

Profile – Group Captain John “Cats Eyes” Cunningham, CBE, DSO, DFC* - 604 Squadron**
By Ian White



(via the Douglas Fisher Archive)

A photograph of G/Capt John Cunningham taken towards the end of the war when he was serving as the Group Captain Fighter Ops at HQ No.11 Group, Fighter Command.



John Cunningham prior to entering the cockpit of de Havilland Vampire F.1, TG278, in which he gained the world altitude record on 23rd March 1948, climbing to 59,446 ft (18,120 metres).

John Cunningham was born in Croydon, south London, on the 27th July 1917 and was educated at Bowden House Preparatory School, Seaford, Sussex, and the Whitgift School, Croydon. Following his first flight in Avro 504K/G-EBIZ whilst still at Whitgift, John was awarded an apprenticeship in 1935 at the de Havilland Technical School at Hatfield, Herts, where he studied the aerodynamics, construction and manufacture of wooden aircraft. On completing his apprenticeship he was allocated work by Captain (later Sir) Geoffrey de Havilland on the development programme of the de Havilland D.H.94 Moth Minor.

During the latter part of 1935, John was accepted for pilot training by the CO of No.604 (County of Middlesex) Squadron, Auxiliary Air Force (AuxAF), Squadron Leader C.P.Gabriel, and introduced to his QFI, Flight Lieutenant Hugh David, who would tutor the young ‘Mr Cunningham’ on the Avro 504N. On the 15th March 1936 John soloed in 504N, J8541, and was awarded his wings and an AuxAF commission as a Pilot Officer on the 5th May. At that time 604 was equipped with the two-seat Hawker Demon fighters and in the September of the following year (1937) he was ‘crewed-up’ with LAC Cecil ‘Jimmy’ Rawnsley as his permanent air-gunner, to begin a partnership that would last until 1944. That same month the young pilot was invited by Captain de Havilland’s son, Geoffrey, Jnr, to join the small team of test pilots to help-out with the flight testing of the Moth Minor.

The Munich Crisis of 1938 saw 604 Squadron mobilised for the first time and re-equipped in January 1939 with the fighter version of the Blenheim bomber, the Blenheim Mk.If. Prior to the outbreak of war on 3rd September, the Squadron was mobilised once more and moved to North Weald, Essex. Although designated as a fighter squadron, 604 was used for a multiplicity of tasks, amongst which were North Sea reconnaissance, convoy protection, coastal patrols and ‘cats-eyes’ night patrols. It was not until July 1940, when the Squadron had moved to Middle Wallop, Hants, that its Blenheims

were equipped with AI Mk.III radar and formally transferred to the night-fighter role. Although adequate as a night-flying aeroplane, the Blenheim lacked the performance required of a night-fighter and it was not until the Squadron received Bristol Beaufighter Mk.Ifs equipped with the superior AI Mk.IV radar in September 1940 that the Squadron got into its stride.

After much trial and error in the Blenheim and learning to handle the Beaufighter and its radar, Cunningham and Rawnsley and another radar operator (R/O) Sergeant John Philipson, began to gel as a team and develop their tactics. These were to come together on the night of 19th/20th November 1940, when the by now Flight Lieutenant Cunningham and Sergeant Philipson in Beaufighter R2101, coded NG-R, destroyed a Junkers Ju 88A-5 bomber over East Wittering, Sussex, a feat they repeated a few nights later on the 12th December with the destruction of another Ju 88. Cunningham and Rawnsley's first 'confirmed' occurred on the night of the 23rd December when a Heinkel He 111 was claimed and from that date Jimmy became John's permanent operator.

With radar serviceability improving and the new ground control of interception (GCI) radars being installed in the south-east of England, Cunningham and Rawnsley's tally steadily increased - an He 111P-2 on 15th February 1941, an He 111H-5 on 7th/8th April, and more Heinkels on the 9th/10th, 11th/12th, two on 15th/16th, one on 3rd/4th May and two more on 7th/8th and 31st May/1st June. For his work during the Winter Blitz Squadron Leader Cunningham, the OC 'B' Flight, was awarded the DFC on 28th January 1941 and the DSO on 8th August. That same month he was appointed to command the Squadron on promotion to Wing Commander and awarded a bar to his DFC the following month (September).

