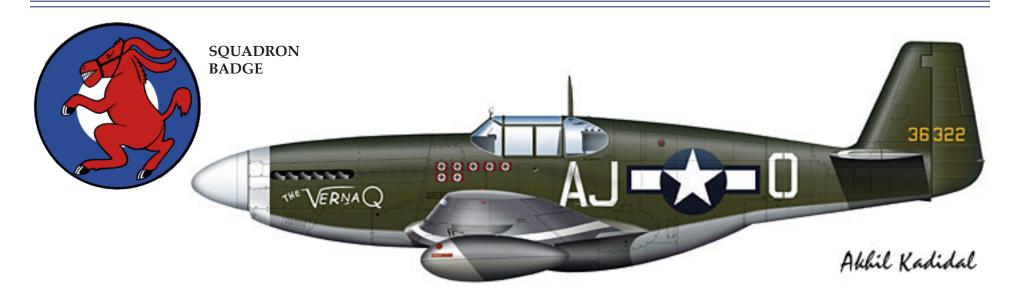
By the time of his capture on 5 April, Beeson had 19.5 kills to his credit in the air and 4.5 aircraft destroyed on the ground. Beeson survived the war, but he did not survive the peace, dying of a brain tumor in February 1947. He is buried in the Arlington National Cemetery. (*Photo: US National Archives*)



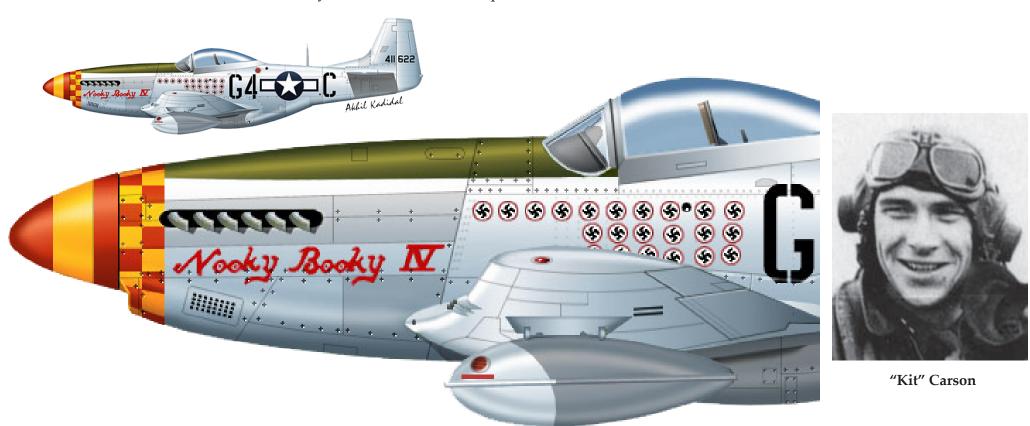
P-51B "THE HUN HUNTER FROM TEXAS," 354th Squadron, 355th Fighter Group, Steeple Morden, England, April 1944: Second Lt. Henry Brown, one of the luckiest and most audacious airman in the 355th Fighter Group, was the pilot of this Mustang. On 11 April 1944, out of ammunition and alone, he mistakenly joined an enemy flight of Me109s under the belief that they were Americans. Soon realizing his error, he attempted to give his new found friends the slip, but the Germans had seen him.

Therein followed a stiff 20 minute dogfight, in which Brown out-turned and outmaneuvered every corner that the Germans put him in. The Germans, eventually tiring of the sweeping, turning dogfight, left for home. One determined German, however, cunningly shadowed Brown for a distance and opened fire, hitting the his tail. In response, Brown did a violent Split-S maneuver and escaped. Later, he just made it to England, almost out of fuel. For his amazing solo combat over the Reich, he was awarded won the **US Distinguished Service Cross (DSC)**.

His final score was 14.2 kills in the air and 14 on the ground. Brown was shot down by Anti-Aircraft guns on 3 October 1944 and spent the rest of the war as a POW. (*Photo: US National Archives*)



P-51B "THE VERNA Q," 356th Squadron, 354th Fighter Group, Ninth Air Force, England, 1944: Major Frank O'Conner was the pilot of this aircraft. O'Conner's final kill tally was 10.75 before his capture on 5 November 1944.



P-51K "Nooky Booky IV," 362nd Squadron, 357th Fighter Group, Leiston, England, 1944:

Leonard "Kit" Carson was the top ace in the 357th Fighter Group (otherwise known as the "Leiston Boys") with 18.5 victories. The P-51K was the same as the excellent P-51D, but with a smaller Aeroproducts propeller. The above, natural finished, aircraft was a favored scheme for late-war USAAF aircraft which had no desire to hide its craft from the hunted Luftwaffe. The removal of the camouflage also made the aircraft lighter, faster and easier to maintain. Plus, the excellent contours of the Mustang showed itself suited to an all-metal finish with a healthy addition of color, such as group colors (red and yellow checks for the 357th) on the nose; notwithstanding personal motifs added by the ground crews on behalf of the pilots. (*Photo: US National Archives*)

