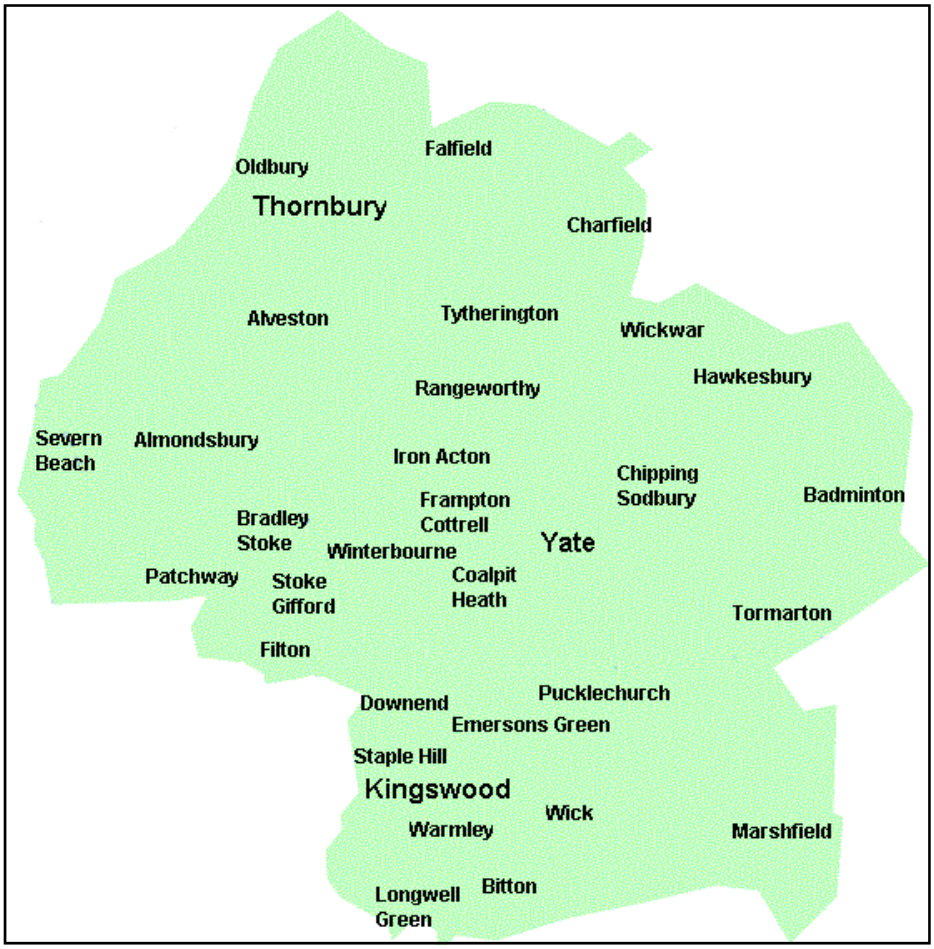
South Gloucestershire Compendium 1914 to 1918

(with additional jottings on the history of certain local undertakings, organizations, and facilities)

Rough notes compiled by John Penny



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OVERVIEW OF SOUTH GLOUCESTERSHIRE 1914 - 1918

At the start of World War One Britain produced just 35% of the food it consumed, and so Germany's best chance of victory lay in starving Britain into surrender through a naval blockade. Consequently, the country had to become more self-sufficient in food, and so during the autumn of 1915 Government backed organizations known as War Agricultural Executive Committees were established in every county in Britain. Set up by the 2nd Earl of Selborne in collaboration with the Board of Agriculture and the County Councils, they were tasked mainly with increasing agricultural output.

The inaugural meeting of the Gloucestershire War Agricultural Committee was held at the Shire Hall in Gloucester on 23 August 1915, at which Maynard Willoughby Colchester-Wemyss of Westbury Court, Westbury-on-Severn, was elected chairman for the coming year. The Committee then began work assisting and advising farmers and the local District Sub-Committees that went on to be formed in every rural and agricultural urban area of Gloucestershire.

Although Committees throughout the country considered that women would be unable to undertake the physically demanding work of farming, in March 1917 the Woman's Branch of the Board of Agriculture established a civilian women's labour force of mobile workers known as the Women's Land Army. It recruited healthy young women over eighteen years of age, trained them for four weeks and then, described as landworkers, sent them out to the farms, something the organization continued to do until May 1919.

In February 1918 a recruitment rally took place in Bristol, details of which appeared in the April edition of the 'Landswoman' magazine. It reported that some 2000 female landworkers from South Gloucestershire and 400 from North Somerset had attended the event, which had culminated in length of service stripes being presented in the Colston Hall. From the numbers involved it seems that during the early part of the twentieth century South Gloucestershire was still predominately rural.

This is also reflected by the fact that at the outbreak of war in 1914 the only locally based Territorial Force unit was a small yeomanry cavalry formation, the Old Down Troop at Tockington, which had been formed in 1906. It was attached to the Bristol based 'D' Squadron of the Royal Gloucestershire Hussars, a regiment which recruited mainly from the farming and land owning community.

Nevertheless, a certain amount of industry had already been established, some of which proved capable of being adapted for large scale war production. However, almost all such undertakings were located on or near the northern fringes of the Bristol conurbation in Filton, Kingswood, Staple Hill, and Warmley. In addition, during the conflict the War Office, Air Board, and Ministry of Munitions were responsible for the erection of extensive military and government facilities at Filton and Yate, while Army training took place in the Chipping Sodbury area, and Auxiliary War Hospitals were set up in suitable premises at Almondsbury, Badminton, Bitton, Chipping Sodbury, Downend, Hawkesbury, Horton, Pucklechurch, and Tockington.

AUXILIARY MILITARY HOSPITALS IN SOUTH GLOUCESTERSHIRE

Although at the outbreak of war in 1914 Britain was relatively well prepared to treat wounded servicemen, the War Office had substantially underestimated the number of casualties, and soon there were insufficient beds available in existing military base and voluntary hospitals. By the end of 1914 it was clear that more accommodation would be urgently required and Bristol, like many other places in the country, was asked to receive an ever growing number of British, Empire, and later American, casualties. Consequently, by the spring of 1915 the city was home to two large military base hospitals.

The first, which had originally been established as part of the new Territorial Force in 1908, was the 2nd Southern General, and this was immediately activated when war broke out on 4 August 1914. Although based on the recently built King Edward VII building at the Bristol Royal Infirmary, the 260 beds set aside for military use soon proved inadequate for the number of casualties being received. Consequently, the Bristol Board of Guardians handed over their new Southmead Infirmary, which was eventually extended to accommodate 1040 beds, and this soon became the 2nd Southern General's main facility.

The other base hospital was the Beaufort War Hospital, previously the Bristol Lunatic Asylum at Fishponds, a 1640 bed unit which opened on 24 May 1915. Although both of the base hospitals were controlled by the Royal Army Medical Corps, many of the nursing staff were women, included in which were large numbers of Voluntary Aid Detachment nurses drawn from the ranks of the Red Cross and Order of St John of Jerusalem who worked alongside the military nurses from Queen Alexandra's Imperial Military Nursing Service.

The Voluntary Aid Detachments were voluntary units of civilians providing nursing care for military personnel, and in fact the VAD system had actually been set up back in 1909 with the help of the Red Cross and Order of St John of Jerusalem. By the summer of 1914 there were over 2500 Voluntary Aid Detachments in Britain, while of the 74,000 VAD members in 1914, two-thirds were women and girls. Although VADs were intimately bound up in the war effort, they were not strictly speaking military nurses, as they were not under the control of the military, unlike those belonging to Queen Alexandra's Imperial Military Nursing Service.

At the outbreak of war, the British Red Cross and the Order of St John of Jerusalem had combined to form the Joint War Committee, and pooled their resources under the protection of the Red Cross emblem. The Committee then secured buildings, equipment and staff, so that the organization was able to set up temporary hospitals as soon as wounded men began arriving from the front. The first Red Cross hospitals in 1914 were set up to care for wounded Belgian soldiers who were then being sent for treatment in Britain, but they soon became flooded with British casualties.

Many of the buildings, which had been lent by their owners, varied widely ranging from public halls and schools to large and small private houses, both in the country and in the

cities. The most suitable ones were set up as auxiliary hospitals, each of which was attached to a base hospital. The patients at the auxiliary hospitals were generally less seriously wounded than those retained at base hospitals, while in order to free up bed spaces clustered around the auxiliaries were groups of convalescent homes to take in those men who were recuperating.

The auxiliary hospitals were staffed largely by mostly middle and upper class women volunteers who had been trained to serve in the Voluntary Aid Detachments, and locally, Her Grace the Duchess of Beaufort, who lived at Badminton House, was the President of the Gloucestershire Section of the Woman's Voluntary Aid Association. In many cases, women in the local neighbourhoods also volunteered on a part time basis, but the hospitals often needed to supplement voluntary work with paid roles, such as cooks. In addition, local medics often volunteered despite the extra strain that the medical profession was already under at that time. The servicemen preferred the auxiliary hospitals to military hospitals because they were not so strict, they were less crowded and the surroundings were more homely.

Both the 2nd Southern General and the Beaufort went on to have a number of Red Cross Auxiliary Hospitals attached to them to which they could send men for the final part of their recovery. Although some were located as far away as Cheltenham, Weston super Mare, and Warminster, most were to be found in Bristol and surrounding districts, including nine in today's South Gloucestershire. These were to be found at Almondsbury, Badminton, Bitton, Chipping Sodbury, Downend, Hawkesbury, Horton, Pucklechurch, and Tockington.

Quick off the mark were Hugh Wyndham Lutterell Harford and his wife Evelyn Nora Harford, who donated part of their residence, Horton Hall, at Horton near Chipping Sodbury (ST 75886 84267), for use as a 28 bed Voluntary Aid Hospital which the Harford family ran themselves, with Hugh's wife being the commandant. Attached to the 2nd Southern General, it had opened on 24 October 1914, and by mid-November was caring for eighteen wounded Belgians and two men of the 5th Battalion, The Loyal North Lancashire Regiment. Between the time of its opening and 26 February 1917 the hospital, which was attached to the 2nd Southern General, had treated 338 men, with just one death occurring. Unfortunately Mr Harford then became ill, necessitating the closure of Horton Voluntary Aid Hospital in May 1917.

Then, on 27 October 1914, came the opening of the 100 bed Cleve Hill Voluntary Aid Hospital at Downend (ST 6488 7717), housed in Cleve Hill House which was owned by Sir Charles Daniel Cave who had offered it to the authorities for use as a hospital for the duration of the conflict. His wife Beatrice became the Commandant, their son Charles Henry Cave, the Quartermaster, while the hospital was staffed by detachments of Voluntary Aid Red Cross nurses from Downend, Frenchay, and Frampton Cotterell'

Cleve Hill made an ideal place for a hospital, standing high in its own grounds, and the house, though an old one and as described by an inspecting General 'with tricky stairs', adapted itself well for use as a hospital. Being near Bristol, the men did not find it dull, and were able to go easily to the various entertainments organized by the Inquiry

Bureau, and a weekly visit to the ‘Hippodrome’ by those patients who were well enough was much appreciated.

The men looked upon the hospital as a second home. The staff worked well and harmoniously together, and while it was open very few changes took place. Cleve Hill Hospital, which was attached to the 2nd Southern General, handled 1343 patients between the date it opened and 28 February 1919, during which time only three deaths occurred there. After the war Mrs Cave was awarded an OBE for her work at the hospital, while the house and estate were later sold at auction, and the house subsequently demolished during the 1930’s to lay out new roads. In fact the old house itself was situated on the north side of Cleve Hill Road, where the present-day Cleve Lawns lies.

Opened on 9 November 1914, the 37 bed Badminton Voluntary Aid Hospital was housed in Portcullis House (ST 80781 81204), close to the Badminton GWR Station at Acton Turville. It was part of the estate of the Duke and Duchess of Beaufort, who lived in nearby Badminton House, and who had loaned the property for the duration of the war. Initially, the Commandant was Mrs H. Butler, but upon her death in May 1917 Mrs Gordon took over, and remained Commandant until the hospital finally closed.

Although attached to the 2nd Southern General, from 10 August 1915 until 15 December 1915 the Badminton VA Hospital was used as an annexe to Roehampton Hospital near London, limbless patients being admitted while awaiting the time for their admission to Roehampton. From the time of its opening, until 28 December 1918, the Badminton Voluntary Aid Hospital handled 510 patients without suffering any fatalities.

The Chipping Sodbury Voluntary Aid Red Cross Nurses' Detachment, with Miss G. Dencer as commandant, mobilized on 11 November 1914, but had difficulty in finding a building acceptable to the medical authorities as the Local Government Board refused to sanction the Workhouse Infirmary, which the Guardians found themselves unable to do without. However, as the 5th Battalion, The Loyal North Lancashire Regiment, were then preparing to move from the town, and had just removed their hospital and stores from Hartley House in Chipping Sodbury High Street (ST 72722 82234), the Red Cross ladies were able to take it over. Then, after thorough cleansing, Hartley House was fitted out with five comfortable wards capable of accommodating a total of 25 patients. Laundry etc, was to be done on the premises, while a sister needed to be appointed quickly to superintend the nursing staff, as the first patients were scheduled to arrive on 17 November.

Only one existing medical facility in South Gloucestershire was pressed into service to treat wounded soldiers, and that was the small hospital at Almondsbury (ST 60709 84027). Built by Sholto Vere Hare of Knole Park in memory of his late wife, the Almondsbury Memorial Institute, which opened in 1892, was a hospital, meeting place, and library for local people. By the end of 1914 it was already receiving military patients, and sadly on the morning of 2 March 1915 the burial took place in the east of the graveyard of St Mary’s church in Almondsbury of 23 year old Soldaat 2 kl OV [Private 2nd Class, War Volunteer], Leopold Jules van de Venne, of 3 Jagers te Voet 1/3 (3 Cie),

[3rd Company, 3rd Infantry Regiment of the Line, 1st Division, 3rd Brigade], Belgian Army, who had been born on 30 October 1892 at Kortrijk, West Flanders, and had died on 27 February at the Almondsbury Institute. During much of World War One it was officially known as the ‘Almondsbury Subsidiary Hospital, an Auxiliary to the 2nd Southern General’, and post war was used as a cottage hospital. A new wing was opened in 1935, followed later by a maternity unit, while in its final years the hospital cared of the elderly. The building was sold in 1996 and is now a private house.

The Harford family, who had established the Horton Voluntary Aid Hospital in October 1914, also went on to set up a 12 bed annexe for it at Hawkesbury (ST 77757 87057), the Commandant of which was Mrs W. Harford. In operation by December 1914, the ‘tin roofed’ facility was staffed by nurses from Hawkesbury Section of the Gloucestershire No.24 Red Cross Detachment. However, when Horton Hospital closed in May 1917 Hawkesbury Hospital Hall was transferred to become an annex to Badminton Hospital, and remained as such until, in September 1917, Hawkesbury finally closed due to the illness of Mrs W. Harford. After the war the site became the Hawkesbury Upton village hall.

Beach House in Bitton (ST 70454 70697) was one of several ‘Class B’ hospitals run by the Red Cross as convalescent homes in a private houses. The Bitton Voluntary Aid Hospital, a 35 bed facility, had been lent for the purpose by Mr Walker. It opened on 17 March 1915, with Mrs Walker as Commandant, while most of the patients arrived there after treatment in either the Cleve Hill or Horton Voluntary Aid Hospitals.

Although the Beaufort War Hospital in Fishponds went on to have nine auxiliary hospitals attached, only one of these was located in South Gloucestershire. That was the 20 bed unit established at Tockington Manor (ST 61161 86653). The Salmons, their servants, and four nurses, ran Tockington Hospital, while sixteen local women did the laundry. In addition, Red Cross records reveal that another auxiliary hospital was set up in the area, and that was at Crump House (Farm?), at Pucklechurch (ST6977 876374).

During World War One the Bristol base hospitals had admitted a large number of injured men and by 1 January 1919, the Southmead section of the 2nd Southern General had received 37,397 patients. The Beaufort War Hospital treated a further 29,434 men before it closed on 28 February 1919, by which time deaths there numbered only 164, and of these 30 were case admitted locally during the influenza epidemic of late 1918 and early 1919.

THE BRITISH & COLONIAL AEROPLANE COMPANY AT FILTON

The establishment of the aircraft industry in Bristol, which for many years was by far the area's largest employer, was due to the entrepreneurial skills of Sir George White, Bart. LLD, JP who had been born in the city in 1854. He left school at the age to fourteen and after becoming articled to a solicitor was soon handling most of his employers' bankruptcy business, much of it railway related. This led to a lifelong interest in transportation systems and after some teething troubles had been experienced in the establishment of a tramway network in Bristol, in 1875 George White, was appointed Secretary of the Bristol Tramways Company.

Sir George was interested in all forms of transport, and since 1904 had been observing the progress being made in aviation. Consequently, at a Bristol Tramways & Carriage Company shareholders' meeting held on 16 February 1910 he announced his intention of opening an aircraft factory, and three days later he launched the British & Colonial Aeroplane Company Ltd with a capital of £25,000. In addition, three other companies, the Bristol Aeroplane Company Ltd, the Bristol Aviation Company Ltd, and the British & Colonial Aviation Company Ltd, each with a nominal capital of £100, were also formed.

Back in the 1880's George White had moved to Fairlawn House in Filton, and although he moved away in 1907 he still owned the property and an adjoining two acres of land, upon which he subsequently built a garage for taxicab maintenance and a depot for the motor buses which ran on to Thornbury. It was these two shed that were to be used as a fledgling aircraft factory (ST 601 791), the chief engineer of which was to be the young George Challenger, who was already employed as a foreman in the omnibus manufacturing side of the Bristol Tramways & Carriage Company's operation.

To ensure that aeroplane production began as quickly as possible the British & Colonial Aeroplane Company obtained a manufacturing licence from Société Zodiac in France, but after the Bristol 'Zodiac' aircraft proved totally unable to fly the project was abandoned. Instead the new undertaking pinned its hopes on a machine designed by George Challenger, and this was much more successful the Bristol Biplane, affectionately known as the 'Boxkite', making its first flight at Larkhill on Salisbury Plain on 30 July 1910.

It went into quantity production in 1911, and by the end of 1912 over 80 had been produced. In order to facilitate this, what Sir George White described as the largest aircraft factory in the world had been established at Filton. There land to the north of the two original sheds had also been acquired to lay out an airfield, while additional buildings were also erected and an office opened in Filton House.

Meanwhile, in late 1911 Frank Barnwell, at that time a partner in the Grampian Motors & Engineering Company of Stirling which had been building gliders and powered aeroplanes, had been hired to work as a designer in the experimental 'X' Department which had been set up secretly by the company to work on an unconventional seaplane project for the Admiralty. However, it was unsuccessful and instead Barnwell co-designed the Baby Tractor Biplane with Harry Busteed, and the prototype of this small

and fast single-seater, retrospectively designated the Scout A, appeared in February 1914. Although two further prototypes, named the Scout B, had not been flown when war broke out on 4 August 1914, they were at once requisitioned by the War Office. They were later sent to France where their high speed and rate of climb won the approval of discerning service pilots who nicknamed them 'Bristol Bullets'.

Although normally committed to ordering Royal Aircraft Factory designs, the War Office was sufficiently impressed by the Scouts to place small production contracts for them. Consequently, the British & Colonial received an order for 12 of a further improved version, the Scout C, on 5 November 1914. The Admiralty also wanted them too and ordered 24 Scouts on 7 December. Further orders followed and so for the next two years the aircraft became the major product of the Bristol Tramways Motor Constructional Works at Brislington* after their resources had been combined with those of Filton. A total of 161 Scout Cs were produced, 74 for the Admiralty, 87 for the War Office, while a revised design, the Scout D, was completed in November 1915.

These fast, unarmed, reconnaissance machines gained a favourable reputation with Royal Flying Corps pilots in France, and a total of 374 Scouts of all types were manufactured between February 1914 and December 1916.

Unfortunately, Government policy in 1913 and early 1914 had been to centralize aeroplane design at the Royal Aircraft Factory at Farnborough. Production of these official designs was then passed over to the various privately owned aircraft makers and consequently from the end of October 1914 the whole of the Filton Works was devoted to the BE 2c biplane.

As a result, with the impossibility of persuading the War Office to consider any more original designs and projects the experimental 'X' department was closed and the technical staff at Filton found themselves relegated to the less demanding and more boring routine drawing office work dealing with Royal Aircraft Factory drawings. Consequently, deprived of the prospect of a challenging future the more talented members of the drawing office staff began to disperse. Even Barnwell left to join the Royal Flying Corps, obtaining his pilot's certificate on 9 December 1914 and his R.F.C. wings in March 1915.

Throughout the first year of the war, Herbert Thomas, the Works Manager, faced a severe problem in stepping up production due to the difficulty of replacing skilled men who had enlisted in the armed forces. Slowly the payroll rose from 200 at the outbreak of war to 520 a year later. A bonus scheme introduced in June 1915 did something to attract and retain skilled employees, but in January 1916, conscription of men single men aged between 18 and 41 for the armed forces was introduced. Finally, in August 1916 the Company was declared ‘a controlled establishment’, the newly created Ministry of Munitions having been given powers under the ‘Munitions of War Act’ of 1915 to declare any factory it considered vital enough to be a ‘controlled establishment’ and thereby restrict the freedom of workers to leave through a system of certificates and of tribunals.

The iron sheds, which had been extended almost as soon as they had been taken over by the British & Colonial in 1910, became the Erecting Hall for the early types and production of later versions of the B.E.2 continued through 1916 and 1917. Meanwhile, a new large brick-built Erecting Hall, with associated fabric and dope and fitting shops, was constructed at the western end of the original sheds, the War Office having contributed £30,000 towards the cost of this extension and given an assurance of full employment until the end of the year. Additional brick detail shops were also put up on the south wall of the sheds filling up the corner bounded by the terraced houses on Southmead Road and the 'Anchor' public house.

The original Filton flying ground facing the houses in Fairlawn Avenue was also built over to provide a wood mill and plating shop in addition to mess rooms and a women's rest centre for the many females who were taken into employment from July 1916 onwards. By the time the Armistice was finally signed in November 1918 more the British & Colonial Aeroplane Company had more that 3000 employees, who between them were building some 2000 military aeroplanes a year.

Although production of the outmoded B.E.2 had been pressed so vigorously by the War Office, experience in the field during 1915 had proved it woefully inadequate in self-defence and manoeuvre, and insistent demands for more aggressive aircraft at length forced the War Office to invite tenders for competitive new designs from the private sector. To begin with aircraft were ordered by the War Office for the Royal Flying Corps (Military) Wing, to serve with the Army, or by the Admiralty for the Royal Flying Corps (Naval) Wing to serve with the Navy, but on 1 April 1915 they were re-designated the Royal Flying Corps and Royal Naval Air Service respectively.

Fighters to combat the Zeppelin airships and the Fokker monoplane were the first priority and in August 1915 Frank Barnwell, by then a Captain, was sent back to Filton "on indefinite leave without pay" to resume his post as Chief Designer, and he immediately set up a new design office with Leslie Frise, an honours graduate from Bristol University, as his assistant.

After making minor, but effective, improvements in the Scout, he went on to design a series of fighting biplanes, first the twin-engined TTA, then its single-engined equivalent the F3A, followed by the S2A two-seater variant of the Scout, none of which was successful enough to attract production contracts. Then came a tentative reconnaissance two-seater, the R2A, and a monoplane Scout, M1A, both of which temporarily hung fire until, with the introduction of the new Rolls-Royce Falcon engine, the two-seater blossomed out into the F2A and F2B, the famous Bristol Fighter. However, the spectre of the monoplane ban still lingered in spite of the M1A's high top speed and, although it achieved limited production as M1C, it was never matched against the Fokker but relegated to service in the Middle East where its superior performance was wasted on the desert air.

