

= John Cunningham (RAF officer) =

John " Cat 's Eyes " Cunningham CBE , DSO & Two Bars , DFC & Bar , AE (27 July 1917 ? 21 July 2002) was a Royal Air Force (RAF) night fighter ace during the Second World War and a test pilot . During the war he was nicknamed " Cat 's Eyes " by the British Press to explain his successes and to avoid communicating the existence of airborne radar to the enemy .

John Cunningham was born in Croydon in 1917 in the midst of the First World War . He was keen on entering the aviation industry as a teenager . Temporarily abiding his father 's wishes to avoid the military , he approached the de Havilland company and was accepted as an engineering candidate . Concurrently , he joined the Royal Auxiliary Air Force and became a member of No. 604 (County of Middlesex) Squadron . Cunningham began his training in August 1935 and flew solo in March 1936 . He received his wings in the summer of 1937 . Cunningham gradually became an established test pilot , gaining a considerable amount of flying time on different types of aircraft .

In August 1939 Cunningham rejoined his squadron , now equipped with a version of the Bristol Blenheim . His operator was Jimmy Rawsley , who would serve as his gunner and radio operator for most of the war and contribute to all but three of Cunningham 's victories . On 26 July 1940 the squadron was re @-@ designated a specialised night fighter unit and was amongst the first to receive airborne interception radar (AI) . Cunningham was promoted to squadron leader in September 1940 . In the autumn , as the Battle of Britain subsided and The Blitz began , the squadron re @-@ equipped with the rugged and heavily armed Bristol Beaufighter .

On the night of the 19 November 1940 , Cunningham claimed his first victory . By the time the Blitz had ended in June 1941 , he had destroyed 13 enemy aircraft and claimed three as probable victories and two damaged . After a prolonged rest period , he was promoted to wing commander in 1942 . He was also appointed to command No. 85 Squadron RAF , by which time his tally had reached 16 enemy aircraft destroyed . In 1943 and early 1944 he added a further four victories , one probable and one damaged . Cunningham 's combat career ended with 20 aerial victories , three probable and six damaged . He spent the remainder of the conflict in various staff officer positions . By the end of the war in Europe in May 1945 had attained the rank of group captain .

After the war Cunningham re @-@ joined de Havilland and continued his test pilot career . He flew the world 's first jet airliner , the de Havilland Comet , in 1949 . He then flew commercial jets for a time in the early 1960s and continued flying in the industry until the late 1970s . He also worked for British Aerospace as executive director , retiring in 1980 . In recognition of his wartime exploits and his contribution to civil aviation he was appointed a Commander of the Order of the British Empire . In his retirement Cunningham was nearly financially ruined when Lloyd 's of London ran into financial difficulty in 1988 . He was forced to live frugally until the end of his life . He died six days shy of his 85th birthday .

= = Early life = =

John Cunningham was born in Croydon in south London on 27 July 1917 , in the midst of the First World War . His father , Arthur Gillespie Cunningham , worked for the Dunlop Rubber Company at Fort Dunlop based in Birmingham . He rose to the position of company secretary . In 1910 he married Evelyn Mary Spencer . Her family owned an engineering company in Coventry which supplied the fabric and textiles company Courtaulds with heavy machinery . In the 1920s , her grandfather was Lord Mayor of Coventry . The family located to Croydon where John was born , along with two elder sisters Mary and Janet and a younger brother , William . John attended Bowden House School , a preparatory school at Seaford , East Sussex until he was 9 . He was subsequently a pupil at Whitgift School , a public school in Croydon . In 1926 , on a school holiday , he took a flight in an Avro 504 . His experiences encouraged him to enter the officers training corps at the school . A personal tragedy occurred in 1930 when his father died . Still , Cunningham did well at school , particularly in the mathematics field . He was keen on entering the aviation industry as a teenager .

= = = de Havilland apprenticeship = = =

At 18 , he joined the de Havilland Aircraft company in 1935 as an apprentice . Cunningham began his engineering career with some menial projects before being invited to assist with the building of the de Havilland T.K.2 and de Havilland Moth Minor . Concurrently , he joined the Royal Auxiliary Air Force and became a member of No. 604 (County of Middlesex) Squadron after a recommendation by a friend of the family . Cunningham began his training at Hatfield Aerodrome in August 1935 and flew solo on 15 March 1936 , receiving his commission as a pilot officer on 7 May 1936 .

He received his wings in the summer of 1936 . He met Jimmy Rawnsley at this time , a 32 @-@ year @-@ old electrical engineer who would later serve as aerial gunner and radar operator on all but three of John 's successful air battles . Cunningham subsequently became a junior test pilot with de Havilland , working with light aircraft alongside Geoffrey de Havilland , the company founder 's son and chief test pilot . The company was short of test pilots and Cunningham caught the eye of de Havilland as his flight experience grew . It was reflected by his promotion to flying officer on 5 December 1937 . At this time John began to care more for test @-@ flying than manufacture and design . He became one of four of de Havilland 's top test pilots .

Cunningham continued with his career . In March 1938 he was called to readiness with 604 Squadron during the Munich crisis . At this time the squadron was flying the Hawker Demon . He was displeased when they converted to the Bristol Blenheim . The machines were fitted with a tray of four 303 Browning machine guns to give forward @-@ facing firepower . As a long @-@ range fighter it was of dubious value . The German Messerschmitt Bf 109 and Messerschmitt Bf 110 could , and would , expose the frailties of the aircraft which was originally intended as a bomber . However , Cunningham was told by the Air Ministry that it would be sufficient in the night fighter role , which is where they intended to use this variant . On 20 April 1938 , John returned to de Havilland test @-@ flying de Havilland Moth Minors .