REPUBLIC P-47 THUNDERBOLT

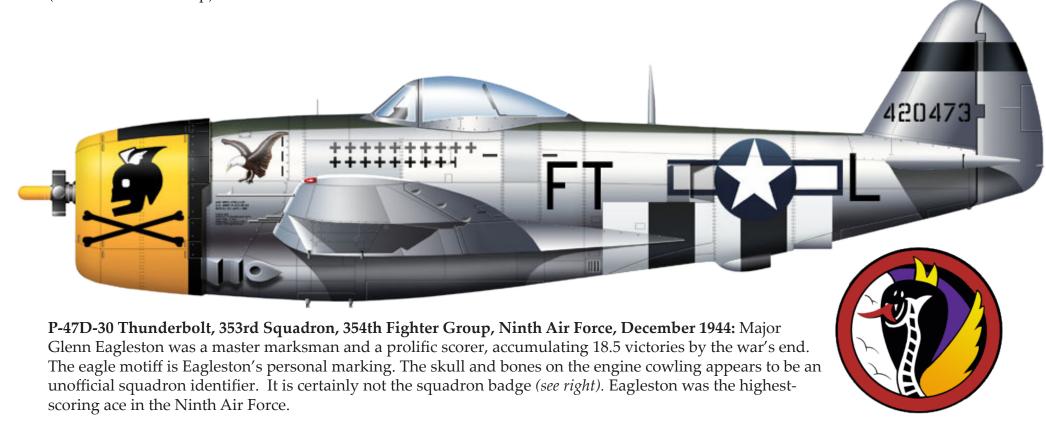


P-47D-25 Thunderbolt, 61st Squadron, 56th Fighter Group, Boxted, Late 1944: America's top ace in the ETO was Major Francis S. "Gabby" Gabreski, a formidable fighter of Polish origin. Gabreski, although a serving US officer, even flew with a RAF Polish Squadron from October 1942 to February 1943. Transition from the sleek thoroughbred Spitfire to the hulking Thunderbolt was difficult, but on 27 August 1943, he recorded his first kill. By July 1944, his tally was 28 kills.

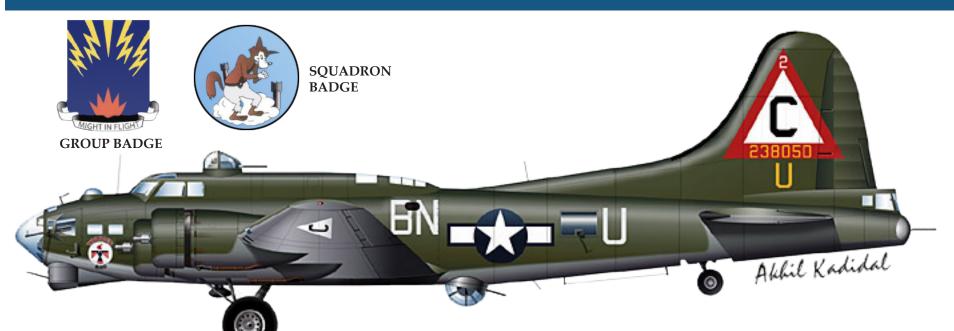




The pressure of trying to maintain his top spot (in what had become an intense ace race) made Gabreski do what he almost never did: attack a Luftwaffe airbase. (NOTE: At the time, the 8th AF also counted enemy aircraft destroyed in the ground as valid kills). Intent on bagging a kill, he failed to notice that he was losing altitude while lining up on a German bomber and his propeller hit the ground. The engine, its mechanism disjointed beyond repair began to vibrate violently. Gabreski managed to crash land and went on the run, staying free for five days before the Germans got him. His accommodation for the next ten months was at Stalag Luft I (Airman's POW Camp) at Barth. (*Photo: US National Archives*)



EIGHTH AIR FORCE BOMBERS

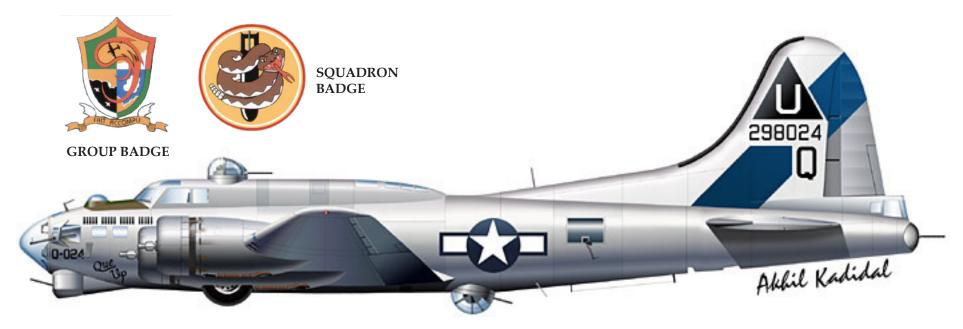


Boeing B-17G Flying Fortress "Thunderbird," 359th Squadron, 303rd Bomb Group, Molesworth Station, Mid 1944:

The B-17G was the best variant of the prolific Flying Fortresses of the war. It had a forward firing chin turret with two .50 caliber machine guns to thwart the Luftwaffe's devastating head-on attacks, but also included more powerful engines and other improvements.

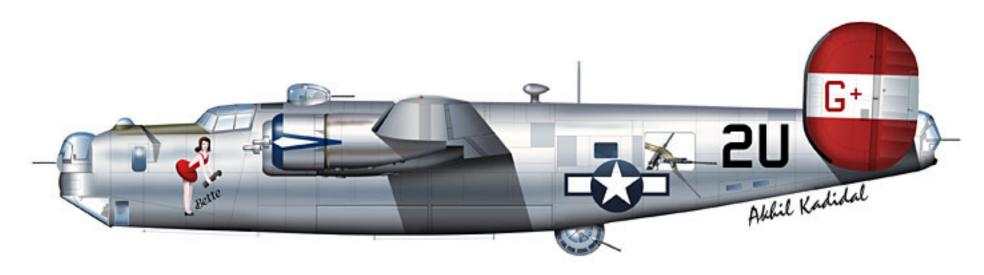
"Thunderbird" is the subject of a sprawling mural at the Smithsonian's Air and Space Museum in Washington. The markings and spirit of the aircraft have also been reborn in a refurbished, flying B-17G belonging to the Lone Star Flight Museum in Texas.

In 1944, finished B-17s were usually delivered in their pristine olive drab finish with neutral gray undersides, although from February 1944, the aircraft factories began sending examples to England in natural, aluminum finish. The 303rd first used its B-17Gs during a mission on 16 October 1944. "Thunderbird" was a Mid-1944 era aircraft, as the 303rd only adopted the red border to its triangle group insignia "C" in August of that year.