The Bristol F2B Fighter, by contrast, went on to become a legend. Production of two prototypes and a further 50 production machines was officially sanctioned on 28

August 1916, although it was 9 September before the first prototype made its maiden flight.

By July 1917 the first order for 50 had been increased to 600, to be followed by a further order for 800 in September 1917 and in March 1918 by two more orders for 500 and 700. The works were again greatly enlarged, at a cost of £88,000, and it became necessary to engage a full-time test pilot instead of relying on the officer commanding of the Filton Aircraft Acceptance Park, or on free-lance test pilots.

In July 1917 the War Office decided to re-equip all fighter-reconnaissance and corps-reconnaissance squadrons of the R.F.C. with Bristol Fighters. This needed rapid production on an unprecedented scale and the Bristol Tramways & Carriage Company's Motor Constructional Works on Kensington Hill in the Brislington area of Bristol, which was already manufacturing aeroplanes for the company, alone went on to build some 1045 'Brisfits'.

Back in 1915 Bristol Corporation had begun erecting Bristol North Baths in Gloucester Road, Bishopston, but construction was interrupted by the war and so, before it was finally completed, the Corporation handed the building over to the Ministry of Munitions. There they set up the West of England Instructional Factory, the first such facility in the country, which was officially opened on 26 June 1917 by the Lord Mayor of Bristol. Capable of taking up to 200 trainees at time, the woodworking and metal working courses were mainly intended for those who would go on to work in the aircraft industry.

Although many were young women, there were some disabled soldiers, sailors and men rejected for the Army among their ranks, all of whom were given basic training so that when they moved to the manufacturer's workshops they would be familiar with the work they would have to undertake and the tools to be used. The main task performed in the factory was the assembly of aircraft wings, which was carried out on the pool floor prior to them being sent up the Gloucester Road to the British & Colonial company at Filton.

In September 1917 it was decided to expand the programme still further by placing contracts for complete aircraft, as well as parts, in the motor car and general engineering industries. Although general control of outsourced production was exercised by the Ministry of Munitions, it could never have worked so effectively without the whole-hearted co-operation and initiative of the manufacturers. A major bottleneck was the supply of metal fittings, which were to be made up by some thirty to forty sub-contractors, most of whom were newcomers to aircraft work with mainly unskilled labour.

Hopeless delays would have ensued had not the Company gone to immense trouble to provide simple but effective jigs ensuring foolproof and rapid assembly and guaranteed inter-changeability even in the hands of novices.
The Company supplied a complete skeleton airframe to each sub-contractor as a sample, together with templates for all ribs and photographs and detail drawings of all jigs and tools required. The firms involved were the Gloucestershire Aircraft Company Ltd at Cheltenham; the Cunard Steamship Company, National Aircraft Factory No.3, at

Aintree near Liverpool; Marshall & Sons Ltd of Gainsborough in Lincolnshire; Sir W.G. Armstrong Whitworth & Company Ltd, at Gosforth & Elswick, Newcastle on Tyne; Angus Sanderson & Company Ltd, again located at Newcastle on Tyne; the Standard Motor Car Company Ltd of Coventry; Harris & Sheldon Ltd of Birmingham, and Austin Motors Ltd of Longbridge, near Birmingham.

Before long airframe production began to outstrip the supply of Rolls-Royce Falcon engines, and alternatives were sought, leading to further modifications in design and generally unsatisfactory results from engines released to production without having been fully developed. When the United States joined the Allies in 1917 the Bristol Fighter was one of the types selected for mass production in America. Contracts for 2,000 were placed initially, but American political insistence on the use of the Liberty engine led to a series of accidents for which the aircraft rather than the choice of engine was blamed. This led to the contracts being cancelled after only 27 aircraft had been built.

During 1917 and 1918 the Company's efforts were by no means confined to the Bristol Fighter programme. When the last of the BE 2e contracts had been completed it was asked to undertake the production of large Porte flying boats of the F3 type, manufacturing the wing and tail components and assembling them on to hulls supplied by other contractors.

This proposal was first discussed on 31 May 1917, but as the proposed programme to build 50 flying boats would have required further large extensions to the works and the dismantling of the completed aircraft for transport to the coast, the project was abandoned. However, the Company's interest in large multi-engined aeroplanes had been excited and continued after the war.

Very large bombers were needed for long range offensives into Germany, and in November 1917 Captain Barnwell drafted a proposal to meet this requirement. This eventually matured as the Braemar triplane, of which three prototypes were ordered. Other concurrent projects were the single-seater Scout F, and the two-seater F2C fighter, which became the Badger, and although prototypes were built, no production orders were obtained. There was also the MR1, a metal-framed variant of the Bristol Fighter, of which two examples were built for evaluation. However, the product which made Bristol aeroplanes a household name was the Rolls-Royce engined Bristol F2B Fighter, which King George V and Queen Mary came to Filton to see in production, on 8 November 1917.

During 1918 over 2,000 aircraft were turned out from the Filton and Brislington works, and there were over 3,000 on the payroll when the Armistice was declared on 11 November 1918. The works immediately closed for three days' holiday and all overtime ceased as from 14 November, while on 26 November the Company received formal notice from the Ministry of Munitions terminating all existing contracts for Bristol Fighters and spares.

Although production of Bristol Fighters by outside contractors ceased on 26 November 1918, the Company was allowed to continue deliveries of all machines contracted for and started at that date, and production at Filton continued until June 1919 by which time some 4747 'Brisfits' had been manufactured by the Bristol & Colonial Aeroplane Company, 2081 at Filton and 1045 at Brislington, a total of 3126, while another 1621 had been built by the sub-contractors.

There had been remarkably few disputes and only four short strikes at British & Colonial, involving a loss of a total of 13 days' work throughout the whole period of the war, and during the conflict, like many other British manufacturers, the Company had prospered as a result of the numerous government contracts that had been awarded.

However, in order to redress the balance somewhat when war ended the Treasury introduced what it called Excess Profits Duty. That due for payment during 1920 forced many fledgling aircraft firms out of business, so in order to keep such duty to a minimum, the British & Colonial Aeroplane Company was officially wound up on 9 February 1920 and its fixed assets transferred to the dormant Bristol Aeroplane Company.

The following month the Air Ministry finally succeeded in persuading the directors of the new company to take over the development of the 'Jupiter' aero-engine, from the bankrupt Cosmos concern in Fishponds, and so its chief engineer, Roy Fedden, complete with his designs, 35 staff, and prototype engines, moved over to Filton. There they took up residence in the northernmost of the three hangers that had been built for the wartime Aircraft Acceptance Park on the Patchway side of the aerodrome, and so created the West Works, the nucleus of what was to become the Bristol Aeroplane Company's world famous Aero Engine Division. This proved to be a great asset for the BAC, as the aero engine department was not dependent on Bristol's own airframes to carry its products and so, through sales of the 'Jupiter', was able to maintain the company's income through a lean period in world wide sales.

* Brislington Works

In 1908 the Bristol Tramways & Carriage Company, the undertaking responsible for operating the city's tramcar network, decided to expand its routes by the introduction of motor buses, However, Bristol's hills proved too much of challenge for the buses originally employed, and so the company set about manufacturing its own vehicles. To begin with the engines and chassis were produced at the Company's Filton works erected specially in 1908 and the bodies at the Brislington tram depot. However, in 1913 a new Motor Constructional Works was opened on Kensington Hill, just a short distance from the tram depot, in premises built in 1902 for Charles Bartlett & Company, scale makers.

As Sir George White was the driving force behind both the Bristol Tramways & Carriage Company and the British & Colonial Aeroplane Company, the Brislington works was always available as an additional production facility when the Aeroplane Company's Filton site was overstretched.

Almost immediately the Brislington works was being employed for aircraft construction as the final six Bristol Boxkites (Serials 394 to 399) were built there in October 1914. As the Filton factory was fully committed to BE 2c production Brislington was next responsible for the manufacture of all the Bristol Scout C aircraft, 161 in number, which were delivered to the RNAS and RFC between 16 February 1915 and 25 March 1916.

The next aeroplanes to be assembled at Brislington were a batch of 24 Bristol TB8s ordered by the Admiralty in August 1915, which were delivered between 24 September 1915 and 24 February 1916. In addition a total of 210 Scout Ds were delivered between 14 February 1916 and 16 December 1916, but by that time the Brislington works had begun production of the Bristol F2A Fighter and declined an Admiralty invitation in March 1917 to tender for a further 40 Scouts. The 50 production F2As were delivered between 20 December 1916 and 23 March 1917, while deliveries of the first 200 F2Bs began on 13 April 1917. By the time of the Armistice on 11 November 1918 Brislington had delivered 853 Bristol Fighters, and as production continued until June 1919, the total grew to 1045.

British & Colonial Aeroplane Company - Production during World War One

Construction Numbers 229 & 230 (2)

Bristol Scout B - military serials 644 & 648. Filton built. Requisitioned by the War Office under contract A2616. Fitted with 80 hp Gnome engines. Delivered to Farnborough by rail on 22 and 24 August 1914 respectively.

Construction Numbers 331 to 342 (12)

Bristol Coanda T.B.8 - military serials 691 to 702, later re-numbered out of sequence 1216 to 1227. Built at Filton under contract C.P.63528 & C.P.73046/14. Intended for the Royal Flying Corps (Military Wing) at Farnborough, but in October 1914 were diverted to the Royal Flying Corps (Naval Wing). Fitted with 80 hp Gnome engines. Delivered between 15 October and 3 December 1914.

Construction Numbers 343 to 346 (4)

Royal Aircraft Factory B.E.2c - military serials 1648 to 1651. NEVER COMPLETED.

Construction Numbers 348 to 393 (46)

Royal Aircraft Factory B.E.2c - military serials 1652 to 1697. Filton built for the Royal Flying Corps (Military Wing) under contract A2554A (1652 to 1668); contract number A2554B (1669); and contract number A2554F (1670 to 1697). Fitted with 70 hp Renault engines up to 1684, then with 90 hp Raf 1a engines in later production models. 1697 became a B.E.12 prototype. Delivered by rail between 20 January and 24 May 1915.

Construction number 394 to 399 (6)

Bristol Biplane - military serials 942 to 947. Brislington built for the Royal Flying Corps (Naval) Wing under contract C.P.56037/14/X. Fitted with 50 hp Gnome engines. Delivered between 15 October and 31 December 1914.

Construction Numbers 400 to 449 (50)

Royal Aircraft Factory B.E.2c - military serials 1698 to 1747. Filton built under contract A2763 for the Royal Flying Corps (Military Wing). 1700 completed as a B.E.9. Fitted with 90 hp Raf 1a engines. Delivered by rail between 17 June 1915 and 6 September 1915.

Construction Number 450 (1)

Bristol Scout C - military serial 1243. Brislington built for Royal Flying Corps (Naval Wing) under contract C.P.67209/14/X (part of a batch of 24). Fitted with 80 hp Gnome engines. Delivered for erection 16 February 1915.

Construction Numbers 451 to 462 (12)

Bristol Scout C - military serials 1602 to 1613. Brislington built for the Royal Flying Corps (Military Wing) under contract A2824. 80 hp Gnome engines. Delivered between 6 May and 13 June 1915.

Construction Numbers 463 to 479 (17)

Bristol Scout C - military serials 1244 to 1260. Brislington built for Royal Flying Corps (Naval Wing) under contract C.P.67209/14/X (part of a batch of 24). Fitted with 80 hp Gnome engines. Delivered for erection between 5 June and 21 July 1915.

Construction Numbers 480 to 485 (6)

Bristol Scout C - military serials 4662 to 4667. Brislington built for the Royal Flying Corps (Military Wing) under contract A3242 (part of a batch of 75). Fitted with 80 hp Gnome engines. Delivered between 10 and 29 July 1915.

Construction Numbers 486 to 491 (6)

Bristol Scout C - military serials 1261 to 1266. Brislington built for the Royal Flying Corps (Naval Wing) under contract C.P.67209/14/X (part of a batch of 24). Fitted with 80 hp Gnome engines. Delivered between 26 July and 24 August 1915.

Construction Numbers 492 to 523 (32)

Bristol Scout C - military serials 4668 to 4699. Brislington built for the Royal Flying Corps (Military Wing) under contract A3242 (part of a batch of 75). Fitted with 80 hp Gnome engines (492 to 495), with 80 hp Le Rhône engines (496 to 502), without engines 503 to 523). Delivered between 9 August and 12 November 1915.

Construction Numbers 524 to 560 (37)

Bristol Scout C - military serials 3013 to 3049. Brislington built for the Royal Naval Air Service under contracts C.P.46106/15 and C.P.74782/15/X (part of a batch of 50). Fitted with 80 hp Gnome engines. Delivered between 5 September 1915 and 9 February 1916. The delay was due to a shortage of 80 hp Gnome engines.

Construction Numbers 561 to 570 (10)

Royal Aircraft Factory B.E.2c (s/s) - military serials 4700 to 4709. Filton built for the Royal Flying Corps under contract 94/A/14. Ordered as single seater night fighter, but delivered as standard. 4708 fitted for rocket firing. Delivered between 12 October 1915 and 31 January 1916.

Construction numbers 621 to 770 (150)

Royal Aircraft Factory B.E.2c - military serials 4070 to 4219. Filton built for the Royal Flying Corps under contract A3243. Serials 4099, 4201 and 4205 were armoured versions, while 4111 and 4120, and possibly others, were converted to B.E.2e, and 4140 to B.E.2d. Fitted with 90 hp Raf engines. Delivered between 17 September 1915 and 22 February 1916.

Construction numbers 771 to 783 (13)

Bristol Scout C - military serials 3050 to 3062. Brislington built for the Royal Naval Air Service under contracts C.P.46106/15 and C.P.74782/15/X (part of a batch of 50). Delivered between 11 February and 25 March 1915. Fitted with 80 hp Gnome engines.

Construction numbers 784 to 820 (37)

Bristol Scout C - military serials 5291 - 5327. Brislington built for the Royal Flying Corps under contract A3442. Fitted with 80 hp Le Rhône engines. Delivered between 23.11.15 and 18.2.16. Serials 5291, 5912, 5295, 5296, and 5297 were delivered without engines.

Construction numbers 870 to 893 (24)

Bristol Coanda T.B.8 - military serials 8442 to 8453 (construction numbers 870 to 881) and military serials 8562 to 8573 (construction numbers 882 to 893). Brislington built for the Royal Naval Air Service under contract C.P.57306/15/X. Serials 8442 to 8449 were fitted with 50 hp Gnome engines, while 8450 to 8453 and 8562 to 8570 had 60 hp Le Rhône engines, and 8571 to 8573 were delivered without engines. Delivered between 27 September 1915 and 10 January 1916 (construction numbers 870 to 881), and between 10 January and 5 February 1916 (construction numbers 882 to 893).

Construction numbers 894 to 1043 (150)

Royal Aircraft Factory B.E.2d - military serials 5730 to 5879. Filton built for the Royal Flying Corps under contract 87/A/115. 5844 converted to single-seat configuration for home defence night fighting. Fitted with 90 hp Raf engines. Serials 5733, 5737, 5739, 5740, 5749, 5814 to 5823, 5843, 5855, and 5861 to 5867 supplied as B.E.2e. Delivered between 27 January and 19 July 1916.

Construction numbers 1044 to 1123 (80)

Bristol Scout D - military serials 5554 to 5603 (construction numbers 1044 to 1093) and 7028 to 7057 (construction numbers 1094 to 1123). Brislington built for the Royal Flying Corps under contract 94/A/319. Delivered without engines between 14 February and 3 June 1916 (serials 5554 to 5603), and 7 June and 15 July 1916 (serials 7028 to 7050).

Construction numbers 1124 to 1173 (50)

Bristol Scout D - military serials 8951 to 9000. Brislington built for the Royal Naval Air Service under contract C.P.145461/15/X. Ordered with 110 hp Clerget engines, but supplied with 100 hp Monosoupape-Gnome engines. Delivered for erection between 18 April and 4 November 1916.

Construction numbers 1174 to 1373 (200)

Royal Aircraft Factory B.E.2d - military serials 7058 to 7257. Filton built for the Royal Flying Corps under contract 87/A/115. Supplied as B.E.2e and fitted with 90 hp Raf engines. Serials 1174 to 1373, 7109, 7122, and 7219 sent to the Russian Government. Delivered between 21 January 1916 and 7 December 1916.

Construction number 1374 (1)

Bristol M.1.A - military serial A5138. Filton built prototype monoplane scout. Completed on 1 July 1916 and first flown at Filton on 14 July 1916. Fitted with a 110 hp Clerget engine. Purchased for the Royal Flying Corps under contract 87/A/761. Delivered to the Central Flying School on 29 November 1916.

Construction numbers 1375 and1376 (2)

Bristol T.T.A - military serials 7750 and 7751. Filton built Prototype twin engined local defence two seaters. Fitted with two 120 hp Beardmore engines. Ordered 15 February 1916, accepted for the Royal Flying Corps on 26 April and 27 May 1916.

Construction numbers 1377 and 1378 (2)

Bristol S.2A - military serials 7836 and 7837. Filton built prototype Admiralty two seater fighters. Subsequently rejected by the Royal Naval Air Service, but on 10 March 1916 the War Office ordered the two for the Royal Flying Corps under contract 87/A/372.

Fitted with 110 hp Clerget engines. Delivered to the Central Flying School on 11 June and 30 July 1916 respectively.

Construction numbers 1379 and 1380 (2)

Bristol F.2A Fighter - military serials A3303 and A3304. Filton built prototype two seater fighters. Ordered by War Office on 28.8.16 under contract 87/A/552. A3303 with a 190 hp Rolls-Royce Falcon engine, was first flown 9 September 1916 and A3304, with 150 hp Hispano engine, on 25 October 1916.

Construction numbers 1381 to 1439 (50)

Bristol Scout D - military serials A1742 to A1791. Brislington built for the Royal Flying Corps under contract 87/A/185, a running contract. Delivered between 22 July and 27 September 1916. A1769 to A1772, A1790, and A1791 fitted with 80 hp Gnome engines, were diverted to the Royal Naval Air Service and delivered between 5 and 8 December 1916.

Construction numbers 1431 to 1480 (50)

Bristol F.2A Fighters - military serials A3305 to A3354. Brislington built for the Royal Flying Corps under contract 87/A/552. Fitted with 190 hp Rolls-Royce Falcon I engines and delivered between 20 December 1916 and 23 March 1917.

Construction numbers 1481 to 1484 (4)

Bristol M.1B - military serials A5139 to A5142. Filton built for the Royal Flying Corps under contract 87/A/761. Fitted with 110 hp Clerget engines except for A5142 which had a 150 hp Bentley A.R.1. Delivered to the Central Flying School between 29 November 1916 and 22 March 1917.

Construction numbers 1485 and 1486 (2)

Bristol F.3A - military serials A612 - A 613. Filton built prototype single engined escort and anti-Zeppelin fighters. Ordered by the War Office for the Royal Flying Corps under contract 87/A/442 of 16 May 1916. To be fitted with 250 hp Rolls-Royce engines. CANCELLED - NEVER BUILT.

Construction numbers 1487 to 1736 (250)

Royal Aircraft Factory B.E.2e - military serials A2733 to A2982. Filton built under contract 87/A/571 for the Royal Flying Corps. Fitted with 90 hp Raf engines. Serials A2957 to A2962 had heavy armour. Delivered between 12 December 1916 and 30 April 1917.

Construction numbers 1737 to 1836 (100)

Royal Aircraft Factory B.E.2e - military serials A8626 to A8725. Filton built under contract 87/A/571. Fitted with 90 hp Raf engines. Delivered between April and June 1917.

Construction numbers 1837 to 1866 (30)

Bristol Scout D - military serials N5390 to N5419. Brislington built for the Royal Naval Air Service under contracts C.P.127042/16 and C.P.130592/16/X for RNAS flying schools. Serials N5400 to N5419 cancelled, but later reinstated. Serials N5390 to N5399 were fitted with 100 hp Monosoupape-Gnome engines, the remainder had 80 hp Gnome engines. Delivered between 2 November and 16 December 1916.

Construction numbers 1867 to 2066 (200)

Royal Aircraft Factory R.E.8 - military serials A6801 to A7000. **CANCELLED**. Military serials re-allocated.

Construction numbers 2067 to 2068 (2)

Bristol M.R.1 - military serials A5177 to A5178. Brislington built experimental all-metal aircraft for the Royal Flying Corps supplied under contract 87/A/865. Serial A5177, with a 140 hp Hispano-Suiza engine, was delivered with wooden wings on 23 October 1917, but A5178, with metal wings and a 180 hp Wolseley Viper engine, was delayed until October 1918.

Construction numbers 2069 to 2268 (200)

Bristol F.2B Fighters - military serials A7101 to 7300. Brislington built for the Royal Flying Corps under contract 87/A/552. Serials A7101 to A7176 and A7178 to A7250 were Series I with 190 hp Rolls-Royce Falcon I engines, while A7177 and A7251 to A7300 were Series II with 220 hp Rolls-Royce Falcon II. A7260 had a 200 hp Raf 4d engine. A7256 was renumbered H7171. Delivered between 17 April 1917 and 18 October 1917.

Construction numbers 2269 to 2518 (250)

Bristol F.2B Fighters - military serials B1101 to B1350. First production aircraft built for the Royal Flying Corps at Filton under contract 87/A/552. Fitted with 275 hp Rolls-Royce Falcon III engines. B1209, B1234, B1307 were renumbered H7069, H7070, H7172, B1124. Delivered between 18 July 1917 and 18 February 1918.

Construction numbers 2519 to 2718 (200)

Royal Aircraft Factory B.E.2e - military serials B4401 to B4600. Filton built for the Royal Flying Corps under contract 87/A/571. Fitted with 90 hp Raf engines. Delivered between 18 June 1917 and 3 April 1918.

Construction numbers 2719 to 2843 (125)

Bristol M.1C - military serials C4901 to C5025. Built for the Royal Flying Corps under contract AS8236. Fitted with 110 hp Le Rhône engines. Delivered between 19 September 1917 and 25 February 1918.

Construction number 2844 (1)

Bristol Scout E - no military serial. Preliminary work undertaken in February and March 1917. NOT COMPLETED.

Construction numbers 2845 to 2850 (6)

Bristol Scout F - military serials B3989 to B3994. Only three were built for the Royal Flying Corps under contract AS3423/17, these were B3989 to B3981. Fitted with 200 hp Hispano engines. Delivered between 12 April 1918 and 22 January 1919. Serial B3982 was NOT COMPLETED, while B3993 and B3994 were NOT BUILT.

Construction numbers 2851 to 3150 (300)

Bristol F.2B Fighters - military serials C4601 to C4900. Brislington and Filton built for the Royal Flying Corps under contract AS17573. Fitted with 190 hp Rolls-Royce Falcon III engines except for C4654 and C4655 which were fitted with 200 hp Siddeley Pumas. Brislington built machines C2851 to C4600, construction numbers 2851 to 2950, were delivered between 17 October 1917 and 2 March 1918, while C4601 to C4900, serials 2951 to 3150, were delivered between 29 November 1917 and March 1918.