On 11 April 1939 he narrowly escaped with his life alongside Geoffrey de Havilland ; both men parachuting to safety . They had taken a Moth Minor into the air to test its response to spins . The prototypes had an anti @-@ spin parachute but preceding tests had been carried out without the need to resort to the safety measure . Geoffrey put the aircraft into a left @-@ hand spin which was recovered . Climbing back to 8 @, @ 000 feet the aircraft was put into it a right @-@ hand spin . The engine cut out , the nose reared @-@ up and the aircraft stalled and entered a flat spin . Geoffrey asked John through the Gosport tube to try to escape their perilous situation after the controls proved non @-@ responsive to de Havilland 's efforts . Both decided to parachute out . Upon doing so the Moth declined its nose and recovered from the spin . The engine ignition had been left on and the wind @-@ milling propeller started the engine . The aircraft began circling the descending airmen at dangerously close range . Fortunately it descended at a faster rate and was destroyed when it hit the ground . Cunningham casually took pictures of the wreckage and his parachute which exemplified his cool nature .

In response to the Nazi ? Soviet pact on 23 August 1939 , the RAF mobilised . Cunningham had been test @-@ flying the airliner de Havilland Dragon . Only 16 were complete before the declaration of war in September . The growing tension in Europe made war more likely . John was forced to commit himself either to de Havilland or the RAF at this juncture . The RAF had trained him and he felt he could be of far more use in the RAF than test @-@ flying aircraft .

= = Second World War = =

In August 1939 Cunningham rejoined his squadron which had been equipped with a version of the Bristol Blenheim . John was not enthusiastic about flying the Blenheim . The turret had been eliminated to reduce weight and increase speed , but the flying suits and cockpit were not heated , which caused discomfort to the crews over the winter period . The radios were too short @-@ range which caused communication problems . The Blenheim 's cockpit windshield was multi @-@ faceted and difficult to clean . It was also liable to reflect light ; which made cooperation with searchlights hazardous . The unit also had unspecified problems with blind @-@ flying instruments . The

squadron incurred some losses owing to the inexperience of crews flying patrols over the North Sea from RAF North Weald in Essex , a number of them a result of the difficulties with the aircraft . In January 1940 604 moved to RAF Northolt and flew Blenheim 's adorned in the Finnish Air Force Swastika to Finland via Sweden to assist the country after the Soviet invasion .

Cunningham was promoted to flight lieutenant on 12 March 1940 . In April 1940 the squadron flew as escort for a De Havilland Flamingo carrying Winston Churchill , First Lord of the Admiralty , to Paris to attend a meeting after the German invasion of Denmark and Norway . Most of the unit 's time during the Phoney War was consumed engaging in intensive training over the Wash which included co @-@ operation with searchlights and mine @-@ laying operations . It did not last for long . On 15 May 1940 , 604 relocated to RAF Manston . From the airfield Cunningham flew sorties over the English Channel and patrols over Dunkirk as the Battle for France intensified . Cunningham made no recorded contact with the enemy and France capitulated on 25 June 1940 .

= = = Night squadron = = =

On 26 July 1940 the squadron was re @-@ designated a specialised night fighter unit . The squadron was amongst the first to receive airborne interception radar (AI) . 604 was sent a number of AI Mk . IV radar sets . Jimmy Rawsley , Cunningham 's friend and crew @-@ mate , saw this as an opportunity to join a program which promised a bright future . Rawsley retrained as a radar operator and would re @-@ join Cunningham in January 1941 . In the intervening period the squadron was frequently frustrated by the limitations of the Blenheim . Even with the " magic boxes " , they were too slow to catch any of the German bombers if the enemy was given the slightest advantage . Cunningham flew with 604 on the night of the 18 / 19 June when the Luftwaffe flew its first major operation in the Greater London area . No victories were claimed in the summer 1940 .

Cunningham was promoted to acting squadron leader in September 1940 , commanding B Flight . Within the month the unit received the heavily armed and powerful Bristol Beaufighter . After the commanding officer , Cunningham was the second man to fly it . The Beaufighter went through a teething stage in relation to its gun sight . The sight projected a ring of light with a spot at the centre onto a small sheet of glass directly in front of the pilots head . The spot in the centre provided the aiming point , and the ring , of variable diameter , helped him to judge the rage and amount of deflection needed to attack a target . The light 's brilliance was adjustable by rheostat , but the control was ineffective . Rotating it a fraction could produce maximum brilliance or cause the spot to flicker out .

Air Marshal Sholto Douglas formed the " Night Fighting Committee " and met regularly at Bentley Priory to discuss operational problems . As an experienced aviator , Cunningham was invited to attend . Henry Tizard invited Cunningham to air his views at the meeting . Tizard referred him to the Royal Aircraft Establishment to meet Arnold Alexander Hall , a gun sight expert . With his engineering expertise and Cunningham 's assessment of the issue , Hall ironed out the inadequacies in the design . Hall later became Cunningham 's managing director at Hawker Siddeley twenty years later . Cunningham also worked with ground control of interception (GCI) carrying out various exercises . He made the acquaintance of Philip Joubert de la Ferté , (Chief of the Air Staff) , who dropped in on 604 as well as Douglas ? the two men were always keen to hear the experiences of the crew .