With the Night Blitz ending during the summer of 1941, when the majority of the *Luftwaffe's* bomber units were transferred to the Eastern Front, trade over Great Britain rapidly diminished. On 22nd/23rd August an He 111H-5 was claimed, followed by a Ju 88C night intruder on 1st/2nd September. Apart from providing detachments to Coltishall in August 1941, 604 remained at Middle Wallop until December 1942, when it was pulled out of the front line and posted to Predannack, Cornwall, for a rest. During this period Cunningham and Rawnsley claimed two He 111s in daylight engagements (4th April & 23rd May 1942) before themselves being rested in July 1942 on posting to HQ No.81 Group, Training Command, and the award of a bar to John's DSO.

Following the completion of their 'rest', John and Jimmy were posted to No.85 Squadron as CO and navigator leader respectively. Equipped with the superlative de Havilland Mosquito NF.XII equipped with the centimetric AI Mk.VIII, No.85 was based at Hunsdon, Herts, as a part of London's night defences. The duo returned to scoring on the night of 13th/14th June when they claimed a Focke Wulf Fw 190A-5 fighter-bomber, a second on 23rd/24th August, and one, possibly two, on 8th/9th September. The partnership concluded during the early part of 1944 with a Messerschmitt Me 410 destroyed on 2nd/3rd January, a Ju 188 damaged on 20th/21st February and a Ju 88 probably destroyed on the 23rd/24th. The pair were once more rested, with John being posted in March 1944 to HQ No.11 Group on promotion to Group Captain Night Operations - a post he would retain until the end of the war. He was awarded a second bar to his DSO on 3rd March 1944 and discharged from the RAF in November 1945.

Following a spell of leave John returned to de Havillands to take up his career test flying the production versions of the Vampire day-fighter. He was also allocated to fly the testbed for the de Havilland Ghost-engined Venom, which was installed in Vampire TG278 to conduct high altitude trials. With its wing tips extended by 4 feet (1.2 metres) and fitted with a specially strengthened cockpit canopy, John established a new world altitude record on 23rd March 1948, of 59,466 feet (18,120 metres). The untimely death of Geoffrey de Havilland, Jnr, in the crash of the swept-wing, D.H.108 Swallow, research aircraft on 27th September 1946, saw John promoted to the post of Chief Test Pilot(CTP) and take over the test programme. The third Swallow, VW120, with a reprofiled nose and improved cockpit streamlining was successfully flown by John on 24th July 1947 and went to become the first British aircraft to exceed the speed of sound on 9th September 1948, in the hands of test pilot John Derry.

Although fully engaged on his test flying career, John still found time to return to command the reformed 604 Squadron in June 1946 at Hendon. His reappointment to 604 as a Squadron Leader, RAuxAF, required him to convert to the Spitfire Mk.16. John's tenure as CO was to prove relatively

short, when, as a consequence of his heavy test flying commitments, he was forced to step down in January 1948.



John "Cat's Eyes" Cunningham (left, with Frank Halford and Frank Whittle), after the war, during his days as a test pilot for de Havilland

The aircraft with which John Cunningham is most closely associated, the de Havilland Comet, flew for the first time in John's hands on 27th July 1949 and was demonstrated to the public by him at the Farnborough Airshow the following September. Later that year a number of overseas proving and fuel consumption flights with the prototype, G-ALVG, were made by John and on one, that to Castel Benito in Libya on 25th October, he recorded an average speed of 488 mph (785 km/hr). These were followed by record-breaking inter-capital flights to Rome, Copenhagen and Cairo at speeds averaging in excess of 420 mph (675 km/hr). John was also in command on the flight of the second prototype, G-ALZK, when it took to the air on 27th July 1950, one year after the first. However, the tragic series of accidents that affected the production versions of the Comet, culminated in the loss of Comet 1, G-ALYP, off the island of Elba on 10th January 1954 and G-ALYY off Naples on 8th April and the withdrawal of the aircraft's operating certificate. A few days after Yoke-Peter's loss John took the prototype of the Comet 2, G-ALYT, (R-R Avon engines) for its first flight, during which it performed flawlessly. De Havilland instituted a complete redesign of the aircraft that made it more powerful, heavier and re-engineered from 'nose to tail' and dispensed with the square windows that were found to be cause of the loss of the earlier Comets. It was then re-launched as the trans-Atlantic Comet 4, G-APDA, which John flew for the first time on 27th April 1958. During its certification trials John and his crew flew G-APDA the 7,925 miles (12,755 km) between London and Hong Kong in a flying time of 16 hours 16 minutes between dawn and sunset on 14th September 1958. On 23rd October 1956 John received the Harmon Trophy from President Eisenhower for his contribution to the development of jet-transport aircraft.