Construction numbers 3151 to 3450 (300)

Bristol F.2B Fighters - military serials C751 to C1050. Brislington and Filton built for the Royal Flying Corps under contract AS17573/17. Fitted with 190 hp Rolls Royce Falcon III engines except for serial C1025 which was fitted with a 200 hp Sunbeam Arab engine. Delivered between 30.11.17 and 28.5.18.

Construction numbers 3451 to 3750 (300)

Bristol F.2B Fighters - military serials D7801 to D8100. Brislington and Filton built for the Royal Flying Corps under contract AS17573/17. Fitted with 190 hp Rolls-Royce Falcon III and 200 hp Sunbeam Arab engines. D7860 had 200 hp Raf 4d engine. Delivered between 29 March and 11 July 1918.

Construction numbers 3751 to 3753 (3)

Bristol Braemar - military serials C4296 to C4298. Long range bombers, Filton built for the Royal Flying Corps under contract AS38907. Serial C4296 was the Braemar I with four 230 hp Siddeley Puma engines. It was first flown on 13 August 1918 and delived the same month. C4297 was the Braemar II with four 400 hp Liberty engines. It was first

flown on 18 February 1919 and delivered the same month. C4298 was a conversion to civil transport for fourteen passengers. Fitted with four 400 hp Liberty engines, it was first flown in early May 1920 and delivered same month. It later became G-EASP on the civil aircraft register.

Construction numbers 3754 to 4253 (500)

Bristol F.2B Fighters - military serials E2151 to E2650. Built for the Royal Flying Corps under contract AS3117. These were fitted with 190 hp Rolls-Royce Falcon III engines, except for E2400 with had a 300 hp Hispano-Suiza engine. Delivered between July and December 1918.

Construction numbers 4254 to 4256 (3)

Bristol F.2c Badger II - military serials F3495 to F3497. Fighter prototypes built for the Air Board under contract 35/A/1122/C994. Fitted with 320 hp A.B.C Dragonfly 1a engines. F3495 was first flown on 4 February 1919. F3496 first flown on 24 May 1919 and purchased by the Air Board on 5 September 1919. F3497 became K-110 on the civil register, later G-EABU.

Construction numbers 4257 to 4956 (700)

Bristol F.2B Fighters - military serials F4271 to F4970. Built for the Royal Air Force under contract 35/A/779/C658? Fitted with 275 hp Rolls-Royce Falcon III in general. F4360 had experimental single bay wings and F4728 3-bay wings. F4631 fitted with a 200 hp Sunbeam Arab engine. Delivered between September 1918 and February 1919.

Construction numbers 4957 to 5456 (500)

Bristol F.2B Fighters - military serials H1240 to H1739. Built for the Royal Air Force under contract 35/A/2100/C2393. Construction numbers 4957 to 5106; 5116 to 5117; and 5124 (H1240 to H1389; H1399 to H1400: and H1407), total of 153 aircraft, fitted with 200 hp Sunbeam Arab engines. Construction numbers 5407 to 5424 (H1690 to H1707), 18 aircraft, were fitted with 230 hp Siddeley Puma engines. Total of 468 aircraft delivered between February and July 1919. Construction numbers 5425 to 5456 (H1708 to H1739), 32 aircraft, to have been fitted with 230 hp Siddeley Puma engines were CANCELLED.

Construction number 5657 (1)

Bristol Badger II - military serial J6492. Prototype fighter, fitted with a 400 hp Cosmos Jupiter I engine. Contract 35A/1122/C994, purchased by the Air Council on 11 March 1920.

Construction number 5658 (1)

Bristol Badger X - civil registration K110. Prototype fighter. Fitted with a 230 hp Siddeley Puma engine. Became G-EABU on 30 May 1919.

Construction numbers 5659 to 5714 (56)

Bristol F.2B Fighter - military serials E5253 to E5308. Originally a Standard Motor Company contract but transferred to British & Colonial contract number 35A/47/C27. Serials E5253 to E5258 (6) Standard built, but transferred to British & Colonial for fitting of Puma engines. Serials E5259 to E5308 built at Bristol.

APPENDIX1

(Activities at the British & Colonial Company's Filton Flying Field - 1911 to 1914)

31 March/1 April 1911

'Western Daily Press', Monday 3 April 1911:- The first flight by aeroplane from Salisbury to Bristol was accomplished on Friday and Saturday M. Maurice Tabateau, who has recently joined the staff of pilots of the British and Colonial Aeroplane Company Limited. Starting from the Larkhill Flying School on Friday afternoon, the Frenchman, whose winning last year the French Michelin Prize and a flight over the Pyrenees has made his name well known throughout the world, headed his machine, the No. 19 ''Bristol" military bi-plane, towards Devizes. Flying fairly high, and meeting with a variable wind, which, however, had little or no disturbing effect, the aviator passed over the ancient market town and proceeded by way of Melksham to Mangotsfield, it being his intention to locate the company's works at Filton and descend the field adjoining. Before Mangotsfleld was reached, however, one of the cylinders the engine, a 70 h.p. Gnome, ceased firing, but still he flew on; but on arriving at Mangotsfield the engine stopped, and M. Tabuteau had reluctantly to alight in a field some miles from his destination.

The farmer in whose field he descended greeted the aviator cordially, and the latter announced his arrival, by means of the telephone, to Mr Charles Challenger, the engineer at the works. A party of mechanics, with Mr Challenger at their head, immediately motored to the spot, taking with them a 50 h.p. Gnome, with which they replaced the 70 h.p. A large crowd of people collected, so large in fact, that police assistance was needed and acquired to prevent undue pressing upon the machine. The greatest excitement prevailed, and M. Tabuteau was the recipient many hearty congratulations.

On Saturday morning he again took his seat in the bi-plane, and rising quickly, flew gracefully and easily to Filton, landing in the field adjoining the British & Colonial Company's works. Many people caught sight the aeroplane as it soared above all else in the fine, but dull, morning air. The aviator was seen by the writer, and expressed his native tongue his delight at the trip and his admiration of the scenery over which he passed and had had so unique a bird's eye view. M. Tabuteau returned to Salisbury Plain on Saturday by rail, leaving the aeroplane at Filton to resume his charge of the pupils at the "Bristol" School at Larkhill.

‘The New Bristol Observer’, Friday 4 June 1971:- Photo caption - First flight from Salisbury to Mangotsfield by Maurice Tabuteau. “The unique occasion called for the assistance of the local constabulary, in the form of Sergeant Large. The pilot of the plane, a Bristol Biplane, made a forced landing at Mangotsfield in April 1911 when it ran out of fuel on a flight from Salisbury. This historic occasion was captured for posterity by local photographer Frank Webster, who now lives at 79 Park Road, Staple Hill.”

Wednesday 12 April 1911

‘Western Daily Press’, Saturday 15 April 1911:- During the past week a representative of the Russian Government has been at Filton inspecting the works of the British & Colonial Company, and subjecting to severe tests the biplanes being purchased by the Russian War Department. Two were sent up the other day, and passed all the trials under the skilful hands of M. Tabuteau. These machines are fitted with Gnome 70 hp, and, with six other machines of a similar type, will be dispatched within a day or so. The Russian Army, by the way, have 300 aeroplanes on order.

‘Western Daily Press’, Monday 17 April 1911:- The novelty of flight spectacle is far from worn off, and hence Bristolians have deemed themselves fortunate who have witnessed the recent graceful flights by Bristol biplanes at Filton. The fields in the vicinity of the aeroplane works, established by Sir George White and Mr Samuel White in that suburb, have been prepared so to be suitable for starting and alighting, and as these machines which bear Bristol's name are evidently in high repute and widely known, practical tests will increase in number with the growth of business. The Russian military order and the visit the representative of the Csar's Government, have combined make this Easter a busy one at the Filton works. Two biplanes successfully passed the test on Wednesday, and half a dozen more are being got ready. The Russian agent, after being at Filton, travelled to the continent, and these other machines will be tried when he returns. Wind and weather have much to do with demonstrations of flying, but, given favourable conditions, it seems probable that further demonstrations will be witnessed today or during the present week.

Monday 17 April 1911

‘Western Daily Press’, Tuesday 18 April 1911:- Fine weather favoured the holiday keepers in the Bristol district yesterday and interesting flights were made at Filton by M. Tabuteau.

Flight, 22 April 1911**:-** On Easter Monday M. Tabuteau and Mr Herbert J. Thomas visited Badminton House in Wiltshire, whither they had flown on a Bristol biplane (No.22) from Filton, at he invitation of the Duke of Beaufort. Alighting in a field close to Badminton House they were received by Lord Lonsdale and cordially welcomed by the Duke and Duchess and their house party. An exhibition flight having been made by M. Tabuteau, a series of trips was made with a number of the guests present, in addition to the host and hostess and their children, the Marquis of Worcester, and Ladies Blanche and Diana Somerset. Amongst others who obtained their “air baptism” were Countess Nora

Lützow, the Hon. Cyril and Mrs Ward, the Hon. Henry Lygon, General and Mrs Brocklehurst, and Mr M.H. Chaplin.

Unalloyed pleasure was the verdict of one and all at their novel experience, and it was with regret that the time came in the evening for M. Tabuteau and his companion, Mr Thomas, to return by the way they had come to Bristol, where they landed without incident to the delight of a big holiday crowd.

End of April

'Western Daily Press', Monday 1 May 1911:- The British Association of Engineers has paid a visit to the Filton works of the British & Colonial Aeroplane Company for the purpose of studying the method of manufacture of the "Bristol" aeroplanes. The party, which numbered about 40, was conducted to the works by Mr C. Howard Turner, the Company's publicity manager. He regretted that the weather had prevented any exhibition of flying, but pointed out that the Bristol & West of England Aero Club would be visiting Salisbury Plain on Saturday, May 6th, when any member of the British Association of Engineers would have an opportunity of witnessing "Bristol" machines in flight.

Friday 5 May 1911

'Western Daily Press', Friday 5 May 1911:- After dinner at the Grand Spa hotel the officers and crew of HMS Bristol, which is visiting Avonmouth will be driven to Filton in conveyances supplied by the Tramways & Carriage Company, to inspect the British & Colonial works, and to see flights if weather permits.

Saturday 6 May 1911:- Visitors to Avonmouth last evening were no doubt astounded by the sight of a biplane hovering straight over the harbour. It appears that M. Tetard, one of the talented band of flying experts attached to the staff of he British & Colonial Aeroplane Company at Filton, acting under instructions, had started from Filton at 6.15, and had flown to Avonmouth and back, completely encircling the harbour.

For some considerable time he hovered straight over HMS Bristol, and the bluejackets gazed up in amazement at the unique spectacle. Tetard stated that when he started conditions were favourable and he made excellent progress, the Gnome engine working splendidly. Rising to a height of between 1,500 and 2,000 feet, he encountered a south-westerly breeze. Avonmouth was reached in good time, and the return journey was equally successfully. M. Tetard was loud in his praise of the beautiful views he obtained 'en-route' and said that he could not wish for a pleasanter journey. The pace that was attained can be gathered when it is said that the whole flight only took just over 23 minutes. There was quite a gathering at the Filton works when the aviator descended, and he was heartily congratulated. the machine used was the "Bristol" military biplane, which is being supplied to the War Office and the Russian Government.

Saturday 6 May 1911

‘Western Daily Press’, Saturday 6 May 1911:- The presence at Avonmouth Dock of the cruiser HMS Bristol had led the British & Colonial Aeroplane Company to arrange for a demonstration of flying at their grounds at Filton today, and one can imagine no function that would be of greater interest to the naval officers and men. There is also today’s trip to Salisbury Plain which the Bristol & West of England Aero Club have organised for the purpose of witnessing flying at the British & Colonial Company’s school. The arrangements for this occasion have devolved largely upon Mr A. Alan Jenkins, the hon. secretary of the Aero Club.

‘Western Daily Press’, Monday 8 May 1911:- Clever and interesting flying feats on “Bristol” biplanes were witnessed on Saturday at Filton and Salisbury.

‘Western Daily Press’, Monday 8 May 1911:- About 200 tars from HMS Bristol saw a masterly exhibition of flying at Filton on Saturday after the luncheon at the Spa. The arrangements made were perfect. Special tramcars waited the bluejackets the foot of the Zig zag, Hotwells, conveying them to the British & Colonial Aeroplane Company's field, where a necessarily hasty inspection of the hangars was made. In front the shed was the Bristol biplane, in which M. Tetard accomplished his fine flights to Avonmouth last night, and but for the huge crowd which had gathered, flying would have commenced immediately. But several thousand people had flocked to Filton, and, straying over the grounds in front of the hangars, defeated the object they had come to see. Obviously there could be no flying until this area had been cleared of spectators, but someone conceived the inspiration of utilising the sailors to force back the sightseers, and by 3.45 M. Tetard was in the air, to the intense delight of the jovial crew the Bristol. A 20 yards run, and the biplane rose easily into the air.

There was more breeze blowing aloft than many people imagined, and as the aviator rose above the trees on the crest of the hill, the machine rocked like the Bristol is reputed to in a heavy sea. M. Tetard steered to the left, making a wide detour towards Horfield, and back over the village of Filton to the company’s sheds He did not fly particularly high, although at one point, where the ground beneath sloped, he is estimated to have reached an altitude of 1,000 feet. For the most part, however, he was not more than 300 feet from the earth. Passing over the sheds low enough make many of the watchers catch their breath, and near enough to the telephone wires to demonstrate the perfect control he had over the biplane, he made another wide circuit in the same direction. He was in the air exactly six minutes before coming to earth with a graceful vol-plane. He executed a quick circle towards the sheds and, with exquisite judgment, brought the machine to a standstill within a few yards of the hangars. It was a perfect descent, which aroused the big crowd to enthusiastically cheer M. Tetard as he clambered from his seat. The programme arranged for the sailors did not permit of another exhibition flight.

Thursday 25 May 1911

‘Western Daily Press’, Saturday 27 May 1911:- A couple of splendid flights were made on Thursday evening at Filton when one of the Bristol pilots took up a Russian official as a passenger. The military biplane passed over the village and surrounding country

between seven and eight o'clock, and the flights were witnessed with the greatest admiration by a large number of spectators.

Saturday 27 May 1911

'Western Daily Press', Monday 29 May 1911:- A series of demonstration flights were made by M. Maurice Tetard on Saturday evening from the grounds adjoining the British & Colonial Aeroplane Company's factory at Filton. Large crowds of spectators, numbering several thousand witnessed the flying and enthusiastically applauded the aviator. The weather was all that could be desired and at half past five a "Bristol" biplane of the new racing type was brought out of the hangars. M. Tetard arrived about this time, and accompanied by Mr Ercole, who was for the time being acting as his mechanic, superintended the preparations for flight. Mr Ercole is mechanic to M. Pierre Prier, who made the non stop flight from London to Paris, recently, and who is now attached to the "Bristol" staff of aviators.

The appearance of the racing biplane (No.44) created great deal of interest, for in several features it differs from the ordinary, and the military types the "Bristol." At first glance one's mind is exercised as to the stability of this remarkable little machine, for it is very small when compared to the military aeroplane, making the 50 h.p. Gnome, with which it is fitted, look larger than it really is. There is, course, no accommodation for a passenger, the machine being designed for purely racing purposes. A few minutes "tune up," and then with M. Tetard in the pilot's seat, the biplane was dragged to a suitable position for starting. The engine revolved, end the machine darted forward along the turf to rise gently within a short distance and soar upward gracefully and steadily.

M. Tetard flew at a height of over 400 feet, over Filton and Horfield Common and descended after executing several effective turns, within a few yards the hangars. His next flight was probably the finest that has been made in Bristol. Lifting the machine quickly from the ground, Tetard mounted very high and flew in straight line for Sea Mills. From Filton the biplane was watched with strained eyes, until it almost disappeared from sight a minute speck against the glaring sky. At Sea Mills a turn the left was made, and the aviator, who was carrrying a small map of the district with him, made for Abbott's Leigh over which flew a great height. Travelling fast, the machine passed over the Suspension Bridge, Clifton Down, Durdham Down, Westbury Park, Redland, Bishopston, and Horfield.

On arriving back at Filton, Tetard flew round the field and then descended in a magnificent volplane. An ovation awaited him from the crowds, which he acknowledged by doffing his cap. To our representative M. Tetard described the route he had taken by tracing it on his map. When he crossed the Gorge, he said, the machine suddenly felt if it was being sucked down into "air pocket." It was a curious sensation, but Tetard knew what do, and did it. On the Downs, numerous cricket matches were in progress, but the players and spectators temporarily lost interest in the games and waved and cheered the aviator. The height at which Tetard flew was between 900 and 1,400 feet, his speed was about 75 kilometres an hour, and he was in the air just over twenty five minutes. Tetard, throughout, was careful to avoid flying over houses, and kept to the fields as far

as possible There were several subsequent flights of shorter duration, and flying ceased about seven o'clock.

Tuesday 30 May 1911

'Western Daily Press', 31 May 1911:- The large number of Bristolians who visited Filton last night in the hope of seeing some more flying had their journey rewarded by witnessing one of the finest flights M. Maurice Tetard has ever made in the vicinity. Rising a few minutes after seven o'clock in the new Bristol racing biplane, a very swift looking machine, M. Tetard, after a few graceful circles over the Filton works, swept away in the direction of Westbury. Passing close Hollywood Towers, the residence of Mr Stanley White, he continued his course, and passed over the Avonmouth Docks then out over the Channel, flying at a height of about 2000 feet, steering the Bristol racer southward, continued for some miles, and then turned inland to the Somerset side of the Avon, and followed its course as far as Pill. Here he crossed into Gloucestershire, and flew back across country to Filton, landing with a magnificent vol-plane from a height of about 200 feet, amidst the acclamations of the crowd.

Special interest attached to the flight it was made on the new light type of Bristol biplane, which has been designed expressly for speed, and also because it was the longest yet attempted with this machine. M. Tetard expressed himself as very delighted with the behaviour of the Bristol racer, and stated that he had no adverse conditions, but had suffered slightly from cold, as he made the flight without donning any of the special garments usually worn by aviators.

'Western Daily Press', Saturday 3 June 1911:- The Filton aviation ground has been the venue of many people each evening since Saturday last, when M. Tetard commenced a series of flights with the new Brisrol racing biplane. This machine has in practically every particular amply fulfilled the hopes of the British & Colonial Aeroplane Company, and one of its most gratifying features is undoubtedly its remarkable stability. M. Tetard is looking forward, with M. Tabuteau, to the European circuit next month, in which both pilots are entered as starters.

When M. Tetard made his splendid flight over Kingroad the other evening, followed by thousands of eyes from Bristol and district, a good many people probably marvelled silently at the picture he presented; and when, upon descending at Filton, he shut off his engine at a height from which no one would care to fall, and gently side slipped down through the air at his own speed, alighting almost without the quiver of a wire, it seemed hard to realise that the air was so treacherous an element after all.

Saturday 10 June 1911

'Western Daily Press', Saturday 17 June 1911:- M. Jullerot's flight on a new "Bristol" biplane, from Filton to Salisbury Plain last Saturday was one of those delightfully impromptu performances that occasionally take everyone by surprise. The pilot flew from Filton easily and gracefully, and arrived at the hangars at Larkhill at a quarter past

seven. M. Jullerot had no map, and steered entirely by compass. He found the air extremely cold, and was, to use his own words “nearly frozen” on arriving.

Sunday 18 June 1911

‘Western Daily Press’, Saturday 17 June 1911:- Tomorrow morning will see the commencement of the great aviation contest, the name of which, ‘European Circuit’, has already become a byword in the mouth of everyone interested in aeronautics. Bristolians in particular will watch with keenness the progress of M. Tabuteau and M. Tetard, who are piloting the two “Bristol” biplanes entered by the British & Colonial Aeroplane Co.

Monday 7 August 1911

‘Western Daily Press’, Wednesday 9 August 1911 & ‘Flight’, 12 August 1911:- A very fine flight was made by Mr Graham Gilmour on Monday last (7 August), when he flew from Filton to Sherborne on his Bristol biplane. Leaving Filton at 6.25, he rose to a height of 2,700 feet, so that he was above a bank of clouds, which completely obscured the landmarks. He, however, had complete faith in his compass and went on, reaching Sherborne at 8.15, having covered the 50 miles in 1 hr 50 min. His slow speed may be accounted for in large measure by the very gusty winds. On his arrival he was given a very enthusiastic reception, and in the evening he executed a series of exhibition flights, which greatly pleased the Bank Holiday crowd which had assembled.

Monday 21 August 1911

‘Western Daily Press’, Wednesday 23 August 1911 & ‘Flight’ 26 August 1911:- The residents of Filton, near Bristol, saw some very fine flying on Monday last, when Mr Graham Gilmour was testing a re-built Bristol biplane. After making a preliminary circuit over the ground in the neighbourhood of the Bristol Co.’s workshops, he went off for some distance in the direction of Horfield, and returned by a very sharp left hand turn. Meanwhile quite an audience had gathered on the field at the back of the workshops, and Mr Gilmour treated them to some very clever trick flying. First diving sharply to the ground he then rose again at a steep angle, after which he banked the machine very considerably in some sharp turns. A long switch-back flight followed, and Mr Gilmour concluded his fine performance by coming down at a very steep angle, bringing his machine to rest exactly opposite the door of the shop where it was to spend the night. During the flight Mr Gilmour took his hands from the controls, and waved a salute to the crowd beneath, afterwards travelling for some distance with his hands folded.

Tuesday 22 August 1911

‘Western Daily Press’, Wednesday 23 August 1911:- Mr Graham Gilmour made another excellent flight on the new pattern ‘Bristol’ biplane last evening. He was to have started for Salisbury, but altered his plans, and after indulging in some remarkable circling flights at Filton, headed his machine towards Avonmouth, flying evenly and graceflly towards Shirehampton, crossing the riner and sailing a thousand feet over Avonmouth

and the docks. Without lessening his altitude Gilmour flew back to Filton, arriving about 8 o'clock.

Wednesday 30 August 1911

'Flight', Saturday 2 September 1911:- During the evening of Wednesday last week Graham Gilmour arrived at the Bristol School on Salisbury Plain, having flown from Filton, covering the 50 miles in 1 hr 20 min, with the wind against him for the great part of the way. He finished his journey in the dark, and was guided by a beacon which had been kindled.

Monday 11 September 1911

'Flight', Saturday 16 September 1911:- A very fine cross country flight was made on Monday evening on one of the new Bristol monoplanes by Mr Graham Gilmour. Leaving Amesbury at 6 o'clock he set out for Devizes, but owing to the mist which prevailed he got off his course and failed to find either Devizes or Chippenham. He continued on for some time, however, and then recognised a large town which loomed up on the left as Bath. From there he steered a course to Bristol, but close by Brislington thick smoke obscured his vision and he had to fly entirely by guesswork. He judged his direction very accurately, however, and recognising the works of the British & Colonial Aeroplane Co. at Filton by their white roofs he planed down steeply from about 500 feet into the field at the back, landing at exactly 7.20. During the trip of 50 minutes he must have covered between 70 and 80 miles. Mr Gilmour expressed himself delighted with the ease and control of the Bristol monoplane.

Friday 22 September 1911

'Flight', Saturday 30 September 1911:- Gordon England was out in the field behind the British & Colonial Aeroplane Company's works at Filton on Friday last week putting a new passenger carrying Bristol through her trials. He did two very fine circuits of about 5 minutes each. After a little adjustment he found the machine perfect. At 5.20 he started off for Salisbury, taking as passenger Mr. Harry Delacombe, who wished to witness the speed tests of the new Bristol monoplane. The wind was very gusty but the machine behaved remarkably well. The journey had to be abandoned, however, owing to very thick mist, which made it impossible to see more than half a mile ahead.