The AI sets added to Beaufighters were the first to be mass @-@ produced . The operating frequency was 190 to 195 MHz with a wavelength of 1 @.@ 5 metres . The equipment consisted of a receiver , transmitter , control panel , modulator , indicator unit and a system of fixed dipole aerials . On the nose the aerial was a double arrowhead shape with a pair of azimuth aerials protruding above and below the leading edge of each wing between the cannon and the wingtip . A pair of elevation aerials were located above and below the wing surfaces near the RAF roundel on the starboard side . The indicator display consisted of two cathode ray tubes . They displayed elevation and azimuth bearing . The set had a range @-@ limitation of four miles (circa 20 @,@ 000 feet) . The minimum range of detection was usually around 400 feet . At closer ranges the target merged with the transmission pulse and was obscured . At altitudes below 1 @,@ 000 feet , the returns from

ground objects would swamp the tubes . Operators like Rawnsley were left to do a fair amount of guesswork . No scales or calibration markings were put on early sets . The position and heading of the enemy in the azimuth plane , its height , and its range had to be guessed . At least the GCI could bring the Beaufighter well within range of the target , usually a mile or so behind the bomber .

The Cunningham ? Rawnsley team used the AI specifically to position themselves directly astern and underneath the enemy . Although the German bombers carried a dorsal gunner , it was difficult to locate an enemy against the black colour of the landscape . Usually the blackness of the country would swallow up the outline of an approaching night fighter . As they approached , the slipstream of the enemy could prove hazardous ; bucking the Beaufighter and throwing the pilot off his aim . Approaching from slightly below allowed the attacking pilot to avoid the slipstream . The tactics allowed for Cunningham to close the range and fire first , which was usually sufficient to end the engagement quickly and successfully . Bob Braham , a rival night fighter ace , also used this tactic .

= = = " Cat 's Eyes " = = =

Throughout the summer , Cunningham and 604 had to sit idle and frustrated as the Battle of Britain raged . By the autumn , the battle subsided . Having failed to gain air superiority the Luftwaffe now resolved to bomb British ports and industries . The change in German strategy began The Blitz phase of the aerial campaign . On the night of the 19 / 20 November 1940 the Luftwaffe raided Birmingham . The Germans hoped to follow up their attacks on the West Midlands after a highly effective raid against Coventry on 14 November 1940 . Pathfinders from Kampfgruppe 100 (Battle Group 100) led 369 aircraft from Kampfgeschwader 26 (KG 26 ? Bomber Wing 26) , Kampfgeschwader 54 (KG 54) , Kampfgeschwader 55 (KG 55) to the city .

Cunningham took off this night from RAF Middle Wallop in Hampshire to patrol north of London . When the direction of the raid was known he was ordered to proceed to the East Midlands . GCI vectored Cunningham and his temporary radar operator John Phillipson ? a former ground radar operator ? onto an enemy aircraft , but the crew were forced much further westward . Search lights attracted their attention and Phillipson was able to make a contact and guide him . Soon visual confirmation was made . A tell @-@ tale sign of an aircraft was a blank patch of sky surrounded by a cluster of stars . Keeping in the enemy 's blind spot , he flew below it and adjusted his speed to match the German pilot . After closing the range as much as he dared , he fired with all four cannons and the Junkers Ju 88 exploded upon hitting the ground near Wittering , Cambridgeshire at 00 : 35 . Cunningham 's victim , 3 . / KG 54 Ju 88 flown by Unteroffizier Kaspar Sondermeister , was not claimed as destroyed . However , after interrogation of the two German survivors who affirmed the circumstances , Cunningham was granted the victory .

Cunningham had to wait a month for his next victory on 23 December 1940 . Kampfgeschwader 1 (KG 1) sent 100 bombers led by Kampfgruppe 100 to attack Manchester . GCI vectored Cunningham onto the enemy aircraft . It was not yet dark and Cunningham identified the machine as a Heinkel He 111 . Flying at 15 @,@ 000 feet , he saw the Heinkel above the Beaufighter at 16 @,@ 500 feet . Cunningham engaged the enemy 50 miles south of West Lulworth . The enemy climbed to 19 @,@ 000 feet . Following , Cunningham opened fire at 200 @-@ 300 yards . The He 111 was engulfed in fire . The bomber was high enough for the crew to jettison the bombs and incendiaries and glide to France where it crash @-@ landed at Cherbourg . Two of Feldwebel Georg Deininger 's crew were wounded . The 3 . / KGr 100 machine was written off . The crew were unaware they had been a victim of a night @-@ fighter . They supposed they had been shot down by a flak ship .

On 2 January 1941 Cunningham nearly added a third . The Germans attacked Cardiff in the city 's heaviest raid of the war . Cunningham engaged an He 111 with an even spread of three aerial masts along its rear fuselage ? indicative of a pathfinder . He expended all the Beaufighter 's ammunition against it from the working cannons ? one cannon jammed . It dived into clouds at 10 @,@ 000 feet at an angle of 50 degrees . A 2 . / KGr 100 machine returned to France with a wounded gunner and Cunningham received credit for a probable victory . On 12 January he claimed a damaged He 111 ? his first with operator Jimmy Rawnsley . Cunningham was awarded the

Distinguished Flying Cross (DFC) on 28 January 1941 for his achievements , including 25 night sorties .