Boeing B-17G Flying Fortress "Que Up," 750th Squadron, 457th Bomb Group, Glatton Station, 1944:

The B-17G was powered by four air cooled Wright Cyclone engines that gave it a top speed of 300 mph. For defense, the aircraft carried thirteen 0.5-in. heavy machine guns, and proved a formidable nut for the Luftwaffe to crack. Still, more than three thousand B-17s were shot down by enemy fire over Europe by the war's end.



Consolidated B-24H Liberator "Bette," 785th Squadron, 466th Bomb Group, Attlebridge Station, 1944:

Calling themselves the "Flying Deck," this group flew its first mission in 22 March 1944, and its last on 25 April 1945. During that time, it mounted a total of 232 missions, dropped 5,762 tons of bombs and lost 71 aircraft.

The B-24s were banded together in the Eighth's **Second Air Division** and employed colorful insignias to show their association with the division or group. The red and white bands of the tail and the **G+** of the above aircraft is a group marker. The "2U" is a squadron code, denoting the 785th Squadron. Of course, personal motifs were popular among the Americans, with this crew choosing "Bette" as displayed.

RIGHT: Detail of Briggs-Sperry Ball gun turret and waist positions.

The "ball turret" was the most claustrophobic and dangerous position on the entire ship and took a brave man to crew it. In a fetal position, the gunner sat between the breeches of two 0.50-in machine guns, a deflector sight between them. Through this, the gunner had the difficult job of protecting the entire underside of the Liberator.

In an emergency, he could only hope that his comrades above would remember to unlock the hatch that sealed him in. Too often, crewmates in their anxiousness to get out of a stricken aircraft forgot about their belly gunners, still hunched up inside the ball turret plummeting earthwards. Later, the designers incorporated a small escape window into the ball turret through which the gunner, overburdened by parachute, heavy flight gear and all, would have to squeeze through to escape.



Group Badge (Left), Squadron

Insignia (Right)

THE LUFTWAFFE

The German Luftwaffe was arguably the most tactically-sound, technologically-advanced air force of the early war years. Ultimately, however, it was to be left down by poor leadership and was never allowed to fully realize the potential of its remarkable aircraft and men.

Born in secrey in 1935 out of a need to represent a reborn Germany under the Nazis, the Luftwaffe was created in clear violation of the Treaty of Versailles, whose writ-

ers had feared the resurgence of a military Germany. These fears were soon justified. Its early combat aircraft, the Ju87 Stuka and the Messerschmitt Me109 would soon became synonymous with German military might and the Blitzkrieg.

Initially designed as a battlefield support force, the Luftwaffe's tactics and doctrines had been molded to accommodate an two-year "Lightning War." This doctrine

would hinder its effectiveness during the Battle of Britain in 1940, where it suffered its first defeat a mere nine months into the war. Despite this setback the Luftwaffe remained a formidable force and in June 1941 went into Russia and the Mediterranean with great, initial success. Later, however, Russian industrial power, coupled with poor decisions and bad weather, eroded these gains.

On the western front, meantime, the Luftwaffe found itself in heavy combat against the equally-professional RAF and the newly-arrived bombers of the American Eighth Air Force. Having failed in its own strategic offensive against Britain, the Luftwaffe did its best against the Americans. It was no mean effort. As the appointed heirs to the traditions and skill of the old World War I *Deutsche Luftstreitkraft* (literally "German Air Fighting Force"), the Luftwaffe was obliged to retain its code of honor and the respect of its opponents, even when fighting on three fronts against overwhelming odds.

In a fatal miscalculation, the German Air Staff, still preoccupied with Bltizkrieg notions of the "offense," paid scant attention to defense. Theoretically, the Luftwaffe's very existence had been founded upon the elimination of the enemy air force first. Once this had been accomplished, the Luftwaffe was supposed to support the army in close air support and battlefield interdiction. No one in Germany had seemingly considered the possibility that the war might be drawn out, or that the Luftwaffe would fail to achieve its fundamental axiom so early in the conflict. By 1943, the Luftwaffe was in uncharted waters as far as "home defense" went – a fact exacerbated by the knowledge that the German High Command had little interest in defensive campaigns.

The woes of the Luftwaffe were later added to by the official

introduction of "Total War" that same year, in which both sides became wholly committed to the destruction of the other. The US Eighth Air Force, making bolder and bolder incursions into the Reich with impunity was a major headache for the Luftwaffe chief, Reichsmarshall Hermann Göring. These were forays that not only resulted in the destruction of allied bombers but also whittled away his valuable force of experienced fighter pilots and aces with each

passing engagement. By the spring of 1944, the Luftwaffe's mission had degenerated into that of an epic struggle to save the Reich.

By Late-1944, however, the Luftwaffe had virtually ceased as a fighting force, leaving the ground forces without air support. By some resolve it fought on into the last days of the war with revolutionary new aircraft such as the Messerschmitt Me 262 and Heinkel 162 jet fighters, and the Me 163 rocket-interceptor. But these aircraft, too little and too late, did little to

save Germany from ultimate defeat.

LUFTWAFFE MARKING SYSTEM (Fighters)

Gruppe	Staffels (Squadrons)			Gruppe Symbol
I	1	2	3	None
II	4	5	6	Horizontal Bar
III	7	8	9	Wavy Line
IV	10	11	12	Cross or disc
Colors	White	Red	Yellow	

INDIVIDUAL FIGHTER MARKINGS

Staff	Geschwader	Gruppe
Kommodore		⋖
Adjutant		<
Ops Officer	←	None
Tech Officer	<10	<0
Major		None

FOCKE-WULF Fw.190







Fw190A6, III/JG11, Oldenburg, Germany, April 1944:

This was Major Anton "Toni" Hackl's aircraft until he was badly was badly wounded in combat with American P-47 fighters on April 15 (*see kill tally on his tail, right*). He returned to combat on 5 May. By 13 July, his total kill tally was at 162...