Saturday 28 October 1911

'Flight', Saturday 11 November 1911:- On Saturday 28th at Filton, Mr Pixton was upon a Bristol biplane, making several circuits, and landing with splendid vol planés, making three flights in all, having Mr Hotchkiss as passenger.

Saturday 25 November 1911

‘Flight’, Saturday 2 December 1911:- At Filton, Bristol, flying ground Mr Hotchkiss was testing a Bristol biplane on Saturday last, bought by Lieut. Harford for use in India. He found it working perfectly.

Thursday 14 November 1912

‘Flight, Saturday 23 November 1912’:- On Thursday last week (14th) Mr. Gordon England, at Filton, went out for the first time on one of the new Bristol tractor biplanes in which pilot and passenger sit in tandem. He made a really fine flight, remaining up for half an hour and landing well. The machine answers the controls perfectly and shows a fine speed.

On Friday (15th), England ascended at 1.45 pm, and flew for quite half an hour, the outstanding feature of his trip being the beautiful vol-plané in landing. Whilst two miles away from the ground from which he started, his engine failed, and, from a height of about 1,200 feet, England effected a remarkably fine landing, thus giving evidence of the gliding angle of the biplane. Later in the afternoon he was out again, this time reaching fully 2,500 feet, and flying for well over half an hour.

Saturday morning (16th) again saw the aviator in the air, his flight lasting about and three-quarters of an hour, during which he flew three very wide circuits and reached an altitude of 3,500 feet.

November 1912

‘Flight’ Saturday 30 November 1912:- Gordon England has terminated his connection with the Bristol Co., but will not actually leave Filton until he has completed the tests of the two new tractor biplanes that are his latest design. When these are finished, however, he intends to widen his experience of the world of flight, which is the sole reason for leaving the Company, with which he parts on the best of terms.

Tuesday 11 November 1913

‘Flight’, Saturday 22 November 1913:- Some remarkable flying in high winds was carried out by Busteed on one of the new Bristol tractor machines at Filton last week. On Tuesday week he was out in a wind blowing fully 45 miles an hour, the gusts at times being even greater, while on Thursday (13th), Friday (14th) and Saturday (15th), in very boisterous weather, he made some wide cross-country circuits.

Tuesday 30 December 1913

‘Flight’, Saturday 10 January 1914:- On Tuesday last week at 3.38 pm Sippe, with Mr A.E. Stone as passenger, arrived at the Bristol Flying School on Salisbury Plain from Filton on an 80 hp Bristol tractor biplane. Commenced landing with four spirals from 6,000 feet and then a vol plané with engine cut off from 4,000 feet, landing perfectly, close to the hangars. The pilot reported having received a few bumps en-route, now covered ground all the way, rather misty and very cold.

Monday 5 January 1914

‘Flight’, Saturday January 10 1914:- Mr Harry Busteed made a very fine flight on a Bristol 80 hp tractor biplane on Monday last. Leaving the Bristol works at Filton at 2.50 pm, he headed off in the direction of Salisbury, at an altitude of 3,500 feet, arriving at 3.30 pm, thus covering the distance of 46 miles in 30 minutes, which is at a rate of 90 miles an hour.

Thursday 26 February 1914

‘Flight’, Saturday 7 March 1914:- A very good account of itself is being given by the latest tractor biplane, turned out by the Bristol Co., and with which Sippe has been doing a good deal of flying over the neighbourhood of the works at Filton. Last Thursday week, Lieut., Hazell, of the Royal Flying Corps, flew over from Salisbury and Sippe accompanied him on his return journey as far as Chipping Sodbury, going back at an altitude of fully 4,500 feet. He was out again Friday (27th), morning and afternoon, and on Saturday morning (28th) putting up some remarkable banked turns, landing by means of a spiral vol plané from over 1,000 feet every time. Sippe has also taken a good many passengers for joy rides on the machine.

APPENDIX 2

Temporary aerodrome at Filton laid out for the “Circuit of Britain” race
2 July to 5 August 1911

This aerodrome (which appeared to have been centred roughly on the junction of Filton Avenue and Wallscourt Road at ST 607 778) was laid out especially for the ‘Circuit of Britain’ cross-country air race which featured eleven compulsory stops, one of which was at Bristol. Run by the Royal Aero Club, this contest for the fastest completion of the 1,010 mile circular course, took place in 1911. It began at 16.00 hrs on 22 July and continued for two weeks, 19.30 hrs on 5 August being the cut-off time for competitors to complete the course.

The proprietors of the ‘Daily Mail’ newspaper offered a £10,000 prize to the aviator who completed it in the shortest time. In addition, there was the ‘Entente Cordiale’ prize of 50 guineas from the proprietors of ‘Perrier’ table water for the first Frenchman to complete the course, along with prizes from Sir George White, the chairman of the British and Colonial Aeroplane Company (£250 total), and the British Petroleum Company Limited (125 guineas total), which was to be divided between those completing the circuit.

The race started and finished at Brooklands in Surrey, and was divided into five stages. Stage 1:- Brooklands to Hendon (20 miles); Stage 2:- Hendon to Harrowgate (182 miles), Harrowgate to Newcastle (68) miles, Newcastle to Edinburgh (92) miles. Stage 3:- Edinburgh to Sterling (31 miles), Sterling to Glasgow (22 miles), Glasgow to Carlisle (86 miles), Carlisle to Manchester (103 miles), Manchester to Bristol (141 miles). Stage 4:- Bristol to Exeter (65 miles), Exeter to Salisbury Plain (83 miles), Salisbury Plain to Brighton (76 miles); Stage 5:- Brighton to Brooklands (76 miles).

A total of 30 aviators entered the event, but only 21 actually started, while just four made it as far as Manchester, although all of these went on to complete the race. The winner was 'André Beaumont', actually Lieutenant Jean Louis Conneau of the French Navy (No.1 - Blériot XI), who finished at 14.08 hrs on 26 July; the second was Jules Védrines (No.9 - Morane-Borel monoplane), who finished at 15.18 hrs on 26 July; James Valentine (No.14 - Deperdussin monoplane), who finished at 18.49 hrs on 4 August; and Samuel Franklin Cody (No.20 - Cody Circuit of Britain biplane), who finished at 09.30 hrs on 5 August.

Flight 13 May 1911:- Royal Aero Club: Mr. Ernest C. Bucknall and the Secretary visited the West of England last week to inspect the alighting places at Bristol and Exeter. The representative of the Bristol and West of England Aero Club accompanied them to the grounds adjoining the factory of the British and Colonial Aeroplane Co., Ltd., at Filton, which is about three miles north of Bristol. These grounds will afford a good alighting place for the Bristol Control. They are so situatedthat a flag erected there can be seen for many miles and enable the competitors to get on the line to Exeter without flying over the town of Bristol.

Manchester (Trafford Park) - Bristol (Filton) - Exeter (Pinhoe)

Extracts for the 'Western Daily Press', the 'Times', and the 'Flight' magazine

WDP, Wednesday 19 July 1911:- The preparations for the equipment of the aerodrome which will form the Bristol control during next week's "Circuit of Britain Race" are proceeding rapidly, under the direction of the committee at the Bristol & West England Aero Club, whose hon. secretary, Mr A. Allan Jenkins, is directing matters according to advices from the committee of the Royal Aero Club. The Bristol Aerodrome, as was announced our Aeronautical notes of Saturday (*page missing from paper*), is at Filton, and in every respect a desirable and convenient point for aviators in the great race to alight. It lies to the right of the Gloucester Road, between Horfield and Filton Village, two large fields dividing it from the main road. For the convenience of spectators, a broad road-way is being cut from the main road to the Aerodrome, and this approach will be divided into three sections, for pedestrians, ingoing motors and carriages, and outgoing vehicles. Hedgerows representing the thick growth of years have been cut through and levelled with the fields, by the wielders of axes and picks, and by the end the present week the aspect of the landscape in the vicinity of the new flying ground will have undergone a startling change. The close proximity of the railway and Filton Station on the one side, and the electric cars on the main road side, render the ground easily accessible from all parts of the city, and from Aerodrome itself it will be possible to obtain a magnificent view of the approach of the flying men and their departure, for there is a practically uninterrupted view on all aides for several miles. The erection of hangars is being proceeded with, and the next day or two will see the springing up of tents and marquees and other unfamiliar objects.

WDP, Friday 21 July 1911:- Tomorrow sees the commencement of the great aerial race round Britain, organised by the "Daily Mail" for the second £10,000 prize. Bristol is one of the most important controls along the 1,010 mile route. Upon their arrival from

Manchester early next week the aviators will find an immense aerodrome laid out at Filton. The hay crop has been taken up from the fields, and only the shot stubbly grass is left. The enclosures are being roped off, and the spaces for the hangars are outlined with flags. The oil and spirit manufacturers will have their tents near the hangars for the storing of many hundreds of gallons of liquid fuel. At right angles with the hangars will be enclosures and tents for refreshments, club members, ladies' cloakrooms, race officials, and representatives of the Press.

The flying ground proper will be very strictly guarded and no one, unless wearing a badge, will be allowed inside the ropes. It is estimated that accommodation in the spaces provided will be large enough for an attendance of between 40,000 and 50,000 people. A large field has been especially reserved for the parking of motor cars. Mr Sidney Jones's band has been engaged, and will play morning, afternoon, and evening. The shape of the Aerodrome is such that it will provide the pilots, if they land where they are expected to, with a long and fairly level run after touching the ground. It is expected that the aviators will cross the Severn at a point near Lydney, and proceed to Filton by way of Thornbury. Along the whole of the route between the various controls will be patrolling motor cars, and on the Aerodrome at Bristol, a huge white cross will mark the landing space, and a smoke fire burning day and night will be an additional indication.

Tuesday 25 July 1911

Times, Wednesday 26 July 1911:- At Filton the crowd began to assemble from about 9 o'clock in the morning. The use of several fields had been secured, the central one, of about 45 acres, being reserved for the landing of the machines. The visitors included Sir George White, president of the Bristol Aero Club, and Sir Herbert Ashman, vice-president.

The wait was a very long one, and in a burning sun with no shade available proved very trying to the crowd. Between 5 and 6 o'clock, when it seemed that there was little probability of Beaumont's proceeding to Bristol that evening, the crowd became very impatient, and some demanded that their money should be returned or passes be given for tomorrow. The officials decided to grant the latter request. Shortly afterwards M. Tétard and Mr Gordon-England gave some exhibition flights.

At last the great moment came, and Beaumont arrived at 20.37 hrs. When the Blériot monoplane was seen floating gracefully from the direction of Thornbury there was great excitement, and the crowds in the enclosures and in the surrounding fields broke bounds and swarmed upon the central field. Beaumont had fortunately seen the flare light, and came down in magnificent style clear of the crowd. he was driven round the ground, cheered by the spectators, and was afterwards taken by the officials of the Bristol Aero Club to the Clifton Down Hotel to rest after his long journey.

Just over 20 minutes later, at 21.00 hrs, Védrines reached Filton, but alighted half a mile from the control. He afterwards resumed his flight, and eventually reached the control at 22.10 hrs. Before Beaumont's arrival there had been what was put down as a 'false alarm' of his having been sighted. It turned out that he actually did approach the control

just before 20.00 hrs, but, mistaking the route, went too far towards Bristol and had to make a wide circle to get to Filton. Védrines, who at 21.00 hrs landed by mistake in the grounds of the Bristol Aeroplane Company, about half a mile from the aerodrome, took a taxicab over to the control. He arrived at 21.15 hrs, and on seeing Beaumont's machine already there burst into tears. A stay of his machine had been damaged, and by Sir George White's orders a number of mechanics were placed at his disposal and repaired the damage. The aerodrome was lit up with acetylene lamps and flares, and Védrines ascended again and flying through the black darkness, landed at 22.10 hrs, amid great excitement. He declared that he should start again at 02.00 hrs, but the officials suggested that 03.00 hrs would be a more suitable time, and preparations were made accordingly.

WDP, Wednesday 26 July 1911:- Such scenes we to-day saw at Filton are probably unprecedented in the history of the village. All Bristol might have taken a holiday and spent it in the environs. The roads teemed with cyclists, taxis rushed in every direction, brake, car,and char-a-banc loads, and pedestrians crowded the thoroughfares, and the sightseers overflowed into the meadows, where they picniced comfortably and uncomfortably. The railway bridge at Filton Station and the surrounding hills were thick with people, and still we waited for the airmen. Thousands passed in and out of the Aerodrome in the afternoon, but though they left the flying ground, they apparently remained in the vicinity and anxiously listened to any item news that filtered through. The band of Mr Sidney Jones played throughout the day, and helped materially pleasantly pass the time away.

Tetard, who gave exhibition flight, ascended quits early the day, but came down a field at Southmead without damaging his biplane, however. Attention was now divided between Thornbury direction and for Tetard was momentarily expected. Towards 6.30 the Frenchman was seen approaching over the Filton Road, and our spirits went up with a bound. Tetard flew, encircled the aerodrome, and descended gently and gracefully. Simultaneously with Tetard's appearance the band struck a lively air, and the complexion of everything changed, for the crowds became interested, and cheered both Tetard and Gordon-England as they flew alternately over the aerodrome and the hangars.

The scene which greeted Beaumont's arrival this evening baffles description. The crowds had thickened beyond proportion since the news was received of Beaumont's departure from Manchester at 5.44, Védrines following upon his tail at 6.11 hrs. After a number of false alarms, at 8.37 a speck high up in the sky in the Thornbury direction attracted everyone. The cheers from the aerodrome grew in volume, and the Bleriot aeroplane, with its red wings, steered directly for the fire situated at the back of the hangars, planing down upon the strip of the aerodrome nearest Filton station, and coming to a standstill quite near the fire.

The crowds then became completely overcome with excitement. The police were present in much too puny numbers to deal with such a sudden and combined rush. The wires of the fence were forced from their staples in the onslaught, and cheering vociferously and waving everything they had to wave, the people raced pell-mell across

forbidden ground in a way that boded disaster for the Bleriot. It was a race between Beaumont's mechanics, who dashed to his assistance in a powerful car, and got there first. The mechanics, at a brisk pace, then trailed it towards the hangars, beating off the crowd. The aviator was hustled into a motor car and driven round the Aerodrome before departing for a well earned rest.

Under Sir George White's direction, after having notified his arrival to the official timekeeper, he was motored to a hotel. The mechanics jealously guarded his monoplane, which was housed in one of the hangars and closed in. The official time of Beaumont's arrival was 8.37.25, and he had occupied 2 hours and 53 minutes in the journey from Manchester.

Vedrine was then anxiously looked for, as it was said that he was only about five minutes behind his rival. It was getting dark and people were straying over the entire flying ground. Then, while the spectators were scanning the horizon, a man in oiled leathers walked on to the ground and was unobserved until Mr J. H. Winter caught sight of him and hurried him to the hangars. Meanwhile mechanics from the British & Colonial Company's flying ground at Filton arrived to say that Vedrine had landed in their field, breaking a stay and that Sir George White had sent motors with mechanics to the aviator's assistance. Vedrine's time was being counted meanwhile, and it was becoming quite dusk. He must land in the Aerodrome before he can have officially arrived. And land he does. At 10.10, and with the light of the flickering flares on the underside of his wings, he planed down in the dark quite safely, near the beacon fire, and was vociferously cheered by the enthusiastic crowds.

In the timekeeper's tent with Sir George White near him, his leather overalls were stripped off him, and with a biscuit and a glass of lemonade he meagerly refreshed himself. Beaumont and Vedrines were to restart at day break. The meeting at Filton will be in full swing today, for Hamel and Valentine are expected, and Tetard and Gordon-England will give exhibition flights. Stop Press:- Beaumont started from Filton Aerodrome at 04.50 hrs; Vedrines at 04.52. both got away well.

WDP, Thursday 27 July 1911:- Pictures of the Flying: Mr R. Pringle, who secured the exclusive rights of cinematographing the arrivals and departures of the competitors in the Filton portion of the contest, showed a splendid picture at his Dolphin Street hall last night, of the departure of Beaumont and Védrines from Filton to Exeter. A picture of the winner arriving at Brooklands will be shown today, in addition to any fresh events that might take place at Filton.

Wednesday Night. The departure of Beaumont and Védrines from the Bristol control was witnessed a crowd enthusiasts, who, in spite of the lateness of Tuesday night's events, returned to the Aerodrome after having little more than a couple of hours' sleep Throughout the night and the early hours the morning the flying ground presented a weird scene. Few, if any, encamped, had any sleep, preferring to spare the short time before dawn in watching the mechanics their work the two monoplanes housed the hangars. Acetylene lamps and flares threw fitful gleams upon the Frenchmen, who worked rapidly and assiduously overhauling every vital part of the machines. From the

time the aviators left their aeroplanes till the moment of their departure the assistants had not an idle moment, and even when the machines were taken out and placed in position for re-starting, they seemed loth to part with their charges. The vigil overnight was interestingly spent by those who stayed, for now came the excellent opportunity to examine at close quarters the features of the monoplanes.

It had been anticipated that the re-start would be made as soon as it was light, but a heavy mist enveloped the landscape, and it was decided to wait until the atmosphere cleared somewhat. As the light increased, the mists rolled away, and conditions were most favourable, there being no wind. The official timekeeper and several other Royal Aero Club officials were present, and the number of spectators had increased considerably as the moment approached for the recommencement of the aerial tour, M. Tetard and Mr Gordon-England successively took up the "Bristol" military biplane, and both aviators were loudly applauded for performing exquisite spiral vol-planes. When Beaumont mounted his machine the crowd gave him a cordial cheer, which was repeated when Védrines also climbed into his seat, his machine being drawn up a little to the rear of Beaumont's. At 04.40 hrs Mr Dutton, the timkeeper, flashed the white flag through the air and Beaumont waved to his mechanics to let go. The machine then took-off, followed at 04.52 by Védrines.

Only a few spectators visited the aerodrome in the morning and afternoon. The band played, and Mr Gordon-England went for a trial flight about noon, but the sun was very hot, and further demonstration flying was postponed until conditions were more suitable. Heavy clouds later rolled overhead, and in the afternoon there were several heavy showers, which drove everyone to shelter. Between the showers the "Bristol" was brought out, and Gordon-England and M. Tetard went up several times in the presence of a larger number of spectators than had been on the ground before today.

In the evening there were some really excellent flights by the "Bristol," and one wished that the crowds of Tuesday might have witnessed the display by Tetard, Pixton, and England. There were several passenger flights, among those going up being Mr H. Tiark. The finest exhibition the evening was that given by Pixton, who met with a crash in the early stage of the great race. That he still feels the effects of his accident was noticeable from the fact that walked stiffly. He was the reverse when up, however, and treated the spectators who were to be seen in all parts of the aerodrome, and in the fields surrounding, to one of the finest performances that has been given in Bristol. Under his control the biplane curvetted and played at it were with the air in an astonishing manner, reminding us Grahame White in his tricky mood. The Lord Mayor of Bristol was an interested spectator, and was very pleased with what he saw. There is to be another vigil, as Hamel and Valentine are expected in the morning.

WDP, Friday 28 July 1911:- Védrines later said, "I lost the race through the unfortunate mistake I made at the Bristol control, when I alighted some two hundred yards from the right spot. To make matters worse, I smashed one of the mainstays of my aeroplane while landing, and it took me nearly an hour to repair the damage. There again my map was to blame. The landing place was marked on the right of the railway. There I came to earth, but it appears that the right place was on the other side of the railway. I had to go

in a taxi-cab to find where the real landing place was, and then go and fly to it. The bonfires, too, helped to bewilder me. Instead of helping, they hindered. There was not one or a few, but hundreds of these discs of fire, at least three hundred, I could see nothing but bonfires".

Mervyn O'Gorman and Harry Delacombe, Control Officials at Filton for the Royal Aero Club wrote that there were three bonfires (petrol fires) carefully arranged on the ground, and only three fires, in addition to one large flare light. The other lights can only be ascribed to such cause as the normal illumination of factories, etc., in the neighbourhood. As regards his remarks that the marking of his map shows the landing ground on the right side of the railway (as approached from the north), there is here some unexplained confusion, because the ground is in fact on the right side of the railway. Perhaps he was confused by the small branch railway which runs on the other side.

Mr Alan Jenkins, the hon. secretary of the Bristol & West of England Aero Club said that Beaumont apparently had no difficulty in discovering the alighting ground. When he approached Bristol there were only two flare lights on our ground, one near the centre of the Aerodrome, and the other at the south-west end. We subsequently set fire to petrol in three other places in response to Védrine's request while his machine was on the Filton Works ground. He must have confused outside lights with those we had at the Aerodrome. Undoubtedly the Bristol Control was the most difficult to deal with, on account of the approaching darkness. Beaumont arrived as it was becoming dusk but he had no difficulty in finding the ground, and there is no doubt that the 20 minutes which divided that time from the moment when Védrines appeared, made the task more complicated from his and our point of view.

Thursday 27 July 1911

WDP, Friday 28 July 1911:- The Filton Aerodrome was yesterday swept from morning till evening by a wind that prohibited any attempt at flying on the part of Gordon-England and M. Tetard. Few people visited the ground towards late afternoon and evening, but up till six o'clock there was no flying. The few people who found it necessary to remain enjoyed the music from Mr Sidney Jones's band, but there was little else to occupy one's attention. The wind diminished somewhat last evening and a number of people visited the aerodrome, and were rewarded by a couple of fine flights on the part of Maurice Tetard. At 7.35 the Frenchman went up, and though the wind was choppy, he managed the machine beautifully, flying a considerable distance beyond the ground. The effect when the biplane was outlined against a horizon beautified by a magnificent sunset sun-set was superb. At 8.30 Tetard again ascended, and after attaining a good height volplaned down in expert style.

Friday 28 July 1911

WDP, Saturday 29 July 1911:- Yesterday was the hottest day Bristol has had this year, the thermometer registering 90 degrees in the shade. At Filton Aerodrome the scorching rays of the sun drove the band beneath hangars.

Another blank day was spent at Filton yesterday, when there was no flying at the aerodrome until the evening, owing to the fierceness of the sun's rays, which aviators avoid as much as possible, owing to the curious eddies which are created in the air. Shortly after six o'clock Tetard brought the biplane from the hangar, and went up for a nine minutes' flight, passing over Horfield, Filton and the neighbourhood. A little later he made a second flight with a passenger behind him. There was a good sprinkling of visitors to the aerodrome now, and in ideal conditions the spectacle of further flights was thoroughly enjoyed, music being supplied by the band, who had been in their places throughout the day. At 7.20 a motor, driven by Mr Stanley White, brought Capt. Dixon and Gordon-England on the ground. England stepped immediately out of the motor, and climbed into the aeroplane. Rising to a considerable height he treated the spectators to a very graceful exhibition of turning and banking, handling the machine in delightful style.

Tetard subsequently took charge of the "Bristol", and in the course of the most magnificent flight that had yet been seen at the aerodrome, the accomplished Frenchman attained a height of 1,500 feet. From a thousand feet Tetard shut off his engine and glided in brilliant fashion to the ground, evoking hearty applause from the spectators. Tetard had been in the air upwards of 20 minutes. This beautiful exhibition was followed by a passenger flight, with England as the pilot. He took his companion for a trip in which graceful turns were an attractive feature.

Saturday 29 July 1911

WDP, Monday 31 July 1911:- Saturday provided another weary vigil for the watchers and waiters at the Filton Aerodrome. Nothing happened excepting a gale in the evening, which blew across the Aviation Ground shortly after six o'clock and threatened to uplift the hangar and the "Bristol" biplane which it contained. M. Tetard and a number of mechanics and others saved the structure by strengthening the supports and roping down the machine. There were no exhibition flights on Saturday owing to the wind.