On 9 February , upon the invitation of Charles Portal , Chief of the Air Staff and Sholto Douglas , Cunningham arrived at the Air Ministry . He was ordered to report to Geoffrey de Havilland at Hatfield , though neither of the senior officers would say why . When Cunningham met Geoffrey de Havilland he was summoned to a hangar . It was the first time Cunningham had laid eyes on the de Havilland Mosquito . Cunningham flew W4050 ? the prototype ? on 9 February 1941 . He was greatly impressed by the " lightness of the controls and generally pleasant handling characteristics " ; Cunningham concluded that when the type was fitted with AI equipment , it would be a perfect replacement for the Bristol Beaufighter .

Cunningham claimed a third victory on 15 February 1941 . The Luftwaffe carried out air attacks on Liverpool and Humberside . Over Newton Abbot , Devon , he engaged a He 111 from Kampfgeschwader 27 (KG 27) . It crashed outside Totnes . The bomber , 1G + FR , belonging to 7 . / KG 27 was completely destroyed . Leutnant Eberhard Beckmann and his crew were killed . The fifth victory eluded Cunningham for some time . On 12 March he was twice vectored onto enemy aircraft by Rawnsley . He could only claim a Ju 88 and He 111 damaged . On the night of the 3 April 1941 he accounted for his fourth enemy aircraft . Although claimed as a He 111 , the identity of the aircraft was likely the Ju 88A @-@ 5 , Werknummer (" factory number ") 4224 , code V4 + AR of 7 . / KG 1 on a mission to raid Avonmouth . Leutnant Ernst Menge and his crew ; Wilhelm Hahn , Robert König , and Wilhelm Schreiber posted missing in action . On the night of the 7 April he became a fighter ace . A He 111 of 9 . / KG 26 was intercepted as its bombers attacked Portsmouth and Portland Harbour . Leutnant Erwin Hartmann crashed into the Channel with his crew . A No. 87 Squadron RAF pilot , Flight Lieutenant Derek Harland Ward claimed the victory as he saw a glow which he fired at before it hit the sea . However , Cunningham was credited with the victory as the Heinkel was about to crash . The 87 Squadron war diary acknowledged the fact in its entry for that night .

Two nights later , on 9 April , he accounted for another He 111 followed by another plus a probable victory on 11 April . It is possible his victim on the later mission was He 111P @-@ 2 , Werknummer 2002 , 1G + HT of 9 . / KG 27 . Pilot Leo Roth and crew members Oberfeldwebel Wilhelm Franke , and Unteroffizier Walter Rüggeberg and Fritz Unterieser were killed . A pilot from 307 Squadron also claimed the machine which crashed at Prowers Farm , Lydlinch , Dorset at 01 : 35 . One 8 . / KG 55 He 111 was lost with its crew over the Channel and a Stab . / KG 26 machine was lost over northern France when the crew abandoned their damaged aircraft . Cunningham 's comrade in 604 , Roderick Aeneas Chisholm , accounted for a 5 . / KG 54 Ju 88 near Portsmouth .

On 15 April Cunningham was to have his most successful night , shooting down three bombers (victories no . 8 ? 10) . On patrol near the south coast he engaged a He 111 over Monmouthshire which he shot down with only 40 rounds . He returned to Middle Wallop only to be sent on patrol for a second sortie . He took off and headed south , towards Southampton . GCI was too busy to employ him and he was granted a request to investigate a searchlight cone towards Marlborough . Rawnsley directed him to attack and he duly shot down the He 111 which crashed into derelict houses in Southampton . He was sent by GCI after another enemy but lost the contact , appearing over Southampton again he spotted yet another He 111 in the moonlight . He closed to 80 yards and shot it down . It crashed in the area of Lymington . Cunningham 's 9th victory was Werknummer 2857 , code G1 + ES , belonging to 8 . / KG 55 . The Heinkel , piloted by Oberleutnant Günther von Seidlitz , crashed onto No. 10 @-@ 12 Padwell Road , Southampton at 02 : 00 . Seidlitz and Feldwebel Franz Hümmer were killed in action and Unteroffizier Horst Rosenberg and Herbert Sauer were taken prisoner of war . In April , having downed at least 10 enemy aircraft in night @-@ fighting operations , Cunningham was decorated with his first Distinguished Service Order (DSO) .

On 3 May Cunningham accounted for another Heinkel . Four nights later on 7 May 1941 Cunningham achieved a victory ? his 12th ? in front of King George VI . Sholto Douglas accompanied the King when he appeared at Danebury Hill , not far from Middle Wallop . The King met Cunningham and Rawnsley , congratulated the airmen on their success and asked Cunningham to get another on that night . The King then was driven to the GCI station Sopley outside

Bournemouth to tour the facility . Eager to impress the King , Cunningham drove to dispersal and prepared to go on patrol . The Luftwaffe began operations at 22 : 00 that night , attacking Liverpool which took their flight path over 604 's patrol area . Cunningham took off and intercepted a He 111 north of Bournemouth . The controller asked the King to go outside as they may have the opportunity of witnessing the battle . Although they did not see it , the King heard the results ; the roar of engines and rattle of cannon fire . The Heinkel , from 7 . / KG 27 , Werknummer 1639 code IG + DR , eventually crashed near Andersea Farm south of RAF Weston Zoyland at 23 : 30 . Pilot Oberfeldwebel Heinz Laschinski , Feldwebel Heinz Shier , Oberfeldwebel Otto Willrich all survived though the pilot was badly burned . Flight Engineer Feldwebel Fritz Klemm and Feldwebel Heinz Shier were killed by gunfire . On the night of the 31 May / 1 June 1941 he accounted for another He 111 as the Luftwaffe completed its last major raid of the Blitz . It was one of 24 German bombers lost on that night . The following morning Cunningham was promoted to temporary squadron leader .