He later became the commander of JG11 on 15 February 1945, when Major Jürgen Harder was killed in action and held this command through ever worsening conditions. By the end of the war, his score stood at 192 confirmed victories. Hackl later died on 9 July 1984. (*Photo: Bundesarchiv*)



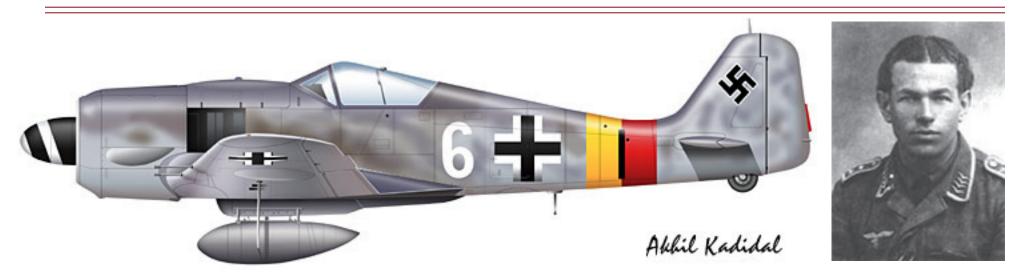




Fw190A7, II/JG1, Strömede, Germany, April 1944: On 29 April 1944, using this aircraft, Major Heinz "Pritzl" Bar, the commander of II/JG1 led a large force of 28 fighters from his command against US Eighth Air Force bombers flying against Berlin. In the ensuing melee, Bar, an experienced ace from the Eastern Front shot down a P-47 Thunderbolt for his 201st Victory. Minutes later, a B-24 Liberator became kill No. 202.

Bar later became one of leading jet aces in the world. He was certainly the third highest scoring *düsen-jäger* (jet ace) of the war with 16 kills, his record surpassed by only two pilots. In modern times, however, one Israeli Air Force pilot is said to have crossed his score.

It is interesting to note that only about eighty A-7s were built by Germany during the war, and all were employed as a bomber destroyers, carrying heavy cannons or rockets. (*Photo: Bundesarchiv*)



Fw190A8, 12./JG301, Stendal, Germany, November 1944: Willi Reschke was just an Oberfeldwebel (Master Sergeant) in the Luftwaffe in late 1944, but he had already outscored most senior officers in his wing. By the war's end, his tally was at 27 kills, all but three victims being Americans. He was a premier *Viermot* (four-engined bomber) killer with twenty heavy bombers to his credit. (*Photo: Bundesarchiv*)



Fw190A8R8, IV (Strum)/JG3, Salzwedel, Germany, June 1944: This Focke-Wulf belongs to an elite unit, IV (Strum) Gruppe, JG3, a specialist anti-heavy bomber unit. Oberfeldwebel Willi Maximowitz flew this machine. In February 1945, the group was posted to eastern Germany to combat the Russians. On one of these sorties, on 20 April, Maximowitz failed to return. (*Photo: Bundesarchiv*)



Fw190D9, IV/JG3, Prenzlau, March 1945: Oberleutnant (First Lt.) Oskar Romm, the *Gruppenkommodore* of IV/JG3 was the pilot of this "Dora." Romm took command after the previous leader, Major Wilhelm Mortiz, suffered a mental breakdown in December 1944. Like Moritz, Romm was a veteran ace and was credited with 92 victories (Moritz had 44) before being badly wounded on 24 April 1945, and subsequently knocked out of the war. (*Photo: Bundesarchiv*)

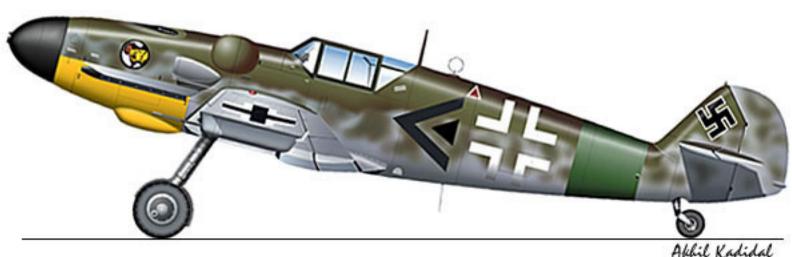
MESSERSCHMITT GMBH





Messerschmitt Me109G-6, III/JG3, Leipheim, Germany, March 1944: Major Walter Dahl, the commander of III/JG3 was the pilot of this Me109. The Geschwader (wing) badge is on the nose and the *Gruppenkommodore's* (group commander) chevrons are next to the German cross on the fuselage. Dahl was a long serving veteran, shooting down his first plane, a Russian I-18, on 22 June 1941. After that he scored kills against the Americans, especially against the Eighth Air Force, destroying no less than 38 craft from September 1943 till the end of the war. Dahl's final tally was 128 confirmed kills. He died at the age of 69 on 25 November 1985 at Hieldeberg. (*Photo: Bundesarchiv*)





Messerschmitt Me109G-6/R6, Jagdgeschwader 27 (Afrika), Grossenhain, Germany, Early 1945:

Major Ludwig "Zirkus" Franzisket was the last wartime commander of JG27, the famed *Afrika* Wing. Franzisket's machine is adorned with all the elements of a late-war Me109. It sports the wing badge (displayed on right), the wing commander's chevrons, a green *Reichsverteidigung* (Defense of the Reich) tail stripe, whose color denotes JG27, and a haphazard mottled camouflage finish of dark green and and RML75 Violet Grey. In a throwback to the

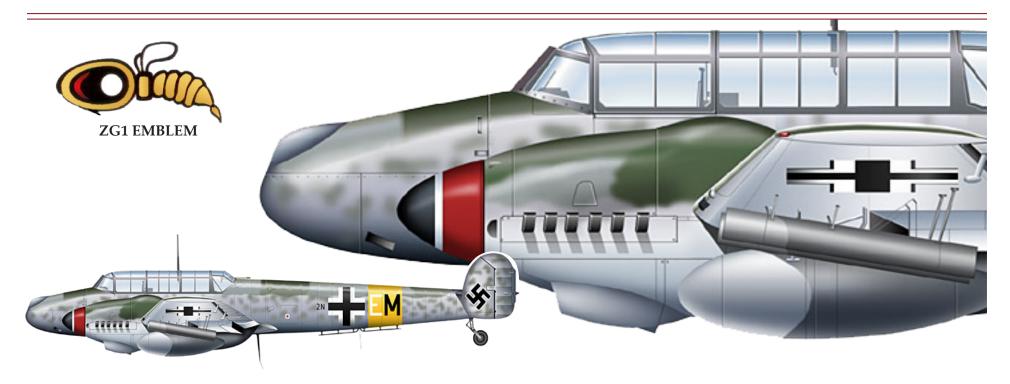
glory days of the Luftwaffe, the nose is partly colored yellow,

more of a need to identify oneself in battle rather than for the

sake of flamoyance that was once apparent on almost every Me109 during the heyday of the Luftwaffe.