Compilation:- That at least two of the remaining contestants in the circuit of Britain, Valentine and Cody, intend to complete the course there seems little doubt. Valentine reached Manchester on Saturday night (29 July), and was to have started for Bristol at four o'clock yesterday morning, but was prevented by the boisterous wind. Cody reached Glasgow. It is possible that Valentine will reach Bristol to-day (31 July).

Valentine left Manchester on Monday morning, the 31st, and landed at Springhill, near Madeley in Shropshire, after 1¾ hours flight, in order to obtain further petrol. On re-starting he only got to Bridgnorth. Getting away in the evening he passed over Worcester just before eight, and reached Gloucester at 20.24 hrs. Although a strong wind was blowing on Tuesday morning, 1 April, he was able to complete the stage to Bristol, where he decided to wait and see if the weather would moderate. He was away again on Wednesday morning (2 August), and landed safely at Exeter at 08.24 hrs.

WDP, Tuesday 1 August 1911:- James Valentine spoke by means of the telephone last night from Gloucester to the officials at the Filton Aerodrome. Yesterday was void so far as flying is concerned. Many people attended the aerodrome last evening, and Gordon England went up for single flight after the wind had dropped. The flares were lit and all turned towards the northern horizon. It grew dark, and the officials knew not what to aspect. A sudden call from Gloucester and the name of Valentine acted like magic. In the next moment, Mr Delacombe, representing the Royal Aero Club, was conversing with the belated airman. It appears that Valentine had landed at St Mary's Meadows, Gloucester, and had made up his mind to re-start at three o'clock this morning.

Tuesday 1 August 1911

WDP, Wednesday 2 August 1911:- At three o'clock yesterday morning (1 August) there were a number of Aero Club officials and visitors at the Filton Aerodrome. News came that Valentine had left Gloucester at 4.30 am and it was broad daylight when he was first observed flying at fully 2,500 feet, but not in the direction of the Aerodrome, but making for the city, via Staple Hill. Then was seen the nose of the machine dive and down it went in a volplane, disappearing behind some trees, Then up went the machine again without landing, and turning its course came in a direct line for Filton Station. Here another turn to the left was executed, and the monoplane dropped from its high altitude over the roof of the hangar near the white cross in the centre of the Aerodrome.

All ran to the man and the machine, and cheering and shaking of hands proceeded. The machine was taken to the hangars, where the back skid, which had been damaged the previous day, had to be repaired. The timing of the dropping of the machine on the ground was officially returned as 5.27. Valentine said he had great trouble in getting to Filton, owing to the terrific wind he faced. It was blowing 30 miles an hour above. He explained that he was attracted away from the proper course on reaching Bristol by what appeared to be crowds of people, but which was a number of horses. He hoped to get away about 3 o'clock after the damaged skid had been repaired and the engine overhaul completed.

The news of Valentine's arrival at Filton hard the effect attracting a considerable crowd of spectators during the early afternoon and evening to the aerodrome. Conditions as the day advanced were not altogether favourable for flying, the wind blowing strongly from the south-west, and the sun blazed uncomfortably at intervals. There were several sharp showers of rain, but it was not until after six o'clock last evening that the breeze lessened, and the probability of the resumption of his journey by Valentine became imminent. Meanwhile, the monoplane, which had met with such ill-luck during early stages of the race owing to the boisterous weather the North, rested in the hangars.

The wind dropped considerably in the evening after a heavy storm had driven the spectators to shelter. When Valentine drove into the aerodrome in the company of Mr Delacombe, he was warmly received by the crowd, who quickly recognised his tall, athletic figure. Wind and rain filled the air after Valentine's appearance at the hangars, and as the time passed there seemed little hope his getting away that evening. Sir George White, Bart., and other well-known Bristolians were on the ground at this time,

and quite a gathering of pilots whose names are well known, came upon the scene in addition to the man of the moment. Pierre Prier, Capt. Dickson, and Gordon-England were all present and inspected with interest the monoplane.

At the eleventh hour a defect at the extremity of one of the wings of the machine was discovered by Valentine, and the mechanics wire again busy for some time rectifying the trouble. However, by this time, the aviator had decided not start before this morning for Exeter but, to the delight of the spectators, agreed to give an exhibition flight. Meanwhile, Gordon-England went up on the “Bristol”, and after curving and twisting his machine in all directions, came down in spiral volplane. At 8.5.Valentine's motor hummed its message that was off, and the finest flight the evening was made. Rising good height Valentine swept at great speed in an ever-winding circuit and went at one moment out of sight to the north. The graceful outlines the Déperdussin were accentuated against a glorious evening sky, and the crowd was charmed with what they saw, a masterly exhibition of the aviator’s skill. Valentine glided to earth after having been in the air twenty minutes, amidst ringing cheers.

Valentine confessed that had enjoyed his short trip of 25 miles or so. He had, he said, raced three trains while he was up, and had obtained a magnificent view of the city and county, and the flying, he said, was easy and pleasant. There were several other flights by the “Bristol", and one trip a lady passenger accompanied Gordon-England. This morning Valentine was expected to leave for Exeter between four and five o’clock. Stop Press - Valentine resumed his flight from Filton Aerodrome for Exeter at 5.31. He rose quickly from the ground in the presence of a fairly large crowd, who watched him fly to the Gloucester Road side of the Aerodrome where he was seen to come down.

WDP, Thursday 3 August 1911:- Valentine arrived with his mechanics at the Aerodrome at 5.15 yesterday morning, when there was a fairly good muster of spectators. The machine was brought from the hangar and placed at the Gloucester Road end of the ground, facing Fishponds.. It was exactly 5.31.30 when Mr Dutton, the official time keeper. lowered his white flag, and the Duperdessin sped swiftly along the turf and rose gracefully, the pilot turning to the left and guiding his machine gradually round to head for Exeter.

The sweep taken was a rather large one, and when several fields intervened between his position and the aerodrome, he quickly disappeared behind trees and hedges. In motors and on foot the spectators made for the spot, and found that Valentine had landed in a field, a few yards only separating him from a large oak tree and some heaps of stones. Little damage had been done, only a valve rod having been broken. A fresh one was procured from the British & Colonial Company’s premises at Filton and the monoplane having been moved to a more suitable spot for starting, the mechanics set to work to right the wrong. This took some time and it was not until 6.50 that the aviator was able to once again take off. Everyone had come from the Aerodrome to the field to witness the re-start, and this having been accomplished, the machine rose into the air, being guided down country. Many people at Clifton, Coombe Dingle, and the adjacent suburbs, saw Valentine pass overhead.

Pringle's Picture Palace, Dolphin Street. An interesting film was exhibited last night showing Valentine arriving and departing at Filton, Sir George White and party at the Aerodrome, and several other interesting items. Today the picture will include views of Mr Cody in flight.

Compilation:- On Wednesday morning, 2 August, Cody left Preston at daybreak and reached Manchester at 4 am. Starting again at 6 he passed over Crewe before 8 and descended on Worcester racecourse at 9.15 because his map had become unwound. He left Worcester again at 10.15 and arrived at Bristol at 11.42 hrs. He announced his intention of proceeding on the next stage to Exeter during the afternoon. Cody left Bristol for Exeter at 07.25 hrs on Thursday, 3 August, after waiting 36 hours for the high wind to decrease. He had intended to leave for Exeter at 04.00 hrs, but the gale and rain prevented him, and he remained at the aerodrome all through the day, hoping that the conditions would improve. The wind, however, was still blowing at a rate of over 20 miles an hour right into his teeth when he left. However, the poor conditions forced him to put down at Weston super Mare landing on the sands in the presence of a large crowd at 20.15 hrs. He stayed for there for the night and got away early the next morning, arriving at Exeter at 05.15 hrs.

WDP, Thursday 3 August 1911:- Things at the aerodrome began to assume their accustomed phase of quietude until 11.20, when Cody was discerned by a small group of officials and others who were standing in the members' enclosure. He was flying on the eastern horizon, going in the direction of Gloucester, and then he went west. Flares were immediately lit on the ground, and by means of these, and the shouts of people, the attention of the aviator was attracted. For quite a time the Cody biplane, had been tracking and turning before the aerodrome appeared to be the airman's immediate objective.

The ground had been deserted, but people turned up from all points and crowded on the alighting space, cheering and weaving enthusiastically. Cody landed in a fairly brisk breeze at 11.42. He shook hands with various people, and jumped nimbly from his seat. The machine was taken to the hangar, and Cody repaired to the members' tent, while his machine was officially examined by Mr Delacombe. The result proved that all the marked parts were intact. This means that he will, with Védrines and Valentine, share the £250 prize offered by Sir George White, Bart., for the first machine, other than the winner of the race, to arrive at Bristol with all the marked parts intact. Mr Cody left the aerodrome with several officials, and his machine at the hangar was inspected by many visitors.

In the evening, at six o'clock the attendance at the aerodrome was large, and the conditions so far as the spectators were concerned were delightful. The wind, however, kept very high, and when, at about 6.15, Mr Cody, thoroughly refreshed after an afternoon's rest, was fully prepared to resume his flight as soon as the weather became more favourable. The mechanics from the British & Colonial Company's factory at Filton assisted Mr Cody with the final preparations. The breeze was somewhat gusty, when, at 7.30, the front of the hangar was cleared and the biplane brought out. However, Cody decided that the wind was too strong and so the machine was taken back into the

hangar and, the 200 people or more who had attended, cheered Mr Cody as he drove away in his car.

Thursday 3 August 1911

WDP, Friday 4 August 1911:- Colonel S.F. Cody, the fourth and last competitor in the 'Circuit of Britain' to pass through the Bristol Control, left Filton at 7.35 last evening on his way to Exeter, it being his intention to come down on the sands at Weston super Mare for the night. There were many people to see the plucky British airman off, but not so many as there would have been, had it been possible for him to start earlier as he had hoped. The wind, which had prevented his ascent early yesterday morning, decreased somewhat after sundown, but when the machine was taken out of the bit of hangar which bad been left to cover it, the wind was blowing fully 20 miles or more per hour in the teeth of the aviator. Throughout the afternoon and evening Mr Cody had been inundated with telephone messages from every point on the route had yet follow, and the varying reports which reached him as to the weather were most perplexing. Cody had resolutely stayed at the aerodrome from 9.30 in the morning waiting for the wind to drop. He said that he should hug the coast line when did start, as the wind would not trouble him so much then. Neither would mind landing somewhere en route after dark, provided that his machine would taken care of until the morning.

Later, he decided to land at Weston-super-Mare to the south of the pier, and the police at Weston intimated that they would be prepared to receive him and guard his biplane through the night. It was generally felt by all who saw Cody at Filton that he had met with the worst luck so far the weather was concerned, and his daring ascent and departure, at the end of a tiring and exasperating thirty-six hours, was admired and cheered heartily. The machine started from the Filton Station end the aerodrome and leaving the ground about half-way, mounted slowly and flew towards Clifton. In a few seconds it was returning the whole length the aerodrome, and rocking violently in the strong wind. Cody bore to the left, and, turning a half circle, followed the course of the Severn and was soon lost to view.

Shortly after three o'clock yesterday morning a few visitors might have been seen arriving at the Filton Aerodrome in anticipation of the departure of Cody for Exeter. The conditions were such, however, were certainly not looked for. Not only had the wind increased in volume during the early hours, but rain was brought from the south-west, softly and slowly at first, but increasing into a continuous and drenching shower as four o'clock approached. The scene at dawn was in truth a melancholy one. The rain lashed in torrents the tents and hangars beneath which the few spectators who had braved the conditions huddled together in sorry groups. Stop Press (3 Aug) - At 5.15 am it was raining heavily at Filton Aerodrome, and there is absolutely no prospect of Mr Cody starting for Exeter. At that time he is waiting at the Clifton Down Hotel.

There was, as time went on, every indication that the start by Cody would be delayed indefinitely. Nevertheless, those who had arrived upon the ground bravely stuck to their posts, preferring wait until the conditions improved than to go away disappointed. Cody, who was at the Clifton Down Hotel, was communicated with throughout the morning,

and it was understood that he was prepared to motor to the ground directly the weather was better. As a matter of fact, he did arrive at 9.30, by which time the rain had ceased, and the sun shone through the clouds. The wind was still high, but from reports which came from as far as Brighton, Exeter, Bridgwater, the Cotswolds, etc., it seemed that there was chance of better conditions shortly. The wind showed no signs of lessening during the morning, in fact, at 12 o'clock, it was, if anything, higher than ever. Cody intimated that if the wind dropped in five minutes he would depart in ten, and added that he would be in that position all day,

A Clifton gentleman who was on Battery Point, Portishead, last evening at eight o'clock, yesterday states that he suddenly heard a whirring sound, and saw Cody fly past. The biplane was flying exceedingly low, and only just escaped the telegraph post on the point. The aviator proceeded in the direction of the lighthouse apparently only 40 feet above the water, but then rose a little. There was a very strong wind blowing at the time, and the biplane seemed to be travelling at a speed of from 35 to 40 miles an hour, but after reaching the lighthouse he rose to a safer altitude. There was an interesting scene at Weston super Mare at 8.15 hrs last evening when a huge crowd of residents and visitors witnessed the arrival of S,F. Cody, who had departed from Filton Aerodrome at 7.10. The aviator had travelled to the accompaniment of a strong north-west wind made a graceful descent on the sands near the Grand Pier. He announced that he intended to depart for Exeter at three o’clock this morning.

FILTON MILITARY AERODROME 1915 to 1920

Introduction

Over the years what has appeared in print and 'on line' concerning the history of Filton Aerodrome during and just after World War One has tended to be vague, and at times contradictory or inaccurate. This is not surprising as most records concerning Royal Flying Corps/Royal Air Force home based units and establishments, along with all World War One aircraft movement cards, were destroyed in the 1920s. In addition, many of the personnel records of individuals who served in the conflict were lost as a result of enemy action during World War Two. Consequently, it's now impossible to compile a definitive history of the aerodrome between 1915 and 1920, and so all that can realistically be achieved is to put together, in roughly chronological sequences, notes assembled from fragments of information gleaned from a wide variety of primary and secondary sources.

These included the few relevant files retained by the Air Ministry and material prepared by the Ministry of Munitions and various public organizations and large private concerns. In addition, biographies, contemporary newspapers, plans, letters, scrap and reference books, along with odd magazine articles and jottings published since the 1920s, were also useful in shedding some light on the first five years of Filton Aerodrome.

Origins

Although by the end of 1910 the British & Colonial Aeroplane Company's factory at Filton was well established in the manufacture of the Bristol Biplane, completed machines still had to be dismantled and taken by road to Larkhill on Salisbury Plain for flight testing. However, during the afternoon of 31 March 1911, Maurice Tabuteau, one of several experienced French pilots employed by British & Colonial as test pilots and instructors at their Larkhill flying school, decided to make an unannounced flight to Filton.

Unfortunately a problem with his 70 hp Gnome engine forced him to land the Bristol Military Biplane No.19 in a field at Mangotsfield, near Bristol, where the engine had to be replaced by a 50 hp Gnome. The following morning he took off again, and following a short flight successfully put down in a field adjoining the British & Colonial's works, making him and his machine the first ever to land there. Shortly after Tabuteau was re-allocated to the Filton works and there, along with Sir George White's nephew Herbert John Thomas, they set up a small flying field on a patch of ground adjoining the western side of Fairlawn Avenue (see Appendix 3 for further details).

In addition, and not to be confused with the British & Colonial's flying field, a temporary aerodrome was laid out at Filton for use during the 'Circuit of Britain' air race, which was held between 22 July and 5 August 1911 and featured eleven compulsory stops, one of which was at Bristol. The 'Western Daily Press' newspaper of 19 July 1911 carried

details concerning the site, which appears to have been in fields in the vicinity of what is now the junction of Filton Avenue and Wallscourt Road:-

“The preparations for the equipment of the aerodrome which will form the Bristol control during next week's ‘Circuit of Britain Race’ are proceeding rapidly, under the direction of the committee at the Bristol & West England Aero Club, whose Hon. Secretary, Mr A. Allan Jenkins, is directing matters according to advices from the committee of the Royal Aero Club. The Bristol Aerodrome is at Filton, and in every respect a desirable and convenient point for aviators in the great race to alight. It lies to the right of the Gloucester Road, between Horfield and Filton Village, two large fields dividing it from the main road. For the convenience of spectators, a broad road-way is being cut from the main road to the Aerodrome, and this approach will be divided into three sections, for pedestrians, ingoing motors and carriages, and outgoing vehicles.”

“Hedgerows representing the thick growth of years have been cut through and levelled with the fields, by the wielders of axes and picks, and by the end the present week the aspect of the landscape in the vicinity of the new flying ground will have undergone a startling change. The close proximity of the railway and Filton Station on the one side, and the electric cars on the main road side, render the ground easily accessible from all parts of the city, and from Aerodrome itself it will be possible to obtain a magnificent view of the approach of the flying men and their departure, for there is a practically uninterrupted view on all aides for several miles. The erection of hangars is being proceeded with, and the next day or two will see the springing up of tents and marquees and other unfamiliar objects.”

The British & Colonial’s own small flying field remained in use until the summer of 1915 when construction of the a new military aerodrome adjacent to the factory enabled the company to extend their Filton works around the original sheds by building not only on their old flying field behind Fairlawn Avenue, but also on some adjoining land rented from the Western Wagon & Property Company Ltd.

Overview

In August 1915 the new Filton Aerodrome was opened on a site about four miles north of Bristol, to the west what is now the main A38 road and on land to the north of the British & Colonial Aeroplane Company’s works. By the autumn of 1918 the grass airfield (centered roughly on ST 599 803) measured about 900 yards by 750 yards and occupied 106 acres, of which some 35 were covered with station buildings.

At that time it was bounded on the north by Hayes Lane, which was a continuation of Gipsy Patch Lane and led to Charlton village (demolished in 1946), and on the south by the Filton to Avonmouth railway line. To the east was the main Gloucester Road North, while its western limit was roughly defined by Hayes Wood.

In Britain during World War One military aeroplanes were manufactured not only by the company originally responsible for their design, but also by a variety of sub-contractors, and before any machine could be delivered to its allotted squadron it first had to be

assembled fully, and then flight tested. For machines destined for the Royal Flying Corps this was usually carried out at one of the Aircraft Acceptance Parks that went on to be set up in various parts of the country. New aircraft were often transported to them in sections, either by road or rail, while such establishments were also used to store the flight-tested machines until they were required in the field.

From August 1915 until October 1919 an Aircraft Acceptance Park was in residence on Filton aerodrome in order to handle locally constructed military aircraft, while between December 1915 and July 1917 the airfield was also used as a Royal Flying Corps Training Squadron Station. During that period six newly formed service squadrons passed through while receiving advanced training and working up to operational status, at which time the establishment was often referred to as Patchway Aerodrome. That was because a local authority boundary actually ran across it, with the result that the buildings and some of the airfield lay in Patchway, a locality in Almondsbury parish within the Thornbury Rural District, while the part of the aerodrome adjacent to the British & Colonial works was in Filton, a parish within Sodbury Rural District.

Then, as a result of a training re-organization which took place in March and April 1918, the aerodrome at Filton was declared a South-West Area Mobilisation Station for one service squadron, but the only unit to actually arrive failed to complete the process before the war ended. Finally, in March 1919 the billets on the aerodrome were used to house personnel from a disbanding squadron, while the official relinquishment of the site took place in February 1920.

Bristol Aircraft Acceptance Park - later No.5 (Bristol) Aircraft Acceptance Park

In 1912, when the War Office had placed the first production contracts for military aircraft with outside firms rather then the Royal Aircraft Factory at Farnborough, it demanded that stringent inspection techniques be used similar to those being employed at the Farnborough works. Consequently, the Inspection Department for Aeronautical Material, under the control of the Director-General of Military Aeronautics, was set up in December 1913. Although in no way connected with the Royal Aircraft Factory, it was based nearby in South Farnborough, and in February 1914 took over responsibility for inspection at contractor's works.

By early 1915 the demand and output of new aircraft and engines had increased to such an extent that it was decided that instead of the existing method of transporting all new aircraft to South Farnborough for acceptance, as soon as possible manufacturing contractors should deliver new machines for acceptance by the R.F.C. to either aerodromes built adjacent to their own works, or to the nearest specified airfield. Under the new system aeroplanes would be erected by the firm's own staff, before being handed over for flight test by Aeronautical Inspection Department pilots.

Consequently, on 10 February Henry White Smith, the Secretary of the British & Colonial Aeroplane Company, reported that following a meeting at the War Office Colonel William Sefton Brancker had sent Captain Hoare down to Filton to inspect the site of the proposed flying field. This was with a view to it being converted by the War

Department into a testing ground, even though it was still in the possession of Moses Smith & Sons. At the same time the Director of Fortifications & Works had revealed that tenders were being prepared in regard to the provision of aviation buildings, and that it had been agreed that the superintendence of the works would be undertaken by the British & Colonial Company.

On 2 March the Secretary stated that the War Office had instructed the Company to proceed with work on the aerodrome, and on 17 April Brancker visited Filton to make a special inspection of the new hangar and flying ground. This he approved, and expressed the hope that very shortly it would be possible to make a further extension to the ground and provide additional hangars.

The first hangar, designed by Royal Engineers at the War Office's Directorate of Fortifications & Works in 1913, measured 140 feet by 65 feet, and comprised a single side-opening shed with rear workshops. It was erected facing east by south in the north-west corner of the aerodrome, and was built to Directorate of Fortifications & Works drawing No.84/13 with a timber framework and corrugated iron cladding on the roof and walls.

A circular concrete aircraft compass platform was later built in front of the hangar onto which an aircraft could be taxied allowing the ground crew to calibrate, check, and adjust the accuracy of its compass. The hangar at ST 59839 80532 still survives, and as it represents a rare example of the earliest standard type of R.F.C. hangar, in December 2005 it was listed Grade II by English Heritage.

Finally, on 19 August 1915 George Stanley White, the Managing Director of the British & Colonial Aeroplane Company announced to the Board of Directors that, "Filton Aerodrome is now ready for the testing and the acceptance of machines and that arrangements had been made with the A.I.D. for the acceptance of machines there instead of at Farnborough." In fact two Bristol Scout Cs, 4665, and 4668, were recorded at the Bristol Aircraft Acceptance Park on 13 August, an Armstrong Whitworth F.K.2, 5331 en-route for the 4th (Training) Wing at Netheravon the following day, and another Scout C, 4670, on the 16th.

Although on the same side of the road as the British & Colonial works, the new Bristol Aircraft Acceptance Park was on the other side of the Filton to Avonmouth railway line. Consequently, completed aircraft had to be taken in sections out of the factory's main gate in Homestead Road and towed down the hill and along Gloucester Road North and Hayes Lane to the aerodrome prior to being assembled, tested, and accepted for the R.F.C.

The 'Western Daily Press' newspaper then reported that, a heavy thunderstorm at Chipping Sodbury on the afternoon of 1 September 1915, "caused an aeroplane to descend in a field at Yate, near the Chemical Works, and caused consternation, people thinking it a hostile craft. It very soon re-started and turned towards Filton".

In spite of Filton aerodrome having been planned as an Aircraft Acceptance Park for machines manufactured by the British & Colonial Aeroplane Company at their Filton and Brislington factories, in October 1915 the War Office decided that as well as housing the Acceptance Park it should be expanded to accommodate two R.F.C. service squadrons undertaking advanced training.