= = = Propaganda = = =

In early 1941 the British press , with permission from the Air Ministry , was allowed to approach Cunningham and write about his experiences . One of the motivating reasons for the lack of censorship was morale . In the early stages of the Blitz , the perception among the civilian population was that the Germans could attack at will over Britain during the night . The publication of Cunningham 's exploits were an attempt to assure the public the RAF was fighting back and imposing losses upon the Luftwaffe . Cunningham was singled out for attention for this purpose , though Rawnsley 's contribution to his success was virtually ignored .

The Air Ministry did not want to allow the enemy to learn of their airborne radar . German night fighters would not be equipped with such devices on a large scale until much later . A legend was created to explain his successes instead . As the first night fighter ace , they were allowed to publish his picture . The captions read that his eyesight was so exceptional it allowed him to see in the dark with the same visually ability as a domestic cat . It was also said that his diet of carrots provided him with vitamin A which allowed him to maintain excellent night @-@ vision . The ensuing public adulation was detested by Cunningham , but he accepted the " Cats @-@ Eyes " tag as a necessary deception . The propaganda story served its purpose for the populace when it was released to the public in January 1941 . The success of night defences also told the Germans the RAF was either improving its techniques , or it had something new .

The premier night fighter aces in the RAF ? Cunningham , Braham and Branse Burbridge ? did not appreciate press attention . In the case of Cunningham and Burbridge , this may have stemmed from deeper religious convictions about combat and killing . Burbridge became a priest during the war and both he and Cunningham did not cooperate with biographers when approached to have their exploits described in print after the war . During the war , Braham also actively shunned the lime @-@ light . One of the country 's best @-@ selling newspapers , the Daily Express , asked to interview him but he declined . Much to Braham 's embarrassment , his father gave interviews about his then famous son in 1943 . When no stories were forthcoming , the newspapers soon lost interest . Braham and Cunningham were certainly aware of each other as a result of the press attention , and a competitive rivalry developed . In his book Scramble , Braham mentioned with pride the night he surpassed Cunningham 's score permanently .

= = = Wing commander = = =

The dynamics of the air war changed in June 1941 . The German invasion of the Soviet Union , Operation Barbarossa , opened up the Eastern Front . The German bomber force was heavily committed to the theatre . The escalation of the fighting in the Mediterranean and North African theatres also diverted German air strength . The operations of the Luftwaffe over Britain changed dramatically . Small numbers of bombers would make hit @-@ and @-@ run attacks on selected targets near the coast for the remainder of 1941 , replacing the mass raids of the preceding autumn

and winter . Cunningham used the decline in the pace of operations to train new crews .

Cunningham 's practice of leadership was different to his day @-@ fighter counterparts . A day unit would fly in formation together , engage the enemy together , communicate by radio and follow the directions and example of their commanding officer in combat . Cunningham was not in a position to lead in this way . The night fighter was a lone hunter . When it took off the crew would operate alone in the air . Instead , he could ensure proficiency in battle only by teaching his men to master their aircraft and AI . He was constantly in touch with scientists and tracked new developments . He also took up new crews in the Beaufighter to generate confidence in the machine . Night pilots had to learn to fly on instruments alone , in adverse weather conditions and for sustained periods . Rawnsley contributed with the use of AI and mock @-@ interception using target aircraft were flown regularly .

Cunningham still flew on operations . Flying the new Beaufighter II powered by Merlin engines on an interception in July , he was hit by return fire from a He 111 . The engines spluttered and one caught fire . Already far out to sea he flew back to base , extinguished the fire and made a wheels @-@ down landing . The following month he had greater success . On the night of the 22 August 1941 he intercepted two He 111s . One was claimed as damaged but the second was confirmed . The Heinkel He 111 , an H @-@ 5 model , Werknummer 4081 , coded F8 + BS belonging to 8 . / Kampfgeschwader 40 (KG 40) , fell into the sea north @-@ west of Wells , Somerset at 22 @. @ 05 . Gefreiter G. Dohmen , H. Hädrich , and K. Dändel were never found . The body of Rudolf Faath was washed ashore at Burnham Overy on 31 August . On 1 September Cunningham caught and downed a Ju 88 ? his 15th victory . He was awarded a bar to his DFC on 19 September , by which time he was an acting wing commander .

The winter 1941 ? 42 passed by with relative inactivity . In the spring 1942 , Arthur Harris began his campaign over Germany in earnest with an attack by RAF Bomber Command upon Lübeck . Adolf Hitler , enraged by the attack , ordered the Luftwaffe to begin retaliatory strikes which began the so @-@ called Baedeker Blitz . On 4 April Cunningham engaged and damaged a Baedeker raider He 111 pathfinder operating over Exeter . It was able to escape into cloud . KGr 100 , the specialist German pathfinder unit , was now operating with new navigational aids which allowed them to fly through and navigate in thick cloud and rain . They deliberately operated whenever the weather proved more difficult for night fighters . Nevertheless , Cunningham made an interception on the night of the 23 May 1942 .