Franzisket began the war as a Sergeant but ended it as a Major with the Knights Cross. In 500 missions over France, Belgium, Holland, North Africa and finally Germany, he scored 43 kills, all against the western allies. Within his tally are five American B-17s shot down over Germany in October 1944. Franzisket later died in

1988 at Münster. (Photo: Bundesarchiv)



Messerschmitt Me110G-2, II/Zerstörergeschwader 1 "Wespen," Wels, Germany, Late 1943: Aircraft such as this formed the second line of defense against American bombers. In the absence of the allied fighter escorts, the Me110 became a feared rocket carrier (carrying Gr.21 airborne mortar rockets as shown). But too often, the lumbering *Zerstörers* (destroyers) were used when allied fighters were present, to the cost of many unfortunate crews. Heavy losses prompted the near destruction of ZG 1 and her sister units, ZG 26 and ZG 76.





The JG400 unit badge. The inscription *Wein ein floh, aber oho!* reads (Only a flea but oho!)

Messerschmitt Me163B-1A, 1./JG400, Brandis, Late 1944: The Me163 "Komet" was one of the most outrageous machines ever to be put into combat by an nation at war. It was more of rocket than an airplane. Powered by a Walter HWK-109-509A rocket that worked on a dangerous method of combining two volatile chemicals (80 percent Hydrogen Peroxide with phoshpate and 30 percent Hydrazine Hydrate in Methanol), the aircraft proved a hazard. Even the smallest mixing imbalance brought about a catastrophic explosion.

The aircraft saw action for the first time on 28 July, when five Me 163's from 1./JG 400 attempted to attack B-17s near Merseburg. The American bomber crews were astounded to see nimble, bat-like aircraft dropping from the sky around them, but for all their show, the Germans were unable to down a single B-17. In all, the Me163 was a complete failure. For the loss of fourteen aircraft, the 1st Staffel, JG 400 (the only squadron to become operational within the wing) shot down only nine enemy airplanes during the war.





Me262A, III/JG 7 (Nowotny), Parchim 1945: This wing, Jagdgeschwader 7, was formed in the honor of the fallen hero,

Major Walter "Nowi" Nowotny (left), a 255-victory ace from the Eastern front. Nowotny was the first pilot to history to score 250 kills in the air - that incredible feat being finalized when he shot down 32 Russians in three seperate days.

Nowotny returned to Germany as a propoganda idol, and later in September 1944 was charged with evolving tactics for new the Me262 "Schwalbe" (Sparrow). His unit, named *Kommando Nowotny* flew some of first combat sorties

for the new jet, but on 7 November suffered a significant setback when Nowotny was killed (final score 258) while attempting to attack an American bomber formation overhead his base near

Osnabrück.

The survivors were banded together into a new wing, JG 7, in December 1944, taking on the name of their former commander. The unit was only one of two regular jet fighter units (the other being the elite Jagdverbande 44), but its effect on the air war was negligible.

By 9 April, although JG7 had a total of Me262 on charge, including 63 serviceable machines, most of the jets were grounded for lack of fuel, and those that took off were frequently victims of marauding bands of allied fighters who loitered around known jet bases to catch the Me262's at their weakest, during taking off and landing. (*Photo: Bundesarchiv*)

TOP JET ACES OF WORLD WAR II

Rank & Name	Jet	Total Kills	Units	Notes
ObLt Kurt Welter	29	63	5./JG301, 10./JG300, Kdo Welter(10./NJG11), NJKdo262	Wilde Sau. Me-262 night fighter.
Maj Georg-Peter Eder	24	78	4./JG51, 7 & 12./JG2, 6./JG1, JG26, EJG2,Kdo.Now., JG7	Viermots expert
ObstLt Heinz Bar	16	221	1. & 12./JG51, I./JG77, JGrSüd, JG1, JG3, EJG2, JV44	
ObLt R. Rademacher	16	126	3 & 1./JG54, Erg.Gr.Nord, 11./JG7	Killed 13/06/1953
Hptm Franz Schall	14	137	JG52, Kdo.Nowotny, JG7	KIFA 10/04/1945
Ltn Hermann Buchner	12	46	II./SchlG1, 6./SG2, 2 & 1./Kdo Nowotny, JG7 .	
Major Erich Rudorffer	12	224	2, Stab II & 6./JG2, IV & II./JG54, I./JG7	
Ltn Karl Schnoerrer	11	46	1./JG54, EKdo 262, Kdo.Nowotny, 9./JG7	WIA
ObLt Fritz Stehle	11	26	5./ZG76, 6./JG6, 2. & 3./JG7	
Obst Hermann Graf	10	212	JG51, III/JG52, JGr.50, JG11	
Maj Walter Dahl	9	128	II, 4, III./JG3, JGzbV, JG300, EJG2	
Ltn Hubert Goebel	9	10	JG301, Ekdo262, Kdo Nowotny, JG7	
Uffz Peter Koester	9	9	EJG2, JG7, JV44	
Ltn Joachim Weber	9	13	8./ZG26, EKdo262, Kdo Nowotny, 11./JG7	1st official jet kill. KIA 21/03/1945

THE ROYAL NAVY FLEET AIR ARM

B orn out of the World War I-era, Royal Naval Air Service, the Fleet Air Arm (or "The Air Branch of the Royal Navy" as it is officially called in naval circles), had a rough beginning. Passed around from service to service since its inception in 1918, it was at last, made a part of the Royal Navy in 1937.