Consequently, on 6 October 1915 Frank Chown of Montpelier in Bristol, a local firm of contractors, began advertising for labourers used to excavating and drainage work to apply to the foreman at 'the Aeroplane Works at Filton'. In addition, during the construction of the new aerodrome members of the Bristol Volunteer Regiment devoted their week-ends from mid-February until early August 1916 to removing trees and hedges and leveling and draining the ground. This work was very much appreciated by the War Office and the R.F.C., and Colonel H. Cary Batten of the Bristol Volunteer Regiment subsequently published a letter dated 2 April 1916 that he had received signed by Brigadier-General William Sefton Brancker on behalf of the General Officer Commanding the R.F.C. It read:-

"Will you kindly accept and convey the officers and men the Bristol Volunteer Regiment thanks for, and my great appreciation of the patriotic work that is being done by the regiment at the Filton Aerodrome for the Royal Flying Corps. As you may imagine, the work which has been carried out so thoroughly, and the hours which have been given generously, are the more especially valuable owing to the facts that works importance the prosecution the war would have been practically at standstill had it not been for the assistance given by your regiment."

Meanwhile, the additional hangars promised by Brancker had been delivered to Filton, where the four coupled 1913 pattern side-opening Aeroplane Sheds with rear workshops were erected in the north-west corner of the airfield. Each measuring 210 feet by 65 feet and facing south-south-east, they were built close to the original single 1913 pattern hangar in an approximately linear group starting at ST 59918 80590, and continuing roughly west by south to ST 59793 80495; ST 59721 80481; and ST 59648 80462. However, the two sited furthest to the west were relatively short lived as they were removed during the 1920s.

R.F.C. aerodrome buildings were normally laid out in four separate groups: the technical buildings; the officers' mess and quarters; regimental buildings and airman's barracks; and the women's hostel, and at Filton these were all erected at the rear of the hangars in an area adjacent to Hayes Lane.

One man who was to be connected with the Bristol Acceptance Park for most of its existence was Clifford Alban Hooper, an R.F.C. officer who had been born in Worcestershire in 1891. On 14 December 1914 he had been confirmed 2nd Lieutenant, granted the duty of Flying Officer, and appointed to the A.I.D. at Farnborough. However, by 18 September 1915 Hooper had been posted to Filton Aerodrome and on 2 November was promoted to the rank of Temporary Captain.

In addition to flying standard production aircraft, Captain Hooper also acted as a part time test pilot for the British & Colonial Company, and it was he who flew and accepted the two prototypes of the Bristol T.T.A. twin-engined local defence two-seaters, 7750 and 7751, on 26 April and 27 May 1916 respectively. On 31 May 1916, Captain Hooper's duty was upgraded from Flying Officer to Flight Commander, and on 9 September 1916 he undertook the maiden flight in A3303, the first prototype Bristol F.2A Fighter.

There then followed one of the most bizarre episodes in the annals of Filton aerodrome during World War One, and this involved a young 2nd Lieutenant named Horatio Harle Bright. Born in Sheffield in 1896, he had been attending Marlborough College when he took it upon himself to lie about his age and volunteer for the R.F.C. Although he was accepted he had to wait until 26 August 1915, his seventeenth birthday, before the Royal Aero Club would grant him Certificate No.1648 following a flight on a Beatty-Wright Biplane at the Beatty School at Hendon.

Bright graduated from the Central Flying School at Upavon on 19 October, after which he was posted to France where, for a short time, he flew operationally. However, after spending several spells in hospital, on 6 September 1916 he was withdrawn from active service to attend a medical board and, following a bout of influenza, was transferred to the A.I.D. to undertake test flying.

On 25 December 1916 Bright was posted to Filton, and it was then that his behaviour started becoming erratic. Not only was he absent without authorization on a number of occasions, but was also observed sneaking women on to the aerodrome and giving them unofficial flights. Then, after ignoring several warnings about flying in an extremely dangerous manner he was grounded by the officer commanding Filton, while also being banned from using the officers mess on account of passing worthless cheques. Matters finally came to a head when he was found to possess photographs of various parts of Filton and Bristol which he had been showing to unauthorised individuals in such a way that it was calculated to 'be useful to the enemy'.

Consequently, on 29 May 1917 Bright was arrested, and three days later tried by General Court Martial which presented a total of eight charges against him. Four of these involved the photographs, with regard to which he was deemed to have behaved 'with extraordinary folly'. He was subsequently convicted on six of the charges, and on 19 July Bright was cashiered. Although he had also been sentenced to twelve months imprisonment without hard labour, this was remitted due to his young age, war service, and the fact that there had been 'no traitorous intent'.

Amazingly he then enlisted in the R.F.C. and was sent back to France where, on 23 September 1917, 82279 Air Mechanic 2nd Class Horatio Harle Bright was killed while flying on an offensive patrol with No.60 Squadron, his S.E.5a, B557, being shot down over the lines by a German fighter. Bright's body was never recovered, and he retains the unfortunate distinction of being the only Air Mechanic to loose his life as a pilot in the British flying services during World War One.

Until late 1917 the Bristol Aircraft Acceptance Park was primarily concerned with handling Royal Aircraft Factory B.E.2d/e two-seater corps reconnaissance and advanced training aircraft, along with Bristol F.2B Fighters, as the British & Colonial Aeroplane Company went on to built 800 B.E.2s between January 1916 and December 1917, and 2550 F.2Bs between April 1917 and February 1919.

Although it's generally been assumed that machines built by the other local aircraft manufacturer, Parnall & Sons of Mivart Street, Eastville, Bristol, which had its main assembly hall at the Coliseum, an old roller skating rink in Park Row, were handled by the Bristol Aircraft Acceptance Park, no documentary evidence has so far come to light to support this theory as most of the company's archives were destroyed during an air raid on Yate in early 1941. Nevertheless, the firm did use Filton Aerodrome for testing as in November 1916, 9862, their second production Avro 504B trainer for the Royal Naval Air Service, is recorded as having made its first flight there prior to being transported in sections to the R.N.A.S Training Establishment at Cranwell in Lincolnshire.

Meanwhile, in May 1916 the Air Board had been formed in an attempt to co-ordinate the design and supply of materiel for the R.F.C and R.N.A.S., and to establish effective co-ordination between them. The Director-General of Military Aeronautics was a member of the Board, and a re-organization in March 1917 resulted in the A.I.D. becoming part of the Ministry of Munitions and being charged with the inspection of all naval aircraft and engine contracts previously overseen by the Admiralty.

However, at the same time responsibility for Acceptance Parks was transferred from the A.I.D. to a new service department, Acceptance Parks & Depots, which was to oversee the assembly, acceptance and final testing of new aircraft. Consequently, on 23 March 1917 the R.F.C. took over control the existing Aircraft Acceptance Parks at Coventry, Hendon, Norwich, Lincoln, Bristol, and Renfrew from the Air Board.

Mid-July 1917 had seen the last R.F.C. squadron leave Filton, after which it ceased functioning as a Training Squadron Station and reverted to operating exclusively as an Aircraft Acceptance Park, still under the command of Captain Hooper, R.F.C. However, his part time work of testing new Bristol designs had ended on 17 January 1917 when Captain Joseph Joel Hammond, who had been born in New Zealand in 1886, was assigned to the British & Colonial Company to be its full time test pilot.

A member of the R.F.C. Special Reserve since February 1913, he was abroad when war broke out, and so it was not until November 1914 that he finally reported to South Farnborough to act as a flying instructor. However, in September 1915, and while instructing at No.4 Reserve Aeroplane Squadron at Northolt, Hammond was admitted to hospital suffering from thrombosis in his left leg. Declared unfit for duty he was sent on sick leave before, in November, being seconded to the A.I.D. as a testing pilot, first at Northolt, and later at the Lincoln Aircraft Acceptance Park where he was serving when the assignment to Filton came through. That was in spite of the fact that three days earlier bronchitis had caused the Medical Board to stop him flying. Nevertheless, on 8 March 1917, Hammond was finally declared fit, and on 10 April test flew A7101, the first Bristol F.2B Fighter, just three days before its dispatch to the Acceptance Park.

Another man who'd arrived at Filton at around the same time was Air Mechanic 2nd Class William Elvin, who had been born in 1898 and had worked as an apprentice carpenter at the Boulton & Paul aircraft factory in Norwich before enlisting in the Army in January 1917. After passing his trade test at Woolwich he'd been sent to join the R.F.C. at Farnborough where he was given a further trade test, prior to being transferred to No.1 School of Military Aeronautics at Reading, and finally posted to the Bristol Aircraft Acceptance Park.

At Filton Elvin was initially involved in testing the guns and engines fitted to Bristol Fighters, before joining a gang of four men who were able to assemble one aircraft a day. These machines still arrived from the factory on their undercarriages, having been wheeled down from the hill from the factory behind a lorry, accompanied by their wings, centre section, struts, tail unit and other components. The gang would then assemble the machines and true up everything, ensuring that the main planes had the right dihedral, and the correct stagger etc., which was done by adjusting the landing and flying wires. There were four gangs in the shed in which Elvin worked, and if there were no aeroplanes to assemble they'd be able to sit around and relax, while in winter they'd slip into the boiler house to keep warm.

At the beginning of December 1917, and while still attached to the Bristol A.A.P., he was sent on a month long course at the School of Inspection at Watford. After graduation he received a certificate which read, "Rigging Inspector's Certificate First Class." "This is to certify that Elvin, W.J., 1st A.M. has qualified as a First Class Rigger and has passed the necessary tests; also shown ability expected as a First Class Rigging Inspector for the following aeroplanes: the de Havilland 4; R.E.8 and Sopwith Camel". Elvin then returned to Filton, and for the next three months continued erecting Bristol Fighters before eventually being transferred to inspect Handley Page O/400 bombers at No.14 Aircraft Acceptance Park at Castle Bromwich, near Birmingham.

Between February and May 1917 total aircraft deliveries from all manufacturers to the Western Front rose from around 150 a month to some 460. Consequently, hangar accommodation at the Bristol Aircraft Acceptance Park again needed to be increased and soon the establishment had the use of eighteen aeroplane sheds, including the five previously set-up in the north-western corner of the aerodrome.

At that time the standard A.A.P. hangar was the triple span 1917 pattern General Service Aeroplane Shed and constructed with brick walls supporting a timber Belfast truss roof. Each of these was 170 feet long and early ones, such as those erected at Filton, had a span of 80 feet. These were subsequently erected as one single and four triple units, and all had workshops and offices built on the sides and wooden concertina-type doors at both ends.

The main construction contractor was P.W. Anderson, although some of the unskilled work was carried out by German prisoners from the internment and prisoner of war camp at Westerleigh Common in Yate, which had opened in February 1917. Three of the triple sheds were erected close together in the north-east corner of the aerodrome

along the eastern boundary and adjacent to the A38 road at ST 604 804, with their doors facing north and south. These later became part of the Rolls Royce West Works, but were demolished in 1995 to make way for the new Royal Mail regional sorting centre.

At the same time as the three triple sheds were being constructed a further triple 1917 pattern General Service Shed, built to the War Office's Directorate of Fortifications & Works drawing No.417/17, along with a single shed to house an Aeroplane Repair Section, were erected in the north-western corner close to Hayes Lane. The single span shed retained four large air vents along the ridge line, while the triple sheds, deprived of natural windows along the side walls, had pitched skylights.

The triple shed at ST 55982 80638 was listed Grade II in December 2005. The single shed, which had been sited close to the western end of the linear group of 1913 pattern hangars at ST 59541 80436, was Grade II listed in March 2014 as very few General Service Sheds survive well, particularly in close proximity to the two companion hangars which were already listed. However, the nearby surviving brick building at ST 59794 80537 is not of World War One vintage, and is in fact a Lubrication Store erected in the late 1920s in accordance with Air Ministry Works & Buildings drawing No.329/26.

With two Aircraft Acceptance Park Sections and two Storage Sub-Sections, the Bristol Aircraft Acceptance Park was not only able to receive and assemble aircraft, carry out an A.I.D. inspection and a test flight prior to delivering them to the relevant R.F.C. formation, but also to undertake minor repairs and overhauls, and to store flight-tested machines until they were required.

On a personal note, in early April 1917 it was announced that the marriage was to take place between Captain Hooper, Commandant of the Aircraft Acceptance Park at Filton, and Janet Ashley Hall, the only daughter of Mr and Mrs John A. Hall of Cherry Orchard, Westbury on Trym, Bristol. The ceremony was subsequently held at St Mary's Church, Henbury, at 2 p.m. on 17 April, during and after which “a large number of aeroplanes performed some clever manoeuvres round the church.”

Then, on 6 August 1917 the ‘Western Daily Press’ reported that a highly successful concert had been held in the Regimental Institute at Patchway Aerodrome, the programme being made up of songs, serious and otherwise, readings, &c, contributed men of the R.F.C. stationed at Patchway. The Committee, it was said, was very gratified to have the presence of Commandant, Captain C. A. Hooper, R.F.C., and the officers of the Aircraft Acceptance Park, which they pointed out was by then the official name of the Patchway Aerodrome.

During the proceedings Captain Edgar Dent-Dent R.F.C. (ex-5th Royal Dublin Fusiliers), the then Assistant Commandant, acted as chairman. He was a regular Army officer who’d transferred to the R.F.C. after being seriously wounded at Fleurbaix in 1915. On 22 March 1916 he’d been gazetted a Flying Officer after instruction with No.15 Reserve Squadron at Doncaster, but on 2 July 1917, and following a surgical operation, he’d been posted Equipment Officer 2nd Class undertaking only ground duties.

The newspaper went on to report that, “The Institute, which was filled, had been tastefully decorated for the occasion. The artists were Lieutenant Andrew Haig Forson R.F.C. (ex-Royal Scots Fusiliers, born 1892), and Air Mechanics Jones, Singfield, Mold, Wright, Abraham, Grosse, Haynes, Lockyer, and Chapman. It is intended to form a pierrot troupe at the Park, and is hoped there is a good time in store for some of our wounded lads in our local hospitals.” On 16 October 1917 No.2 Aircraft Acceptance Group based in Birmingham assumed responsibility for the Bristol Aircraft Acceptance Park which, on 10 December 1917, was re-designated No.5 (Bristol) Aircraft Acceptance Park.

December had seen the British & Colonial Aeroplane Company complete the last of its B.E.2 contracts, and consequently No.5 (Bristol) Aircraft Acceptance Park was in a position to handle other types, such as the Airco D.H.9 light bombers which the Westland Aircraft Works at Yeovil had just begun manufacturing. In fact they went on to built 148 of them between December 1917 and June 1918, followed by a further 350 of the more successful D.H.9A between June 1918 and August 1919.

As the Acceptance Park was already dealing with Bristol Fighters manufactured by the British & Colonial Company, it was also able to handle some of the 522 F.2Bs which the Gloucestershire Aircraft Company at Cheltenham went on to build between April 1918 and August 1919. Another undertaking contracted to manufacture the F.2B was the National Aircraft Factory No.3 at Aintree in Liverpool which was run by the Cunard Steamship Company. Between June 1918 and January 1919 they built 126 aircraft, and although it’s said that they were dealt with by the No.5 (Bristol) Aircraft Acceptance Park, only D2126, the first to be produced has so far been confirmed at Filton.

Meanwhile, on 19 February 1918 D.H.4, A8002, built by Airco at Hendon and belonging to No.1 School of Navigation & Bomb Dropping at Stonehenge, had crashed on take off from Filton killing its 19 year old pilot Temporary 2nd Lieutenant Edward Tilney Evans. A native of Spittlefields in London, he was the son of George Alfred and Emma Evans of 24 Dowsett Avenue, Southend on Sea, Essex.

The inquest into his death was held during the afternoon of 20 February by Mr A.E. Barker, the Bristol City Coroner, and during the course of it 2nd Lieutenant Oliver Bell, R.F.C., stated that the deceased was a pilot and he was an observer. The machine, it was said, cleared the ground and was at an altitude of about 100 feet when the engine stopped and the aeroplane crashed. Lieutenant Meyer, R.F.C., said that the accident was caused by the engine cutting due to a failure of the petrol supply. The machine had in fact been fitted with Rolls-Royce Eagle IV engine, serial number 32WD15658. Dr. J.P.N. Casey considered that death had been caused by shock, and the jury found accordingly. Edward Evans was subsequently laid to rest in the City of London Cemetery & Crematorium, grave reference 180.90038.

The National War Savings Committee designated March 4th to 9th 1918 to be 'Business Men's Week', and throughout the country those engaged in trade and industry were asked to invest as much as they possibly could in National War Bonds and War Savings

Certificates. In Bristol the City's recently established Rotary Club was given the task of organizing the fund raising effort and one of the Rotarians, Tracy Percival Rogers the director of a Bristol brewery, came up with the idea of dropping leaflets advertising the campaign from an aeroplane.

Flight Commander, and by then Major C.A. Hooper, who was still the Officer Commanding at Filton Aerodrome, was then approached and not only did he grant permission, but also flew the first leaflet sortie over Bristol which took place on 6 March. In addition, the Bristol Fighter he piloted also carried Rogers whose task it was to throw the leaflets out by hand, and who subsequently stated that he then understood the origin, and appreciated the true inward meaning, of the expression "to feel like nothing on earth!"

Conrad Penrose Fry, a director of Bristol chocolate and cocoa manufacturer J.S. Fry & Sons, had authorized some 50,000 of the 8 x 5 inch pale green leaflets to be printed by Everard of Bristol, and consequently an ornate Fry's advertisement appeared on the back of every one. Further sorties over Bristol and its environs are said to have been made on 7 March, while it was the turn of Bath on the beautifully clear afternoon of 8 March. Consequently, the 'Bath Chronicle' was able to report that shortly after four o'clock the centre of the city, which was crowded with people, had been "thoroughly well 'bombed' with War Bonds literature."

The newspaper also described how aeroplanes, "circled round and round, sometimes dropping low and passing with tremendous whirling sounds just over the tops of houses and at other times flying fairly high. Shoals of pamphlets were dropped, and were carried by the wind for considerable distances, the bunches gradually scattering, so that the leaflets fell over wide areas. In descending they looked for all the world like flocks of birds. A few of the leaflets fell in Union Street, Stall Street and Westgate Street, but most of them reached roofs of houses or the road long distances from the point at which they were discharged from the aeroplanes. Rarely have Bath people seen aeroplanes in motion at such close quarters, and the 'bombing' gave rise to a good deal of excitement."

It was also noted that one of the aircraft was piloted by Captain Albert Goodess Henshaw, R.F.C., the son of Alderman James Edward Henshaw of Bath.

Albert Goodess Henshaw, the eldest son of James Edward Henshaw, a coal merchant and Mayor of Bath in 1902, and his wife Mary Anne Henshaw, previously Higginson, was born at Bath on 29 April 1894. From 1908 until 1912 he attended Blundell's College at Tiverton where he was a member of the Officer's Training Corps. With a fair knowledge of engineering, and the ability to speak French, Henshaw later travelled to Canada where he worked as a salesman and interpreter.

However, at Sarnia, Ontario, on 24 October 1914 he joined the Canadian Overseas Expeditionary Force, and finally sailed for England aboard the 'SS Grampian' on 18 April 1915. Then, on 4 December 1915, Lieutenant A.G. Henshaw of the Eastern Ontario Regiment was ordered to report to the School of Instruction at Reading for instruction in aviation. The School had only opened on 1 December, and Henshaw was in the first intake of 36 officers from all over the British Army.

On 8 February 1916 he was posted to No.3 Reserve Squadron at Shoreham, and on 26 April 1916 was awarded Royal Aero Club Certificate No.2781 following a flight in a Grahame-White biplane at the Grahame-White School at Hendon. On the same day Henshaw was transferred to No.28 Squadron at Gosport before being graded Flying Officer and seconded to the Royal Flying Corps on 24 June. Consequently, on 27 June 1916 he posted to France to join No.20 Squadron at Clairmarais.

Then, on 30 July 1917, Henshaw was given a 'Special Appointment', which necessitated him being promoted to Temporary Captain and graded Flight Commander 'whilst so employed', and on 29 August 1916 he was transferred to No.16 Squadron, which moved to Bruay on the 31st. However, on 17 October 1916 he hospitalized and declared unfit for General Service, but fit for Home Service and on 26 January 1917 was transferred to the Home Administrative Wing, before being posted to the Southern Aircraft Repair Depot at Farnborough on 3 February, and then attached to the Air Ministry at No.2 Aircraft Acceptance Park at Hendon on 9 July. On 4 May 1918 his address was given as Englishcombe House, Englishcombe Lane, Bath, and on the 14th he was declared unfit for General and Home Service - ground duties only.

Henshaw married Winifred Margaret Moore on 12 June 1918 at St George, Tufnell Park, Islington, London, and on 23 July was once again permitted to undertake local delivery flights. On 30 May 1919 he ceased to be seconded to the RAF, at which time his service record stated that since joining the R.F.C. he had flown 'all types of machines' including several German types.

He subsequently migrated to the United States, arriving at New Orleans from Havana, Cuba, aboard the 'SS Chalmette' on 28 April 1924 and described as a broker. On 29 August 1928 Henshaw married Gladys Ann Buckles at Vincennes, Indiana, and on 12 November 1955, and by then described as retired, blind, artificial right eye, scarred left eye, was granted US citizenship at Biloxi, Mississippi. Albert Goodess Henshaw, widower, died in Jackson, Hinds County, Mississippi, in December 1976 and was buried in the Southern Memorial Park at Biloxi.

Another pilot involved in the leaflet dropping mission over Bath was 2nd Lieutenant Cyril Frank Uwins, then a ferry pilot based at No.5 (Bristol) A.A.P. at Filton, but a man who would later become the chief test pilot of the Bristol Aeroplane Company. However, his sortie ended badly as after suffering engine problems he had to make a forced landing at Twerton. Fortunately he was unhurt but his aircraft, which came down on a hedge opposite the local school, was written off.

Finally, on Saturday 9 March Lieutenant Clifford Thomas, R.F.C., flew across from No.3 (Western) Aircraft Repair Depot at Yate to drop a special package. Suitably weighted by a stone, and containing a cheque and applications for £200 worth of certificates, it was later reported to have come down outside Bristol's Head Post Office in Small Street narrowly missing a large pane of glass!

Within weeks the Royal Flying Corps had ceased to exist, as on 1 April 1918 it combined with the Royal Naval Air Service to form the Royal Air Force, after which No.5 (Bristol) A.A.P. became an R.A.F. establishment administered by No.11 (Equipment) Group at Salisbury. By then the majority of aircraft, other than those used for training pilots at home airfields, were being dispatched directly overseas.

On 29 July 1918 at No.5 (Bristol) A.A.P., Filton, fitters were running up the Sunbeam Arab engine, serial No.19177, fitted to Bristol F.2B Fighter, C9895, recently arrived from the Gloucestershire Aircraft Company. However, they failed to have a man on the tail,

and consequently Lieutenant Leslie Wood was injured, and Air Mechanic 3rd Class Cedric William Chuchyard, the passenger, slightly injured.

During the war women had been employed with units of the R.F.C. and R.N.A.S., so that when the R.A.F. was formed there was a nucleus of female personnel to form the Woman's Royal Air Force, recruiting for which began in the summer of 1918. Those who joined the W.A.A.F. undertook to serve for a year, or the duration of the war, whichever was the longer period. The range of trades in which they were occupied was wide from clerks and storekeepers to cooks, orderlies, dispatch riders, painters and dopers, fabric workers, acetylene welders, carpenters, photographers and drivers. Although the majority received reasonable remuneration, those allocated to the Household section worked long hours for low pay.