In addition to his work on the Comet John was also responsible for undertaking the first flight of the D.H.110 prototype, WG236, (later the Sea Vixen) at Hatfield on 26th September 1951 and its early flight testing before handing over the programme to John Derry to concentrate on the Comet. The loss of this aircraft and members of the public at the Farnborough Air Show on 6th September, came at the time when John and de Havilland's were trying to develop the Comet, which served to further increased John's workload. Once the cause of the accident had been established as structural failure, the second prototype, WG240, was strengthened and John, accompanied by flight test observer Tony Fairbrother, took the aircraft for its first post-modification flight on 17th June 1953. Following this flight John was able to handover the test programme to Jock Elliot (CTP, Christchurch), John Wilson and Chris Capper.

In January 1960 de Havilland became a division of the Hawker Siddeley (HS) Group and John became the division's CTP. With the Comet test programme handed to Pete Buggé (but still involved in customer crew training), John was able to concentrate on the up-coming Trident short/medium-range tri-jet airliner project. This aircraft which was to suffer a prolonged gestation period due to Government interference and commercial naiveté on the part of the HS Board, flew for the first time in John's hands from Hatfield on 9th January 1962. The Trident was a T-tail design and therefore subject to the effects of a deep-stall (sometime referred to as a super-stall) - a condition that killed CTP Mike

Lithgow and his crew in the BAC-111 on 22nd October 1963. To ensure the Trident's safety in this regard John and his team of test pilots put the aircraft through 2,195 stall tests, but this did not prevent the tragedy from occurring again. On 3rd June 1966, Trident G-ARPY was lost during a deep-stall test killing all on board - George Errington, Peter Barlow, 'Brax' Brackstone-Brown and G.W.Patterson. On the completion of the test phase and the commitment of the Trident to production, John became fully occupied with the training of pilots for British European Airways (BEA) and the development of automatic landing (Autoland) in conjunction with Blind Landing Experimental Unit (BLEU) at Bedford. On 10th June 1965 Trident 1C, G-ARPR, made the world's first Autoland carry fare paying passengers at Heathrow.

John was intimately involved with the sales drive to sell the Trident 2 to the Civil Aviation Authority of China (CAAC) beginning in 1972. For once Britain had a commercial edge as the Chinese did not regard the American Boeing 727 as an acceptable product. Subsequently, the HS Board were offered the opportunity to supply Tridents to the CAAC and have them delivered to China by John, together with a support team of specialist technical experts. Following a great deal of negotiation, during which John spent very nearly a year in China, HS was awarded a contract in August 1971 to supply thirty-three Trident 2Es and two Super 3Bs. At the end of the Chinese contract in 1978 John retired from active flying and stood down as Hatfield's CTP. That same year he was awarded the Seagrave Trophy for his accomplishments in the field of air transport.

Throughout his post-war career John retained a keen interest in the activities of the 604 and 85 Squadron Associations and was the President of both organisations. He also served as a Deputy Lieutenant for the County of Middlesex, later of the Greater London Council, was elected a Liveryman of the Guild of Air Pilots & Air Navigators and served on the committee of the Royal Aero Club. Group Captain John 'Cat's Eyes' Cunningham, CBE, DSO**, DFC*, and CTP for de Havilland and HS Hatfield, died following a short illness on 21st July 2002, aged eighty-four.

The Comet prototype wearing its civil registration, G-ALVG, which John Cunningham flew for the first time on 27th July 1949. Note the union flag and BOAC's speedbird emblem.



Trident 1C, G-ARPB, operating in the colours of BEA on the approach to Gatwick during Auto-land trials. This aircraft conducted the majority of the Autoland trials between 1962 and 1967.