At the outbreak of war, the Fleet Air Arm (FAA) consisted of 20 squadrons with only 232 aircraft between them. To make matters worse, much of these aircraft were obsolete or approaching-obsolescence. Even more damaging was the FAA had virtually

no middle or senior commanding officers, to help the younger generation of pilots and crews.

Predictably, the service suffered terribly. Many of its earlier missions in Norway, the North Atlantic, the Mediterranean and the Far East were dismal failures or moderately adequate. One bright spot was the attack on the German pocket-battleship *Bismarck* and later, the

attack on the Italian naval base at Taranto. Interestingly, both these successes were carried by the Fairy Swordfish, a biplane attack aircraft that was hopelessly obsolete by the standards of war but nevertheless carried on admirably until the end of the war.

Improved naval aircraft (including "navalized" versions of the famous Hurricane and Spitfire) lessened this technological gap. More was needed, and soon arrived in the form of American naval types, including the highly-potent Hellcat and Corsair. This reliance on American naval craft proved so steady that at its peak, one third of all FAA aircraft were American-supplied.

The FAA's greatest battle took place in 1945, when the British Pacific Fleet approached the Japanese Islands. Fierce resistance and a sudden availabilty of targets allowed for several pilots to become aces. The Arm's second and to-date, the last Victoria Cross, was won in these waters.

By the end of the war, the total strength of the Fleet Air Arm was 59 aircraft carriers, 3,700 aircraft, 72,000 officers and men, and 56 air stations. The aircraft carrier, regarded with some suspicion before the war, had replaced the battleship as the fleet's capital ship, and its aircraft had come into their own. The term "Naval Aviator," had now become something to be proud off.

FLEET AIR ARM CARRIER GROUPS, 1945

1st Carrier Air Group

Formed 30 June 1945 for *HMS Victorious*. Disbanded September 1945 Avenger and Corsairs: 849, 1834, 1836 SQS

2nd Carrier Air Group

Formed 30 June 1945 for *HMS Formidable*. Disbanded October 1945 Avenger and Corsairs: 848, 1841, 1842 SQS

3rd Carrier Air Group

Formed at Nowra on 2 August 1945. Disbanded 20 October 1945

Corsairs: 1843, 1845 SQS **7th Carrier Air Group**

Formed for *HMS Indefatigable* at Scholfields 30 June 1945. Disbanded March 1946. Seafires, Avengers, Firefly: 820, 887, 894, 1770, 1772 SQS

8th Carrier Air Group

Formed for *HMS Implacable* 30 June 1945. Disbanded April 1946. Seafires, Avengers, Firefly: 801, 828, 880, 1771 SQS

11th Carrier Air Group

Formed for *HMS Indomitable*. Disbanded 30 November 1945. Hellcats, Avengers, Firefly: 857, 1839, 1844 SQS

13th Carrier Air Group

Formed for *HMS Vengeance* on 30 June 1945. Disbanded August 1946. Barracudas and Corsairs: 812, 1850 SQS

14th Carrier Air Group

Formed for *HMS Colossus* on 30 June 1945. Disbanded 23 July 1946. Barracudas and Corsairs: 827, 1846 SQS

15th Carrier Air Group

Formed for HMS Venerable on 30 June 1945. Disbanded 1947.

Barracudas and Corsairs: 814, 1851 SQS

16th Carrier Air Group

Formed for *HMS Glory* on 30 June 1945. Disbanded 1947.

Barracudas and Corsairs: 837, 1831 SQS

FAA SQUADRON CODES

Code	Squadron	Code	Squadron
K1	766 SQ	Y1	759 SQ
M2	768 SQ	Y2	759 SQ
Ø7	893 SQ	W4	760 SQ
R7	776 SQ	W7	760 SQ
R8	776 SQ	W8	760 SQ
S7	804 SQ	W9	760 SQ
W4	760 SQ	K1	766 SQ
W7	760 SQ	M2	768 SQ
W8	760 SQ	R7	776 SQ
W9	760 SQ	R8	776 SQ
Y1	759 SQ	ΥØ	787 SQ
Y2	759 SQ	S7	804 SQ
ΥØ	787 SQ		

NOTE - Many units did not use regular squadron codes.

BRITISH-MADE FIGHTERS



Fairy Fulmar Mk I, No. 806 Squadron, HMS Illustrious, Mediterranean, 1940: This aircraft was flown by the FAA ace, Sub Lt. Alfred J. Sewell, RNVR with the rear cockpit occupied by his navigator/air gunner, Leading Airman Denis J. Tribe. Sewell achieved most of his 8½ kills while flying from HMS Illustrious from September 1940 to January 1941. He died in a flying accident on 3 October 1943 over Yarmouth, Maine when he collided with his wingman during formation flying. (*Photo: IWM*)



Hawker Sea Hurricane Mk IIC "Nickie," No. 835 Squadron, HMS Nairana, June 1944: One of the most recognizable of the Fleet Air Arm's Hurricanes was NF700 "Nickie." The red shield with the yellow stallion was present on the other side of the fuselage, under the cockpit canopy, and name "Nickie" was painted on both sides. This aircraft was lost during a deck landing when on 2 March 1944, her pilot, Lt. Commander Allen Burgham came down too hard and broke her back.

Supermarine Seafire Mk III, No. 887 Squadron, HMS Indefatigable, August **1945:** Flying this aircraft, Sub Lt. Victor S. Lowden, RNVR, carried out the last dogfight of the war just hours before the Japanese

ROYAL NAVY Akhil Kadidal surrender on 15 August 1945. On this

day, Lowden and his flight of seven Seafires were escorting a force of Fireflies and Avengers against Kisarazu airfield, 30 miles south of Tokyo, when they blundered into an enemy air patrol of fifteen Zeros over Odaki Bay. The battle was joined and the one of the seven Seafires was downed. But the British shot down eight Zeroes and claimed another four probables. Lowden was credited with 2½ destroyed during this battle and another two probables or damaged. He was later awarded a **DSC**.