W.R.A.F. personnel fell into two categories, one being the 'Immobiles' who lived at home and went to work each day at their assigned station. A considerable number of the other ranks were ‘Immobiles’, and although their direct value to the service was less than that of the 'Mobiles', who could be transferred elsewhere if required, they nevertheless released men for active service with the R.A.F. At Filton the ‘Mobiles’ lived in huts at the women’s hostel on the aerodrome site, and in late 1918 personnel of No.5 (Bristol) A.A.P. amounted to 11 officers, 23 Warrant Officers and Non-Commissioned Officers, 32 corporals, and 310 other ranks, all of whom were male, plus 2 forewomen, 88 women and 14 household women.

Sadly on 9 September 1918, 169977 Air Mechanic 2nd Class Harry Burrows of No.5 (Bristol) A.A.P., was accidentally killed after walking from the port side into the propeller of the Sunbeam Arab engine installed in Bristol F.2B Fighter, E2320, which was being run on test after the machine had been at what was described as Filton’s ‘No.9 Aircraft Repair Park’. The unfortunate airman was subsequently buried in the churchyard of St Wilfred in Grappenhall, Cheshire.

Tragically, Captain Hammond, the British & Colonial Company’s test pilot, who was temporarily serving with the British Air Mission to the United States, also lost his life soon after. This occurred on 22 September 1918 when his American built Bristol Fighter got into a spin, hit a tree, and crashed near the Indianapolis Speedway. Consequently, the Company required a replacement, and that man was to be Flight Lieutenant Cyril Frank Uwins, who was still serving at No.5 (Bristol) A.A.P. at Filton where, since late May 1918, he’d been carrying out acceptance flights for newly built Bristol Fighters, prior to ferrying them across to France.

By that time he’d become particularly friendly with a family headed by Charles Boucher, a pharmaceutical chemist and director Ferris & Company, which lived at number 14 Tyndall's Park Road, Clifton,. His wife Maude later recorded in her scrapbook that Uwins often used to fly over their house and circle round at a very low altitude, sometimes just skimming the tops of the trees in the garden. The couple had four children, Joyce, aged 20; Audrey, aged 16; John, aged 13, and 9 year old Anthony, and whenever the family heard an aeroplane and saw that it was flying low they knew Uwins was the pilot. Then they, “all used to hurry out into the garden as quickly as possible and wave to him, and

we used to see him waving back to us, and he said he could see us all quite plainly from his machine at any height."

One Sunday afternoon he dropped a note for Joyce, a lady he later married, and as it fell in the garden next door her younger sister Audrey had to go in and fetch it. Maude later wrote that "the boys were always very excited when the aeroplane came over, and one day Mr Uwins flew down quite low over the cricket pitch where they were playing cricket with their school on the Downs, and John said he was so close to them that they could have touched him with his cricket bat."

However, the low flying was stopped later on as it was making some local people nervous. Uwins also arranged for Audrey and her brother John to be issued with a pass to visit Filton Aerodrome. This took place on 3 May 1918, during their Easter holidays, and they were, "were hugely delighted with everything they saw there." Then, on 4 September 1918 Uwins made his first trial of a new aircraft type when he flew the prototype Bristol Scout F1, B3991. Finally, on 25 October 1918, Uwins was officially seconded to British & Colonial Company before, on 1 May 1919, being demobilized from the R.A.F. and formally joining the firm.

On 6 November 1918 Bristol F.2B Fighter, F4576, built by the British & Colonial Aeroplane Company, crashed while being ferried from No.5 (Bristol) A.A.P. to No.138 Squadron at Chingford by two members of that unit. The aircraft was fitted with a Rolls-Royce Falcon III engine, serial number 264/1881WD51965, and it appears that this cut out causing the machine to be forced landed into trees.

The 27 year old pilot, Lieutenant John Simpson Bower-Binns (ex-21st Canadian Infantry), a native of Barnes in Surrey, and the 28 year old observer, 114640 Acting Sergeant Walter Henry Martin, a native of Teddington in Middlesex, were both killed and subsequently laid to rest in Chingford Mount Cemetery in Essex, memorial references C.R. 7732 and C.R.7740 respectively. The following day F4538, another F.2B from the same batch, was damaged en-route to Chingford, but was later repaired.

Enlisted men from all over the country had been posted to Filton during the conflict, and among those known to have been on the strength of No.5 (Bristol) A.A.P. in November 1918 was 12223 Air Mechanic 2nd Class, D.S. Askew from the Isle of Man. His name is among the 127 on the World War One illuminated roll of honour in Finch Hill United Reformed Church in Douglas, which is a record of local men who served in the armed forces. Sadly on Armistice Day, 11 November 1918, 46858 Air Mechanic 1st Class, James Ashton Rollings of No.5 (Bristol) A.A.P. died aged 28. The husband of Lily Rollings of 183 Newcombe Road, Handsworth, Birmingham, he was subsequently laid to rest in Handsworth Cemetery, memorial reference, Screen Wall, 8. 2829.

Bristol's Victory Loan Week lasted from 7 to 12 July 1919 and, just as they had done in March 1918, the Bristol Rotary Club took an active part in the campaign which was aimed at raising vitally needed money for the Government. The Lord Mayor of Bristol wrote an open letter to citizens of the City and this, dated 8 July, was not only published in the local newspapers, but also printed on leaflets variously described as white or buff,

and measuring 5½ x 8½ inches. These were once again dropped over Bristol by an aeroplane which flew over the City daily, almost certainly operating from Filton. The leaflets had been printed by local firm Partridge & Love, and as their production seems to have been arranged by J.S. Fry & Sons, one of their advertisements was placed on the otherwise blank back. On this occasion it took the form of a product recommendation written by the famous aviator Captain Sir John Alcock, K.B.E, D.S.C:-

“We found Fry’s chocolate wonderfully sustaining in our flight across the Atlantic, and would not have been without it on any account. It was our chief solid food on the journey, and was indispensable to us.” It is the duty of every Patriot to buy Victory War Loan.

In fact July 1919 marked the end of aerial leafleting for publicity purposes in Britain. That was because at the end of the month the Air Ministry thought it necessary to remind those engaged in aviation that although during the Victory Loan campaign the Secretary of State for Air had waived the provision in the regulations against leaflet dropping, “the exemption was no longer in force.”

In spite of the fighting having ended No.5 (Bristol) A.A.P. was kept busy for much of 1919 handling aircraft still being delivered under late war contracts. In fact the Bristol F.2B Fighters and Airco D.H.9A light bombers then being received at Filton were vital to the survival of the fledgling R.A.F., as one of the strengths of Hugh Trenchard, the Chief of the Air Staff, was his ability to ‘make do with a little.’ By using the large inventory of Bristol Fighters and D.H.9As he was able to build a peacetime air force without having to purchase new aircraft designs, and both types went on to prove valuable in the R.A.F.’s subsequent air policing role in the outposts of Empire.

Finally, on 27 October 1919 No.5 (Bristol) A.A.P. transferred to Eastleigh in Hampshire where it was disbanded on 12 March 1920. As a result, on 27 November 1919, and with the R.A.F. rank of Squadron Leader in the Special Reserve, Hooper was officially released from military service and went to live near Rugby.

R.F.C. Training Squadron Station Filton - December 1915 to July 1917

At the beginning of the war the R.F.C. was interested only in officers with aviation experience, and refused to accept any unless they already possessed a pilot’s license. However, as a result of mounting casualties that requirement was dropped in July 1916 and from then until mid-1917 periodic appeals were made to infantry, cavalry, and artillery units for men to transfer to the R.F.C.

From the autumn of 1914 until mid-summer 1916 Netheravon aerodrome in Wiltshire was used to train R.F.C. squadrons for combat duty. However, during that period the Corps expanded rapidly, and by the summer of 1915 it had been realized that training needed to be decentralized in order to cope with the flood of local volunteers and that uniform training within specially established units was necessary. Consequently, in late 1915, and Netheravon was one of the aerodromes selected operate so called Reserve Aeroplane Squadrons and, on 28 July 1915, No.7 R.A.S. and No.8 R.A.S. were both

formed there, although their titles were shortened to Reserve Squadrons on 13 January 1916.

These formations provided men with their initial flying training leading to them becoming certified pilots, after which they were transferred to service squadrons for advanced training. This was necessary if they were to be awarded the R.F.C. Graduation Certificate by the Central Flying School, and subsequently posted for duty as Flying Officers.

In addition, Reserve Squadrons were often responsible for bringing into existence the nucleus of new service squadrons, which usually spent the first few months of their existence in the advanced training role. Finally, after receiving their operational aircraft, the squadron would spend a month or so working up prior to mobilization and deployment on front line service. However, an element would often be left behind to form the nucleus of a new unit, either another service or a reserve squadron.

Of the six service squadrons that went on to be resident at Filton, two had formed there from scratch, while the other four had all moved over from Netheravon. In addition, three Reserve Squadrons formed at Filton between November 1916 and February 1917, but within days of their embodiment they had all transferred to aerodromes elsewhere.

After working up at Filton one of the service squadron was sent to the North of England for home defence duties, and although the other five were all allocated to the Western Front in France, the transfer of the last to be based at Filton was cancelled shortly before its scheduled departure. This resulted in it being re-deployed to Rendcomb aerodrome near Cirencester in order to complete working up. From then Filton aerodrome was to be used exclusively as an R.F.C. Aircraft Acceptance Park in order to deal not only with the ever increasing numbers of aircraft being constructed by the British & Colonial Aeroplane Company, but also with machines ordered from a number of other manufacturers.

With regard to administration, on 1 May 1916 the Training Squadron Station at Filton had been subordinated to the R.F.C.'s 4th (Training) Wing based at Netheravon, which was also responsible for several other sites including Netheravon itself, where the Wing's Aircraft Repair Section was established on 15 May 1915, and Rendcomb when it opened in June 1916. However, following the formation of the 21st (Training) Wing at Filton on 9 August 1916, responsibility for Filton and Rendcomb, where the Wing's Aircraft Repair Section was established on 4 September, along with Port Meadow at Oxford, passed to the new formation which re-located to 'The Castle' in Cirencester on 2 September 1916.

No.20 Squadron (15 December 1915 - 16 January 1916)

On 1 September 1915 the nucleus of No.20 Squadron was formed from an element of No.7 Reserve Aeroplane Squadron at Netheravon where, in October, it began training in preparation for its role as a fighter unit. It was the first squadron to arrive at Filton, transferring over from Netheravon on 15 December 1915.

From the time of its activation it had been commanded by Temporary Major Christopher William Wilson (ex-Seaforth Highlanders), a regular army officer who'd been born at Leith in 1878. He'd been awarded the Royal Aero Club Certificate No.329 following a flight on a Grahame-White Biplane at the Grahame-White School at Hendon on 15 October 1912. In May 1914 Captain Wilson, as he then was, had been injured in a mid-air collision at Farnborough, but between September 1914 and April 1915 served in France as a Flight Commander with No.5 Squadron, prior to being posted in May 1915 to No.1 Reserve Aeroplane Squadron at Farnborough, again as a Flight Commander.

During its short time at Filton No.20 Squadron is confirmed as having had a variety of aircraft on strength. These included not only the ubiquitous B.E.2c two-seaters, but also a Blériot X1 Parasol and a Blériot X1 Monoplane which having proved too frail for operational purposes, had been relegated to the training role. In addition, the unit is known to have operated a couple of examples of the Vickers F.B. 5/5a Gunbus, the first aircraft purpose-built for air-to-air combat, along with a Martinsyde S.1 Scout.

It was the latter aircraft type that No.20 Squadron had been selected to fly operationally, but unfortunately the little single-seat Martinsydes had proved to be unstable in combat, and so by October 1915 all had been withdrawn from use on the Western Front. As single-seat scouts were also unsuitable for reconnaissance purposes, their pilots being fully occupied flying the machines and so unable to photograph or make observations on the scene below, it was decided instead to re-equip No.20 Squadron with two-seat aircraft.

Consequently, the unit was allocated the new Royal Aircraft Factory F.E.2b, and by the end of 1915 a total of 450 were on order. Although on 15 December 5203, the third F.E.2b to be built by Boulton & Paul in Norwich, had been allotted to No.20 Squadron, this machine was re-allocated to No.22 Squadron at Gosport on 5 January 1916, while other early examples went to No.6 and No.16 Squadrons already operating on the Western Front.

Nevertheless, on 16 January 1916 No.20 Squadron was transferred over to No.1 Aircraft Depot at St Omer in France, and it was not until 23 January 1916, the day on which the squadron arrived at nearby Clairmarais aerodrome, that they received their first F.E.2b.

No.33 Squadron (12 January 1916 - 4 April 1916)

On 12 January 1916 No.33 Squadron was formed at Filton by re-designating an element of No.20 Squadron and posting some personnel surplus from No.12 Squadron, which had just transferred from Netheravon to France. While at Filton No.33 Squadron undertook 'higher training' and is recorded as having had on strength several Avro 504 trainers which had been sent over from Netheravon, along with the ex-No.20 Squadron Martinsyde S.1 Scout, and a number of B.E.2c two-seater reconnaissance aircraft with which the squadron was to work up to operational status.

One of these is known to have previously been on the strength of No.20 Squadron, but the majority had originally been allotted to No.22 Squadron at Gosport. However, as that unit was by then re-equipping with the F.E.2b, the B.E.2cs were re-directed to No.33 Squadron. As a result, in late January 1916 they began being dispatched by rail from Gosport to Filton, many still in their manufacturer's packing cases.

From the time of its activation No.33 Squadron had been commanded by Major Philip Bennet Joubert de la Ferte (ex-Royal Field Artillery), a regular army officer who had been born at Calcutta in India in 1887. He had received Royal Aero Club Certificate No.280 on 3 September 1912 while flying a Bristol Biplane at the Bristol School at Brooklands. Joubert de la Ferte served in France as a Flight Commander with No.3 Squadron from August 1914 until November 1915. In January 1916 he was posted as a Flight Commander to No.1 Reserve Aeroplane Squadron at Farnborough, out of which No.15 Squadron was formed in March, and to which he was appointed Squadron Commander.

In May it became operational at Dover, but in August Major Joubert de la Ferte was posted to France to take command of No.1 Squadron. However, in late November he was taken ill and sent to the Duchess of Westminster Hospital at Le Touquet, prior to being repatriated to England in December. Following a couple of weeks convalescence at home he was declared fit for 'light duties' and posted to Filton to command No.33 Squadron, which was about to start forming.

Unfortunately, Joubert de la Ferte was soon faced with the crated aircraft without engines, crates of engines that didn't fit the aircraft, and had inherited one corporal and sixty men whose trade qualifications varied from 'indifferent' to 'bad'. Nevertheless, he did have a Flight Commander and a dozen pupils, and knew a number of suitable men, then recovering from illness, that he subsequently arranged to be posted to the squadron. He then began building it up in spite of the fact that the men were billeted in leaky and draughty huts on the aerodrome, and that before winter ended a blizzard blew up which did a great deal of damage and stopped flying for several days.

In early 1916 Zeppelin raids on Britain were causing great concern, and on 16 February the Government ordered that lighting restrictions, already in force in various parts of the country, should be extended to cover certain other counties. These included Gloucestershire, Wiltshire and Dorset, where a 'black-out' was to be in force from 1½ hours after sunset to half an hour before sunrise. Consequently, the Chief Constable of Bristol, keen to see how the new regulations were being enforced, asked Major Joubert de la Ferte to fly over the city and report upon the amount of light still showing. This was his first experience of serious night flying and he spent a long time cruising over the docks and centre of the city, pinpointing places which were showing too much light. However, when he got back to the aerodrome a lamp was flashing the following signal: "For God's sake come down. We want our dinner!"

A native of nearby Thornbury, 11522 Air Mechanic 2nd Class Reginald Butt of No.17 Reserve Squadron R.F.C. was based at Croydon aerodrome near London when, on 17 March 1916, he was fatally wounded in a motor accident at Wallington while returning to

the airfield after having dinner. Along with four other men he was riding on the tailgate of a motor wagon when the supporting chain broke and they were all thrown off into the road. Tragically Butt struck the curbing which caused a fracture at the base of his skull, and he died the next day in Croydon War Hospital without regaining consciousness. The body of the 28 year old was brought home for the funeral and the hearse was conveyed to Thornbury Congregational Church accompanied by members of the Thornbury Volunteer Corps, and appropriately by a detachment from No.33 Squadron at Patchway.

On 21 March 1916 it's recorded that 2nd Lieutenant William Patrick Garnett (ex-Royal Berkshire Regiment), a young man who had been born in Bristol on 18 October 1894, was 'being given instruction in aviation' with No.33 Squadron at Patchway. He had received his Royal Aero Club Certificate No.2415 on 31 January 1916 while flying a Maurice Farman Biplane at the Military School at Catterick Bridge, at which time his home address was given as Backwell Hill House near Bristol.

Unfortunately, at around 11.30 a.m. on the morning of 1 April an aircraft flying low near Filton Golf Links hit a tree and came down in a garden belonging to Mr Macey. The passenger, Lieutenant Garnett of Flax Bourton, was buried underneath the machine, but several golfers at once went his aid and extricated him. He was seriously injured, sustaining a dislocated collar bone, cuts and bruises over the body, and a nasty cut over one eye. However, the pilot, 2nd Lieutenant Hyde, escaped with shock and minor injuries. After attention by Dr. Green of Filton, Lieutenant Garnett was removed to Southmead Hospital, and the following day both officers were reported to be improving.

Meanwhile, as a result of the continuing Zeppelin raids, on 18 March 1916 No.33 Squadron was formally designated a 'Home Defence' squadron, and as such went on to become one of the few R.F.C. squadrons not employed on the Western Front throughout World War One, nor did it serve in any other foreign field of conflict.

Between 29 March and 4 April 1916 No.33 Squadron moved from Filton up to Bramham Moor, near Tadcaster in Yorkshire, to take part in the defence of Leeds and the industrial Midlands. Its Bristol Scouts were intended to be used against day raiders, while the B.E.2cs flew anti-Zeppelin patrols at night. In addition, until June 1916, No.33 Squadron was also expected to undertake pilot training with its dual control B.E.2d aeroplanes.

No.42 Squadron (1 April 1916 - 8 August 1916)

The third unit to be based at Filton was No.42 Squadron which had begun forming at Netheravon on 26 February 1916 from a nucleus provided by No.19 Squadron. On 1 April 1916 it moved from Netheravon to Filton to undertake advanced training prior to working up on a batch of new B.E.2ds, some of which had been built at Filton by the British & Colonial Aeroplane Company, and others at Lincoln by Ruston, Proctor & Company.

In addition to the B.E.2ds, while at Filton No.42 Squadron is recorded as having had on strength three ex-No.19 Squadron aircraft, an old Henry Farman F.20, and two Avro

504s. It is also known to have operated a number of Avro 504As, a single F.E.2b and three Armstrong Whitworth F.K.2 two-seaters, along with a B.E.2c and a Royal Aircraft Factory R.E.7, a two-seat light bomber and reconnaissance biplane.

From the time of its activation No.42 Squadron was commanded by Major John Lawson Kinnear M.C. (ex-Kings Liverpool Regiment), a regular army officer who had been born at Copgrave, in Yorkshire, in 1890. On 11 September 1914 he was granted Royal Aero Club Certificate No.884 at the Central Flying School at Upavon in Wiltshire. He later flew with No.6 Squadron in France and in October 1915 was 'Mentioned in Dispatches' before, in January 1916, being awarded the Military Cross. In March 1916 he was serving as a Lieutenant (Temporary Captain) with No.8 Reserve Squadron at Netheravon when he was recommended for promotion to the rank of Captain, and consequently was transferred to No.19 Squadron, also at Netheravon, on 19 March 1916.

During July No.42 Squadron is known to have written off a number of aircraft, beginning on the 2nd with Avro 504, 571, and F.K.2, 5330, both of which were struck off charge and reduced to spares, as was Avro 504A, A463, on 4 July. Then on 12 July came the F.E.2b, 4266, and finally Avro 504, 783, wrecked on 25 July.

Between early July and early August 1916 No.42 Squadron received its dual controlled B.E.2d machines before, on 8 August 1916, moving from Filton to No.1 Aircraft Depot at St Omer, and then on to Bailleul (Town Ground) aerodrome from where it carried out artillery observation and tactical reconnaissance work over the Western Front.

No.19 Squadron (4 April 1916 - 30 July 1917)

The nucleus of No.19 Squadron was formed out of No.5 Reserve Aeroplane Squadron at Castle Bromwich aerodrome in Warwickshire on 1 September 1915, before transferring to Netheravon on 31 January 1916, and on to Filton on 4 April. It was charged with working up on the R.E.7 two-seat light bomber and reconnaissance biplane, prior to service on the Western Front.

Unfortunately, during operations the R.E.7 had proved to be so underpowered and unreliable that on 20 June 1916 R.F.C. Headquarters ordered that no more should be delivered to France. As a result, it was decided instead to re-equip No.19 Squadron with Royal Aircraft Factory B.E.12 single-seat long-range reconnaissance and bombing aircraft, which were being pressed into service as stop-gap fighters. Consequently, on 22 June machines previously earmarked for direct delivery to France began being re-allotted to the unit. In addition to twenty B.E.12s, during its time at Filton No.19 Squadron is confirmed as having had on strength a Henry Farman F.20 and an Avro 504A; four old Avro 504s, three of which are known to have been ex-No.33 Squadron; and five R.E.7s, all used for training purposes.

From 1 September 1915 the squadron was commanded by Major Reginald Mandeville Rodwell (ex-West Yorks Regiment), a regular army officer who had been born in 1890 at Uitenhague in South Africa. On 12 November 1912 he had been granted Royal Aero

Club Certificate No.362 following a flight on a Bristol Biplane at the Bristol School at Brooklands. From August 1914 until early 1915 he served as a Flying Officer with No.2 Squadron in France but, after a period of sickness, in early May 1915 he was posted for duty as a Flight Commander with No.1 Reserve Aeroplane Squadron at Farnborough, prior to being appointed the Officer Commanding No.19 Squadron.

Another man who served with No.19 Squadron at Filton was 5251 Air Mechanic 1st Class, Frederick Archer, who had been born in Burton on Trent in 1896. An apprentice joiner, he'd volunteered for the R.F.C. and had been given his initial training at Farnborough. He was then posted to No.5 Reserve Aeroplane Squadron at Castle Bromwich and sent on a rigging course to Avro at Manchester. Archer was transferred to No.19 Squadron when it formed, and during his time at Filton often served as part of a small crew that had been given the task of towing a raft at the end of a 200 yard long rope out into the River Severn to act as a target for the crews of the unit's aircraft to practice dive bombing.

Tragically the first incident in which an airman from Filton lost his life took place on the morning of 9 June 1916 and involved 2nd Lieutenant Frank Dudley Evans, (ex-4th Battalion, Warwickshire Regiment) a pilot with No.19 Squadron, who had been born at Birmingham on 3 August 1897. He'd received Royal Aero Club Certificate No.2940 on 27 April 1916 at the Military School at Thetford, in Norfolk, after a flight on a Maurice Farman Biplane, but at the time of his death he was flying Avro 504A, 4050, which stalled on a very flat turn and crashed near Filton Aerodrome.

On 10 June the inquest into the death of the 18 year old was held by the Bristol City Coroner, Mr A. E. Barker. Alfred James Young, an Air Mechanic 2nd Class serving with the R.F.C., said that prior to the ascent he tested the 80 hp Gnome engine and everything had been in order. There had been no trouble with the machine. Alfred Hewitt, an Air Mechanic 1st Class who examined the rigging of the machine before the flight, also found it all right. That was at 7.30 a.m., and the officer went up at 9.15. The machine had been in their possession for four days, and had been intended for the instruction of pupils.