Attempting his usual tactic , the British crew approached from behind and below . Suddenly the Heinkel lurched into a tight left @-@ hand turn allowing the gunners to fire a broad @-@ side . The bomber disappeared into the mist . Cunningham asked GCI for help . They tracked the Heinkel flying north near Shaftesbury . Engaging again the German pilot managed to turn into a head @-@ on position and dive past almost upside down . He continually evaded Cunningham by turning in underneath him at near @-@ impossible angles . Cunningham and Rawnsley came to understand they were not dealing with a novice . Soon a turning match began and then the German attempted to escape by twisting and diving . Cunningham forced him down to 900 feet but Rawnsley and GCI lost contact when the ground clutter hid the Heinkel 's signal . Cunningham returned to base . News soon came through the He 111 had crashed onto the slopes on Cranborne Chase . Apparently , the Heinkel had broken through the clouds at only a hundred feet and dived vertically into the ground near the isolated village of Alvediston at 17 : 05 . Intelligence later determined that the machine was a He 111H @-@ 6 , Werknummer 4627 , code 6N + FR , from 7 . / KGr 100 . The bomber disintegrated upon impact . The pilot , Staffelkapitän (" squadron leader ") Hauptmann Siegfried Langer was killed along with his crew ; Oberfeldwebel G. Schmidt , Feldwebel D. Hoffmann , P. Gaidies and Gefreiter W. Worrington . It was a unique victory for Cunningham . He had not fired his guns in the 150 @-@ minute chase .

Following the episode Cunningham was promoted to temporary wing commander on 1 June 1942 , and following the downing of his 16th enemy aircraft , received a bar to his DSO on 24 July for , among other feats , " destroying an enemy aircraft without firing a single bullet ... by diving through cloud at great speed , drove the enemy aircraft to the ground . "

Cunningham and Rawnsley were soon ordered to staff positions . It was a compulsory order for

fighter pilots even when the men considered themselves fit for operational duties . Before they departed Middle Wallop and 604 , they had a chance to test the new 4 1/2 inch (10 cm) AI Mk . VIII radar which had a range of two or three miles (3 1/2 kilometres) . The new radar was a radical improvement . All the information was displayed on a single tube . The ground echo was reduced but could still be seen on screen when flying low , but it did not interfere with the overall picture . Cunningham was to take over as director of all training units from Rory Chisholm who left 604 to become a staff officer at group headquarters . Rawnsley was due to take an instructors job at 62 Operational Training Unit (OTU) at Usworth . Cunningham managed to persuade the CAS to deploy him to headquarters at No. 81 Group RAF , the training organisation for RAF Fighter Command . Rawnsley was also promoted to squadron leader and was awarded the DFC and Distinguished Flying Medal (DFM) . The pair remained grounded for six months until January 1943 .

== = Last tour == =

Cunningham was allowed back onto operations . He was given command of No. 85 Squadron RAF , equipped with the de Havilland Mosquito NF.II based at Hunsdon . He selected Jimmy Rawnsley as his operator . The radar set displayed the entire picture . A small cathode @-@ ray tube set on the left side of the instrument panel gave Cunningham a composite image . The duo decided Rawnsley should control the interception in the initial stages until they reached a point where the enemy could take evasive action . Then Cunningham would take over while Rawnsley would call out the ranges and free the pilot from looking at his ray @-@ tube .

On the night of the 3 March 1943 the Luftwaffe was active again . Cunningham scrambled too late to get contact with the GCI 's contact . He climbed toward a searchlight box . The searchlights operated in a box @-@ shape , separated by evenly spaced markers . Each fighter was given a box and flew to its allotted marker beacon . There he orbited until the lights illuminated a target , or formed a cone where he could pick up an AI contact . Soon he had a contact ? a Dornier Do 217 . He closed in but his cannons jammed . After sitting behind the Dornier for some time and trying in vain to encourage the guns to fire , the German crew suddenly woke up and dived away . Cunningham was furious . Three @-@ quarters of the squadron got airborne but only he had seen an enemy . Unsatisfied with ground and aircrews , he used his influence in the small night @-@ fighter community to bring in personnel from his old unit , 604 , currently languishing in Cornwall . With the new VIII radar a uniform facility , Cunningham took command of a Mosquito NF.XII ? the first Mosquito to have a smooth " bluff " nose dome over the dish antenna .

At this time the Luftwaffe was sending increased numbers of Focke @-@ Wulf Fw 190 fighters over England , at night and at low @-@ level . They were able to hit the coastal areas and their speed and agility meant they were a difficult prospect to intercept . The German pilots were disadvantaged in some respects . There was a lack of night @-@ flying experience in these units , the Fw 190s did not carry radar and had a short range . Aside from a small mirror , the pilot could not always see behind him well enough at night . On 16 May 1943 the Fw 190s lost four and probably a fifth to 85 Squadron . On 13 June 1943 Cunningham intercepted an Fw 190 not far from his airfield at West Mallory . The GCI controller telephoned the crew @-@ room to notify them the commanding officer was closing on an enemy aircraft heading to London . They heard both aircraft and the brief burst of fire followed by the explosion . To his amazement , Cunningham later learned the pilot ? Leutnant Ullrich from 3 . / Schnellkampfgeschwader 10 (Fast Bomber Wing 10 ? SKG 10) ? was thrown through the canopy as the Fw 190A @-@ 5 , Werknummer , 840047 code CO + LT , fell earthwards . He deployed his parachute and was picked up by a searchlight crew with a broken arm .