THE ROYAL NAVY



Royal Navy Fleet Air Arm Squadron Emblems

A handful of squadron emblems belonging to the Royal Navy's *Fleet Air Arm (FAA)* are displayed here. They are provided to illustrate the rich, varying badges used by the FAA during the war. A few of these squadrons have survived into the modern period. No. 800 Squadron is currently operational and is frequently based onboard the Royal Navy carrier, *HMS Invincible*, flying Harrier jump jets. Between September 1939 and August 1945, the FAA possessed a total of 142 squadrons (of which 107 were frontline units) most of them numbering from 800 to 1852.





HMS EAGLE

A famous name in British naval history, *HMS Eagle* was laid by Armstrong-Whitworth on 20 February 1913,. She commissioned on 26 February 1924.

At first a seaplane carrier, *Eagle* was modified into a strike carrier. She was provided with a full-length flight deck, and a large starboard island. At the outbreak of war in September 1939, *Eagle* was in Singapore. Her next assign-

ment was the Mediterranean from May 1940, and in her first action there, her No. 813 Squadron attacked enemy shipping at Tobruk on 5 July 1940.

She was later sunk by four torpedos on 11 August 1942 from *U-73*. Two officers and 158 ratings were lost, but 927 men, including Captain Mackintosh were picked up accompanying ships. The wreck is now located 70 nautical miles south of Cape Salinas, Majorca.

AMERICAN-MADE FIGHTERS

Grumman F4F-3A Martlet Mk III, No. 805 Squadron, Maaten Bagush, North Africa, 1942: This squadron was the first in the Royal Navy to equip with Wildcat fighters in July 1941. In British service, the aircraft became the Martlet and served with distinction until 1944. This example was shore-based in Egypt during



African campaign, when in April 1941, No. 805 (equipped with twelve Martlet Mk Is) became part of the Western Desert Royal Navy Fighter Squadron (RNFS), serving with the 264th, 269th and later the 234th RAF Wing. The RNFS was disbanded in February 1942.

Grumman F6F-3 Hellcat Mk I, HMS Emperor, No. 800 Squadron, August 1944: A total of 252 F6F-3's were recieved by the Royal Navy as the Hellcat Mk I under the lend-lease agreement. The aircraft was an brutish, inelegant, craft, but it gave naval aviators a leap forward in the right direction. Powered by a 2173-hp Pratt &

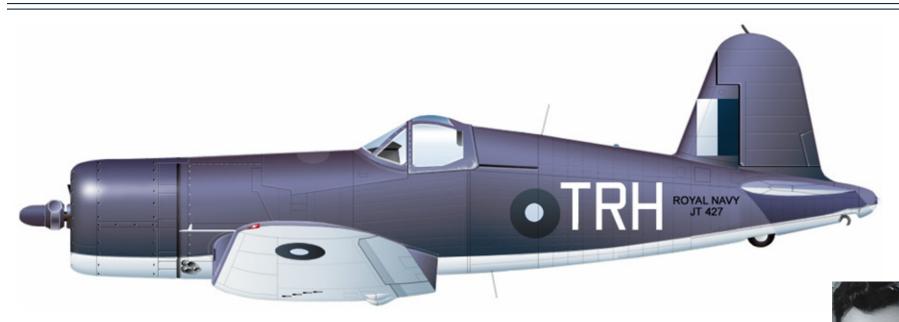
Akhil Kadidal Whitney R-2800-10W radial engine, it had

a top speed of 611 km/h (380 mph), an initial climb rate of 3,250 ft/min and a ceiling of 37,400 ft. Maximum range was a whopping 2,100 kilometers (1,305 miles) and it was armed with six 0.50-in. machine guins with 400 rounds per gun. This aircraft took part in Operation "Dragoon," the invasion of Southern France in August 1944.

Grumman F6F-5 Hellcat Mk II, No. 1844 Squadron, HMS Indomitable, April 1945: The Hellcat's reputation as a dogfighter was built on the destruction of 6,477 Japanese aircraft during the war. These victories accounted for seventy-five percent of all carrier air kills, with 4,947 falling to the US Navy (the greatest user



of the aircraft). Hellcat-equipped squadrons in the FAA were credited with 52 kills despite few enemy encounters. The highest scoring FAA pilot on Hellcats was Sub Lt. E.T. Wilson of this squadron with 4.83 victories. The colors of the above aircraft are reminscent of the US Navy's color scheme of the 1944-45 period. The "W" on the tail represented the 11th Air Group aboard *Indomitable*.



Chance-Vought F4U-1A Corsair Mk II, 47th Naval Fighter Wing, HMS Victorious, January 1945:

The Corsair was another important American fighter to see large scale service with the Royal Navy. This machine was flown by Lt. Colonel R.C. "Ronnie" Hay of the Royal Marines. Hay took command of the 47th Naval Fighter Wing (Nos. 1834 and 1836 Squadrons) in August 1944 and led it until June 1945. He was one of the Royal Navy's fifteen wartime aces and ended with war with 7.91 Victories (including shared destroyed claims). His first victory was the shared destruction of a German He111 during the Norwegian Campaign on 27 April 1940. His last was a Japanese aircraft in 1945. (*Photo: IWM*)