On the night of the 23 August an Fw 190 was claimed off Dunkirk and on 8 / 9 September 1943 , an Fw 190A @-@ 5 off Aldborough proved his 19th victory and last claim of Cunningham for the year . The Fw 190 was seen to crash into the sea by the Coastguard . Cunningham achieved his 20th and final air victory on the night of the 2 / 3 January 1944 . Chasing a Messerschmitt Me 410 to France , near Boulogne before shooting it down . The machine , Werknummer 017 , Code U5 + FE , belonging to 14 . / Kampfgeschwader 2 (KG 2) crashed at Marquise . Oberleutnant Helmut Schülze

and Heinz Beger were killed .

In January 1944 the Luftwaffe initiated Operation Steinbock . Cunningham filed two claims during the offensive which lasted until May 1944 . On the night of the 20 / 21 February 1944 he claimed Junkers Ju 188 damaged at 22 : 09 near Staplehurst . One Ju 188 was lost and its destruction was attributed to another pilot . On the night of the 23 / 24 February he claimed a probable victory against another Ju 188 off Beachy Head . One Ju 188E @-@ 1 landed at Coulommiers after surviving an attack by a night fighter . Werknummer 260222 , code U5 + AN from 5 . / KG 2 returned with two crewmen injured ? Unteroffizier Johann Triebel and Wilhelm Spönemann . During these missions Cunningham was nearly shot down . Closing in on a Ju 188 from astern , the gunners suddenly opened fire and the Junkers took evasive manoeuvres . A single round struck the windshield nearly shattering it . Glass fragments struck Cunningham in the face which were later removed in a field hospital . Later , a captured German crew told intelligence officers a new radar was being used in the rear of German aircraft to detect night fighters . Bombers were now more difficult to surprise . Cunningham 's last encounter with the enemy in 1944 was in pursuit of an Me 410 . He had to give up when his windshield iced over near the French coast .

On 3 March 1944 he was awarded another bar to his DSO . The citation describing him as " an example beyond praise . " On 11 April 1944 , Cunningham was decorated by the Soviet Union with the Order of the Patriotic War , 1st Class . He was promoted to wing commander (war @-@ substantive) on 1 September 1944 , serving in a series of staff positions for the remainder of the war .

= = = Group captain = = =

In March 1944 Cunningham relinquished command of 85 Squadron . He was appointed group captain in command of Night Operations at No. 11 Group RAF . At 26 he was one of the youngest to hold that rank . Air Marshal Roderick Hill asked him to report to de Havilland in company with Adolph Malan . They were to test @-@ fly the de Havilland Vampire . Cunningham commented that the machine would make an ideal night fighter . Although he was not familiar with the workings of the de Havilland Goblin turbojet , he recommended that if the cockpit was extended to allow for a navigator and the fuel tanks were enlarged , the type could make a formidable interceptor . While test @-@ flying , Cunningham and Rawnsley carried out a sortie over Normandy from RAF Uxbridge . They overflew the British sector on the 9 June 1944 as the Battle for Caen began . They were vectored onto enemy aircraft but were unable to hold their contacts .

On 13 June 1944 the V @-@ 1 flying bomb offensive began and Cunningham was tasked with assisting with their interception . He also coordinated his efforts with No. 100 Group RAF , which were engaged in intruder operations over occupied Europe . Cunningham was concerned at using Mosquitoes for intercepting V @-@ 1s because of the dangers of the bomb exploding and damaging the attacking fighter . One of his former commanding officers and current Group Captain Edward Crew ? an ace with 15 enemy aircraft and 31 V @-@ 1s shot down ? was forced to bail out when the nose of his Mosquito was split open . The operations did last long and by August 1944 the Mosquitoes were back on bomber support missions .

Towards the end of the war he spent most of his time flying throughout Europe and meeting various commanding officers and units . He took advantage of his position to fly other types he had not had the chance to operate . He flew Supermarine Spitfires frequently on such trips . Soon after the Normandy Campaign he took leave to visit his mother in Ireland . She was staying with his sister Mary , (and his niece) who had lost her husband killed in action at Anzio in Italy . He remained with 11 Group until the capitulation of Germany on 8 May 1945 .

In July 1945 was sent to the Far East . A group was created which was a collection of RAF forces that were to be used to recover Singapore from the Japanese . Cunningham and Rawnsley flew out to Rangoon via Malta , Cairo , Baghdad and Karachi . Soon after they arrived they learned of the atomic attacks against Japan . On 2 September 1945 , Japan surrendered and the Second World War was over . Cunningham was offered a permanent commission in the RAF but he feared his career , if he stayed , would become mired in administration , policy @-@ making staff courses and

committees . It would mean flying would become a secondary occupation . He decided to return to de Havilland . The company had asked the RAF to release him the previous summer but had been refused . He was formally de @-@ mobilised in November 1945 and re @-@ joined de Havilland on 1 December .

= = Post @-@ war activities = =

Cunningham relinquished his RAF commission officially on 1 August 1946 , retaining the rank of group captain , but remaining in the re @-@ constituted Auxiliary Air Force with the permanent rank of squadron leader . He reformed his old auxiliary squadron at the request of the Air Ministry in 1946 but took no active part in its running , serving as a reserve officer in the Royal Auxiliary Air Force until his retirement as a reserve squadron leader on 1 August 1967 .

At de Havilland he was awarded a salary of £ 1 @, @ 500 in a company that had expanded enormously during the war . The number of employees rose from 5 @, @ 000 to 38 @, @ 000 . The turnover of the company had gone from £ 1 @. @ 5 million before the war to £ 25 million and was now supported by around 100 factories . Cunningham now took the title of chief test pilot of the de Havilland Engine Company under the supervision of Geoffrey de Havilland Jr . Cunningham served as a pilot and consultant in a series of deals with the Swedish Air Force and Swiss Air Force . Both countries were keen to employ him but Cunningham visited only to deliver and advise on the de Havilland Vampire and British airborne radar design . In 1990 the Swiss presented him with the spade @-@ grip from the control column mounted on a wooden stand when they withdrew the last of their Vampires . When the Swedes retired the machine in 1997 he was invited to celebrate its 50 years of Swedish service .

On 27 September 1946 Geoffrey de Havilland Jr was killed test @-@ flying the DH.108 Swallow over the Thames estuary . Cunningham had taken off at the same time to deliver the first Vampire in Switzerland . Cunningham only learned the next morning , from Swiss newspapers at breakfast in Geneva , that de Havilland was missing . Cunningham knew the family well and contacted his father , whose other son John had been killed in a collision while flying a Mosquito in 1943 . With the agreement of de Havilland senior , Cunningham took the dead pilot 's post which earned him £ 2 @, @ 000 per year .

In March 1948 he set a world flight altitude record of 59 @, @ 430 feet (18 @, @ 114 metres) in a Ghost @-@ powered Vampire . The flight lasted for 45 minutes , reaching 50 @, @ 000 feet in 13 @. @ 5 minutes . The following year he went on to test the de Havilland Comet , the world 's first jet airliner which first flew in 1949 . On 23 May 1952 he flew the Comet ? now a highly successful export ? carrying the recently widowed Queen Mother and Princess Margaret on a four @-@ hour tour around the Alps . At one point he supervised the Queen Mother as she took the controls . She was to dine with members of the No. 600 Royal Auxiliary Air Force squadron later that night and was anxious to say she had piloted an aircraft . Cunningham continued to test @-@ fly prototypes such as the re @-@ built Comet 3 and 4 in the late 1950s . On 23 October 1956 he travelled to the United States and received the Harmon Trophy from President Dwight D. Eisenhower . It was the most prestigious American trophy for services of civil aviation .

On 1 December 1958 he was appointed a member of the de Havilland board , but the company was sold and merged into Hawker Siddeley in 1960 . With the Siddeley company , he was instrumental in the development in the Hawker Siddeley Trident in 1962 . Cunningham worked under the managing director Arnold Alexander Hall , whom he had first met in 1940 to iron out the malfunctions in the Beaufighter gun sight . Later Cunningham acted as a consultant and advisor to the Chinese Government from 1972 ? 79 as the company sought to increase its revenue by selling aircraft to China . At their insistence , he postponed his retirement for three years to complete a series of aircraft sales . On 1 May 1975 the British Government announced the nationalisation of the industry and British Aerospace consumed all the nation 's manufacturers .

Cunningham had one serious accident whilst flying . On 20 November 1975 at Dunsfold Aerodrome , Surrey , a flock of Snowy plover birds collided with the British Aerospace BAe 125 aircraft just after takeoff and were ingested by the engines . Cunningham was forced to make an emergency landing .

He put the aircraft down at 130 mph (210 km / h) , onto the runway , but it careered through the perimeter of the airfield and across a public road where it collided with a car carrying four passengers who were killed ; no one died on board the HS 125 . Cunningham suffered two crushed vertebra but he remained chief test pilot at Hawker Siddeley after the accident until 1978 when British Aerospace was formed . He was awarded the Segrave Trophy for his services in 1978 . In recognition of his wartime exploits and his contribution to civil aviation , he was appointed a Commander of the Order of the British Empire and retired from British aerospace in 1980 .

In his retirement , Cunningham devoted himself to aviation affairs of a charitable nature while building a retirement fund for himself . In 1980 he was appointed Chairman of the Sir Geoffrey de Havilland Flying Foundation , a charity devoted to helping young people with aspirations in aviation . Over a number of years former senior RAF officers had been attracted to investing in Lloyd 's of London as a Lloyd 's " Name " . Unfortunately , Cunningham 's commitment was one of unlimited liability . When Lloyd 's ran into financial difficulty in 1988 he was faced with enormous debts . He was forced to live frugally until the end of his life . John Cunningham died six days shy of his 85th birthday in July 2002 .

= = Sale of medals = =

Following Cunningham 's death in 2002 his service medals and flying memorabilia passed to the de Havilland Aircraft Company Trust . The medals were subsequently sold for £ 384 ,000 to raise funds for the Bentley Priory Battle of Britain Trust Appeal on 7 September 2012 .