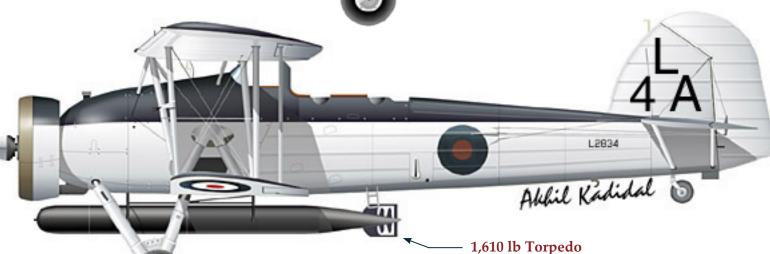
Chance-Vought (Goodyear) FG-1D Corsair Mk IV, No. 1841 Squadron, HMS Formidable, Japan, August 1945: The Canadian Lt. Robert "Hammy" Gray, DSC flew this Corsair (KD658) during his fateful last sortie against naval targets in Onagawa Harbour, Japan on 9 August 1945. That August, the squadron began sorties against targets in the Tokyo area. On one of these attacks, the Lt. Gray became the second member of the FAA to win the Victoria Cross. During an attack on Onagawa Harbor, Northeast Honushu on 9 August 1945, against overwhelming fire, he pressed home a bomb attack against the Japanese destroyer *Amakusa*, running a gauntlet of fierce AA fire. He sank the destroyer, but crashed in flames soon after. The sacrifice was honored by a posthumous Victoria Cross. Gray's is the last Victoria Cross to be won by a British naval aviator to date. (*Photo: Mrs. Phyllis Gautschi's private collection*)



ATTACK AIRCRAFT

Fairey Swordfish Mk I, No. 818 Squadron, HMS Furious, Early 1940: This aircraft was one of those that took part in the Norwegian Campaign in April 1940. It was lost during the 2nd Battle of Narvik. The aircraft is carrying two 250 lb bombs, one under each wing. The Swordfish could carry a total of 1,500 lbs of bombs.





Fairey Swordfish Mk I, No. 815 Squadron, HMS Ilustrious, November 1940: This aircraft took part in the famous Taranto raid of 11 November 1940. Its crew, Lt. Commander Kenneth Williamson and his crewman, Lt. N.A. Scarlett scored a sucessfull torpedo hit on the Italian battleship Cavour. Their aircraft was shot down by enemy fire from the warship Cesare soon after. The two men were taken prisoner.

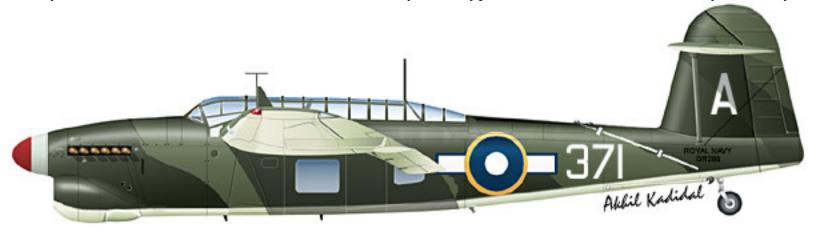
Fairey Swordfish Mk II, No. 837 Squadron, HMS Dasher, 1942: This Swordfish wears an attractive colour scheme of black with sky undersurfaces. The Mark II version of the Swordfish was similar to the Mark I, but could carry eight 60-lb rocket-projectiles under the wings. Despite its antiquity, the Swordfish saw extended frontline service with the Royal Navy until 1945. From 1944 onwards, the aircraft was also a carrier of ASV radar, serving as an ASW (Anti-Submarine Warfare) craft.



Fairy Firefly Mk I
"Evelyn Tensions," No.
1771 Squadron, HMS Implacable, Japanese Home
Waters, Mid-1945: This
aircraft is now a resident
at the Imperial War Museum at Duxford. During
the war, as indicated by
its markings, it served in the Far
East with the British Pacific Fleet.
The aircraft was the successor to



the Fairy Fulmar. It had a crew of two, the rear cockpit occupied by a navigator. Although the aircraft was classed as a fighter, it was more of an attack craft, being armed with four 20 mm cannons (thus becoming the heaviest gun-armed aircraft in the navy during the war), and could carry two 1000-lb bombs or sixteen 60-lb rockets. A Firefly of this type was the first British aircraft to fly over Tokyo during the war.



Fairy Barracuda Mk II, No. 812 Squadron, *HMS Vengeance,* **The Pacific, Mid-1945:** Naval attack craft had a reputation for being the strangest, most complicated aircraft, abound with weird portholes, protruding struts and miscellanea. This was doubly true of british designs as demonstrated by the Barracuda. Still, the Barracuda was one of the Royal Navy's most effective torpedo-bombers.

The first protoype took to the air in December 1940, and incoporated a foldable cantilever shoulder wing with Fairy-Youngman trailing flaps to give the aircraft much better performance than its predecessors, the Swordfish and the Albacore. But the aircraft had a slow start. After trails, it went into operation only in late 1943 due to the high-priority given to the RAF. It's mid-war deployement, however, was illustrious and aircraft proved its worth during the FAA strikes on the *Tirpitz* in 1943 and 1944. After, this, the Barracuda went on to serve with distinction in the Far East.

ACKNOWLEDGMENTS

All text and artwork created specially this document by the author. The photographs are ascribed to their respective sources.

Undoubtedly, much of this would not possible without Photoshop, the proverbial vessel into which I could concentrate a varieties of ingrediential methods and techniques. Much of the interest for this work comes from building plastic and wooden models of aircraft when I was a child, with the joy being to get the fine details right, including the unit badges and markings. I must thank my parents for letting me indulge in this hobby when they could, and for leading me to my love of aircraft.

ABBREVIATIONS

AF	Air Force
BC	Bomber Command
CO	Commanding Officer
DFC	Distinguished Flying Cross
DFM	Distinguished Flying Medal
DND	Canadian Department of Defence
DSC	Distinguished Service Cross
DSO	Distinguished Service Order
FAA	Fleet Air Arm
HMS	His/Her Majesty's Ship
IWM	Imperial War Musuem
JG	Jagdgeschwader (Fighter Wing)

NA	National Archives
RAF	Royal Air Force
RN	Royal Navy
USAAF	United States Army Airforce
USN	United States Navy
VC	Victoria Cross
*	Denotes Bar to award

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