Frank Everitt, a farmer, said that he was crossing one of his fields when he saw the aeroplane. It was very low, and he thought the airman intended landing in the field. It was going rather fast and wobbling. The engine was running then, but a moment later it stopped and the machine came straight down, nose first. Before the fall the machine was turned somewhat, apparently to avoid a windmill.

2nd Lieutenant Arthur Wilfred Reynell (ex-East Surrey Regiment), of No.19 Squadron, said that he saw Evans ascend. At about 150 feet from the ground the engine started misfiring, but it picked again. When some 400 feet up the aviator started to turn to the right and the nose of the machine went down. The witness's view was then obscured by trees, and he only heard the crash as the machine came to the ground. In reply to the Coroner, the witness said that Evans appeared to be turning rather flatly, but his view was that the accident was due to the engine not giving its full power, so that the machine lost flying speed. The witness regarded Evans as a competent flyer.

Alfred Dudley Evans informed the Coroner that his son had his first instruction in actual flying on 1 April, but prior to that had been to a theoretical school. Replying to Mr Evans, Reynell stated that the machine was fitted an engine which was not popular. Evans stated that his object in asking questions on this point was to suggest that if the authorities realized that this type of engine was unpopular and liable to cause trouble they would give up using it. In reply to another question by Mr Evans, Reynell said that knew that Evans had made a forced landing on a previous occasion.

Sergeant Maurice Walter Piercy, R.F.C., said that the machine was probably three or four months old. He did not know the age of the engine, but it had been completely overhauled recently. He believed the machine was first flown with that engine on 6 June, when witness went up with it himself. On 8 June he flew the machine for two and half hours, and in his opinion it was in satisfactory condition.

He saw Evans go up, and the machine climbed all right to about 150 or 200 feet. Then he heard a very slight miss in the engine. The machine climbed steadily until about 400 feet. The officer then commenced a very flat right-hand turn, which brought the tail to the wind. At the finish of the turn the machine dived. The witness was of the opinion that the officer did such a flat turn because the engine was not developing its full power. In reply to the Coroner, the witness said that he thought it was an engine fault which caused the dive. Questioned concerning the engine, witness said that he was "not in love with it;" it was not as good as the latest patterns.

Lieutenant M. G. Dobbyn, a doctor in the Royal Army Medical Corps, said that death of Evans was due to fracture of the base the skull, and the jury returned verdict of "accidental death", his death being certified in the Thornbury Registration District.

At the funeral, his body was carried to Castle Bromwich on a transport wagon by officers and men of the R.F.C., who acted as bearers, the coffin being covered by a Union Jack and bearing a large floral cross sent by his old comrades. During the service in St Mary & St Margaret’s church the choir sung ‘Lead, Kindly Light’, and the large congregation included a uniformed detachment of Red Cross auxiliary nurses, of whom Evans’s mother was an officer. He was subsequently buried in the adjoining graveyard, and is also commemorated on the village war memorial and the roll of honour plaque in St Mary & St Margaret’s church.

On 5 July 1916 B.E.12, 6523, of No.19 Squadron was written off prior to being reduced to spares. Then, on 11 July 1916, came an incident involving B.E.12, 6536, an aircraft which had been built by the Daimler Co. Ltd in Coventry. Originally allotted to the Expeditionary Force in France it was already at the Southern Aircraft Depot at Farnborough when it was reallocated to No.19 Squadron at Filton. However, during its ferry flight it crashed into a hedge near the Drover’s Arms at Cambridge in Gloucestershire, about 19 miles north-east of its destination. Thankfully the pilot escaped uninjured, and on the same day the badly damaged aircraft was officially taken on charge by No.19 Squadron. However, on 23 August, the wreck was transferred to No.66 Squadron before being struck off charge at Filton on 31 August.

Another of No.19 Squadron's B.E.12s, 6520, was written off on 22 July, and again was reduced to spares, while on 25 July B.E.12, 6506, was sent to the 4th Wing Aircraft Repair Section at Netheravon.

Finally, on 30 July No.19 Squadron flew its aircraft over to No.1 Aircraft Depot at St Omer, while the transport went from Avonmouth and the ground staff sailed from Southampton to Rouen. The squadron then moved on to Fienvillers aerodrome, but within a month the B.E.12s had proved so disastrously inadequate as fighters that the squadron temporarily switched to carrying out only bombing and contact patrols.

No.66 Squadron (24 June 1916 - 3 March 1917)

On 24 June 1916 No.66 Squadron was formed at Filton as a single Flight from a nucleus of No.19 Squadron, and was initially tasked with training new pilots to the level of 'higher instruction' and to take the Central Flying School officer pilots 'A' certificate. On 2 July the squadron moved temporarily to Netheravon to collect aircraft before, on 27 July, returning to Filton where during the next four weeks further machines were taken on charge by its three Flights.

While resident at Filton No.66 Squadron went on to be divided into three Flights equipped with a mixed inventory of aeroplanes. It was recorded as having operated 21 Avro 504As; three B.E.2bs; four B.E.2cs, one of which was ex-No.42 Squadron, along with four B.E.2ds; one B.E.2e; and nine ex-No.19 Squadron B.E.12s, all of which were used in the training role, prior to receiving Sopwith Pup fighters on which the unit worked up to operational status. During its time at Filton No.66 Squadron also undertook some ferrying work for the co-sited Aircraft Acceptance Park.

The squadron had Captain Henry Stewart Walker (ex-Cheshire Regiment) as its Acting Commander from 2 July until he was appointed Wing Adjutant at the 4th Wing headquarters at Netheravon. As a result, on 24 October 1916, Major Reginald George Douglas Small (ex-1st Battalion Leinster Regiment), a regular army officer, assumed command of No.66 Squadron. A local man, who had been born at Keynsham in 1887, he had received his Royal Aero Club Certificate No.429 following a flight on a Grahame-White Biplane at the Grahame-White School at Hendon on 18 February 1913.

In August 1914 he was posted to No.7 Squadron at Netheravon with the rank of Captain. After a short spell with the squadron in France Small returned to England and in June 1915 became a Flight Commander with No.4 Reserve Aeroplane Squadron at Northolt. After serving with several other home base squadrons, in March 1916 he became acting Squadron Commander of No.12 Reserve Squadron at Thetford, prior to being posted to No.66 Squadron.

On 15 November 1916, shortly after Small's arrival the nucleus of No.55 Reserve Squadron was formed out of No.66 Squadron, prior to it moving to Yatesbury in Wiltshire on the 22nd to operate Avro 504s and Bristol Scout Ds. It maintained an independent existence until 2 August 1917.

Major Small remained in command of No.66 Squadron until the beginning of January 1917, when Captain Gordon Roy Elliott, one of No.66 Squadron's Flight Commanders, took over temporarily allowing Major Small to take up his posting as Wing Commander at the 21st (Training) Wing Headquarters at Cirencester on the 4th. On the same day Major Owen Tudor Boyd (ex-5th Cavalry, Indian Army), was appointed Acting Officer Commanding No.66 Squadron.

Born at Marylebone in London on 30 August 1889 Boyd had joined the Indian Army in 1909 and the R.F.C. in 1916. He was then taught to fly at the Central Flying School at Upavon, being gazetted Flying Officer on 25 April 1916. He was awarded the Military Cross on 18 August 1916 while serving in France as a Flight Commander with No.27 Squadron which operated Martinsyde G.100 'Elephants'. In October 1916 Boyd was appointed Squadron Commander of No.28 Reserve Squadron at Castle Bromwich, before finally arriving at Filton on 7 January 1917.

One of the early arrivals to be successfully trained to the level of 'higher instruction' by No.66 Squadron was a Scotsman, 2nd Lieutenant Stanley Stuart Beattie Purves who had been born at Kirkcaldy in Fife in 1893. Educated at Kirkcaldy High School, where he was a member of the school Officer Training Corps, he later attended the Kirkcaldy School of Science & Art to study mechanical engineering, prior to joining Douglas & Grant Ltd (Millwrights & General Engineers) as an engineer, working in their Fitting, Erecting Shops and Drawing Office. Sponsored by the company he also attended Harriot Watt College in Edinburgh between 1911 and 1914. In September 1914 Purves enlisted as a Private in the Scottish Horse Regiment before, in 1915, being promoted to Lance Corporal and graded a motor cycle dispatch rider. Finally, on 26 September, he was commissioned 2nd Lieutenant in the 3rd Regiment, 1st Scottish Horse.

The following year Purves was seconded to the R.F.C., reporting to the No.1 School of Instruction at Reading on 5 July 1916, and later the same month to No.27 Reserve Squadron at Gosport for basic flying training. When this had been completed he was transferred to No.66 Squadron at Patchway, arriving late on 31 August 1916. Finally, on 21 October, Purves graduated after taking his flying examination with No.54 Squadron at Castle Bromwich near Birmingham, and consequently was awarded his certificate and wings and designated a Flying Officer on the same day. He then returned to No.66 Squadron for two days before being posted away.

Unfortunately accidents during training were common and B.E.2c, 5434, which had been taken on charge by No.66 Squadron on 4 August 1916, was spun into the ground at Filton sometime the following month. Although the pilot appears to have survived, the aeroplane did not, its wreckage being transferred to the Aircraft Repair Section at Rendcomb aerodrome on 22 September.

Tragically, at the end of 1916 No.66 Squadron suffered two fatalities, the first of which took place on 11 November 1916 and involved 24 year old Lieutenant George Edward Giles (ex-Army Service Corps) who was flying B.E.2e, 7211, an aircraft which had been built by the British & Colonial Aeroplane Company at Filton and allotted for use in France. On 28 October Giles was ferrying the machine to the Southern Aircraft Depot at

Farnborough when he was killed after it stalled while he was trying to avoid trees during an attempted emergency landing at Tormarton in Gloucestershire.

Giles had transferred to the R.F.C. in January 1916, and by March was serving as an ‘observer on probation’ with No.2 Squadron in France. However, his pre-war engineering skills had soon been recognized and he was sent back to England for technical training. As a result, 2nd Lieutenant Giles was gazetted Assistant Equipment Officer on 29 June 1916 but as he was still determined to become a pilot, he was sent to Netheravon where he was awarded his pilot’s certificate on 21 August 1916. Then, on 8 September, he joined No.66 Squadron before finally being appointed a Flying Officer with the squadron on 8 November.

On 13 November the inquest into the death of Lieutenant Giles was held at the Portcullis, Tormarton, by Edwin Watts, the coroner for the Lower Division of Gloucestershire. Mr P.S. Kingscote, of Acton Turville, deposed that on the morning of the 11th he saw an aeroplane flying near Dodington Park. It was hazy at the time. The plane circled round, and the aviator appeared to reverse the direction his flying. Later the machine appeared to climb, and then suddenly it nosed to the ground. He heard a crash and report of an explosion. He went to the spot and found a terrible smash. The nose of the machine was buried the ground; the tail part was twisted towards the nose. The aviator was dead the wreckage of the machine.

George Smith of Tormarton stated that he was attending to sheep when an aeroplane flew just over his head. The aviator climbed to get over some trees, and then the machine suddenly dropped nose downwards to the ground. He heard no shout from the aviator. In the flight downwards there was an explosion just as the machine touched the ground. In reply to a juryman, he said that the aviator was flying low when the witness first saw him. There was a belt fog the time. He thought the machine was landing. Edgar Cottrell, a labourer of Tormarton, corroborated the previous witness and said he assisted to extricate the deceased.

Major Reginald George Douglas Small, the Officer Commanding No.66 Squadron, stated that deceased was a pilot flying officer and previously had done observation work. The deceased told the witness that he was satisfied with his machine before he set out on his flight. Further evidence was given of the deceased's capabilities as pilot by Lieutenant Ralph Imray Kirton (ex-King’s Own Scottish Borderers) who was serving with the R.F.C. as a Flying Office.

Lieutenant Giles was the only son of Major Godfrey D. Giles of Douglas Lodge, Newmarket, Suffolk, who said that his son was a single man who had joined up at the beginning the war, and had served France. He had his pilot’s certificate and was experienced in flying. Captain Gilbert Dobbyn, a doctor in the Royal Army Medical Corps, said he found the deceased lying by the side of the aeroplane, and that there were extensive fractures of the skull, arm, and legs. He was of the opinion that the deceased probably fell 150 feet, and that death was practically instantaneous.

The Coroner, having expressed sympathy with Giles in his bereavement, an expression endorsed by the jury, a verdict was returned of “accidental death by falling from aeroplane." No blame was attached to anyone, and sympathy was expressed to the distinguished corps to which he had belonged. The jury gave their fees to the Red Cross Fund.

During the afternoon of 14 November the funeral of Lieutenant Giles, took place with full military honours at Canford Cemetery, Westbury on Trym, Bristol. The body of the deceased officer, who was great favourite with his comrades, was conveyed to Westbury on Trym upon a motor tender. At the top Westbury Hill, near the Shrine, the funeral procession was formed. The coffin, covered by a wealth of beautiful flowers and draped with the Union Jack, was transferred to a gun carriage from the White City barracks at Ashton. The firing party, under Sergeant-Major Blake, preceded the coffin, and upon either side marched six lieutenants, who acted as bearers.

The deceased officer's father, his wife, and daughter were the only members the family present, and with them were the Rev. Muller R.N., Messrs G. L. Gent, W. Matthews, and A. E. Hole, from Tormarton, Major Small, Major Leighton (Officer Commanding No.62 Squadron), and a large number of R.F.C. officers followed, and in the rear of the procession marched 150 of the men. The Depot band, under Bandmaster Bradford, played the funeral music impressively. The Rev. H. A. Watts, head-master of the Bristol Cathedral School, and acting chaplain to the R.F.C., took the service at the graveside, and he was assisted by the Rev. Canon Alford, the senior chaplain to the forces in the district. There were a large number of floral tributes from the family and brother officers, and the grave, Sec. F. Grave 27, was lined with choice blossoms.

The second fatal incident occurred on 21 December 1916 and involved 2nd Lieutenant George Douglas Pechell, (ex-Indian Army Reserve of Officers), who had been training with No.66 Squadron since 9 November. The 25 year old pilot was killed during the afternoon while flying B.E.2d, 6735, which had been manufactured by the Vulcan Motor & Engineering Co. It appears that the aircraft went out of control at an altitude of 60 feet, side-slipped, and then crashed on Filton aerodrome.

2nd Lieutenant Pechell was the younger son of Lieutenant-Colonel Sir A. Alexander Brooke-Pechell, 7th Baronet, of Larrau, Licq, Basses Pyrenees, France, and the Royal Hospital, Chelsea. He had been gazetted to the Indian Army Reserve of Officers in November 1914, and in the following January was attached to the 108th Infantry Regiment, and later the R.F.C.

The inquest on his death was held on 22 December, at which Captain Gilbert Dobbyn, a doctor with the Royal Army Medical Corps, stated that he saw the deceased fall with his machine about five o'clock. Death was instantaneous. Captain Cuthbert Ambrose Anthony Hiatt, (ex-2nd Battalion, Norfolk Regiment), a Flight Commander with No.66 Squadron, said he saw the deceased in the air at 3.45 p.m. He was rising, when the machine turned to the right. The turn became steeper and steeper, and after one complete turn it fell through the roof of store building, from a height of about 100 feet. He attributed the accident to the machine getting out of control through lack of experience of

the aviator, who was under instruction. Captain Hiatt said he examined the machine and found all the controls in working order.

Lieutenant Alfred Reginald Boeree (ex-4th Battalion, Suffolk Regiment), another Flight Commander with No.66 Squadron, stated that he had flown the machine four times that afternoon previous to the deceased taking it up, and everything worked perfectly. 2nd Lieutenant Pechell had flown the same machine satisfactorily alone before. A verdict of 'accidental death' was returned and the deceased was subsequently buried in Bristol's Canford Cemetery, Sec. F. Grave 28.

One evening in No.66 Squadron's mess at Filton, 2nd Lieutenant Basil Scott-Foxwell (ex-North Devon Hussars), who had begun training with the squadron on 23 September 1916, announced that he intended to fly an Avro 504A under the Clifton Suspension Bridge, and accepted a £5 wager from his flying instructor. So on Christmas morning 1916, the two set off in separate aircraft, Scott-Foxwell to go under the bridge and his instructor to stay aloft to see he did. And he did, flying along the Avon Gorge from Avonmouth and dipping under the bridge at the last moment. Afterwards they returned to Filton, loaded up one aircraft with Christmas cards and small gifts which they subsequently dropped to the staff of Ham Green Hospital, where Scott-Foxwell had recently been a patient.

One of the enlisted men who served with No.66 Squadron as part of the ground crew, and of whom some details have survived, is Thomas Wray Cockerill who was born in 1891 at Malton, Yorkshire. He went on to become a watchmaker and moved to London where, at the outbreak of war, he joined the Metropolitan Police as a Special Constable. However, in 1916 he enlisted in the R.F.C. and, as 25416 Air Mechanic 2nd Class Thomas Wray Cockerill, was posted to Reading, probably as a pupil at the No.1 School of Technical Training. He is next recorded serving at Patchway aerodrome in late December 1916, by which time he had been promoted to Air Mechanic 1st Class, while as part of No.66 Squadron he finally embarked for France on 4 March 1917.

Tragically, on 2 January 1917 No.66 Squadron suffered another fatal accident involving its dual control B.E.2d, 5761, which had been built by the British & Colonial Aeroplane Company at Filton. It appears that the aircraft had stalled and nose-dived from 200 feet while trying to turn in mist, prior to crashing at Patchway and killing one occupant outright and fatally injuring the other.

One of the men involved was 25 year old 2nd Lieutenant Joseph Ernest Townsend (ex-1st Battalion, Worcestershire Regiment), from Bangor, County Down, the son of Joseph and Mary Townsend, who had been training with No.66 Squadron since 9 November. The other was 27 year old 2nd Lieutenant Francis Ronal Bissicks (ex-Inns of Court O.T.C.), the son of Henry James and Agnes Bissicks of 20 Fairmount Road, Brixton, London. He had joined No.66 Squadron on 31 August 1916, had been a Flying Officer since 31 October, and appears to have been in the process of being posted to No.48 Squadron at Rendcomb.

Their inquests were held on 3 January 1917, that concerning the death of Townsend by Mr Edwin Watts, the coroner for the Lower Division of Gloucestershire. Identification was provided by Captain Gordon Roy Elliott, a Flight Commander and the temporary Squadron Commander of No.66 Squadron, who said that Townsend was under instruction as a pilot, but was a very promising pupil, and at times had flown alone. Elliott stated that at the time of the accident Townsend was flying in a dual control machine, along with Bissicks, his instructor. They took off at about 9 a.m., in the aircraft with which Bissicks was familiar, but soon after news was received that there had been a serious accident. Elliott proceeded to the scene where he found the machine, which appeared to have made a straight nose dive, reduced to a complete wreck, but from which both men had already been removed and taken away by ambulance.

Alfred Lewton, a general dealer, stated that at about 9.50 a.m. he saw an aeroplane flying at an altitude of about 100 feet, which then turned at a left angle and crashed into the ground. It came down about 100 yards from where he was standing, and after rushing over to the wreckage saw two men were pinned down inside. He then released Bissicks, who was in the rear seat and still alive, after which a Mr Clutterbuck arrived and together they extricated Townsend, who was dead.

Captain James B. Barry, a doctor in the Royal Army Medical Corps arrived at 10.05 a.m. and found that Townsend had been killed by a fracture of the base of the skull, and had also suffered other injuries, while it was arranged for Bissicks to be conveyed by ambulance to the Bristol Royal Infirmary. A verdict of accidental death was returned on Townsend, and reference made to the fact that his body had initially been removed to the mortuary in Bristol, and therefore outside the jurisdiction of the Gloucestershire Coroner, although it was afterwards taken back into the county.

The inquest on the body of Bissicks, a qualified pilot, was held later the same day by Mr A. E. Barker, at the Bristol Coroner's Court. Captain Gordon Roy Elliott gave identification evidence, and Major Stock, Royal Army Medical Corps, Territorial, of the 2nd Southern General Hospital stated that Bissicks was brought in at about 11.30 a.m. His skull and right thigh were fractured, in addition to other minor injuries. He died at 2.15 p.m., the cause of death being the fractured skull and laceration of the brain. A verdict of accidental death was returned.

The subsequent funeral of the men at Canford Cemetery in Bristol began at 3 p.m. on 4 January 1917, and was conducted by Canon Alford, as the Rev. H. Wood, acting chaplain to the RFC, was indisposed. En route through Westbury to the cemetery the band of the University Battalion, Bristol Volunteer Regiment, played the 'Dead March' in 'Saul', and they were followed by Captain Gordon Roy Elliott; Captain Percy Musker (ex-2/1 Norfolk Yeomanry), the Recording Officer of No.66 Squadron; Captain George Chadwick (ex-7th Battalion Manchester Regiment); and Major Joseph Adrian Milot (ex-15th Battalion Canadian Expeditionary Force), all from No.66 Squadron, plus a number of other officers, while the Lieutenants in the Squadron acted as pall bearers.

Many residents of the Westbury district also attended the funeral. As the cortege reached the cemetery entrance members of the firing party present lined up inside the

gates. The coffins were on tenders drawn by light motor wagons, and amongst the wreaths was a floral emblem of an aeroplane. The men were laid to rest in Section F, Townsend in Grave 320, and Bissicks in Grave 321, while on Canon Alford finishing the burial service, volleys were fired and the trumpeters gave the “Last Post”.

In addition, No.66 Squadron is also known to have suffered a fair number of non-fatal accidents while training at Filton, but relatively few details of the pilots involved have survived. The exceptions are incidents which involved the writing off of four Avro 504s aircraft during the winter of 1916/17. The problems began on 21 November when 2nd Lieutenant Walcot Brett Wood was injured when A423 turned sharply near the ground causing it to nose dive. Then came an accident involving A420 in which 2nd Lieutenant Albert Heywood was injured; and this was followed on 13 January when 2nd Lieutenant Charles Edgar Wykes crashed A3357 during a take off, while on 16 January A3355 was forced landed by 2nd Lieutenant Clive Maxwell Bailey.

However, the B.E.2s also appear to have had more than their fair share of problems as 22 year old Temporary 2nd Lieutenant Arthur Stanley Gould Lee (ex- Nottinghamshire & Derbyshire Regiment - Sherwood Foresters), then attached to No.66 Squadron, later recalled. He wrote that at Filton accidents “took place every few days, usually as a result of uninformed pilots allowing their B.E.s to spin into the ground on take-off. That was not surprising as most of the instructors didn’t know how to correct a flat spin, indeed they didn’t know how to instruct, and in effect once launched on the first solo on a given type of aeroplane, we pupils had to teach ourselves how to fly.”

“They also added to their risks by dam-fool flying, which usually consisted of skimming very low, below tree-top level, across the countryside. Frowned upon officially, this enjoyable contour-chasing or hedge-hopping or grass-cutting as we called it, was dangerous chiefly because of the unreliability of our engines. In variation of ordinary hedge-hopping were the trips made by the more venturesome along the deep Avon Gorge and under Clifton Suspension Bridge, which lay conveniently near the aerodrome. I performed this useless but satisfying feat myself.”

Lee had been commissioned in February 1915, but in was not until 1916 that he was finally seconded to the R.F.C. Following ground training at No.1 School of Instruction at Reading he’d been posted to No.24 Training Squadron at Netheravon to begin training as a pilot, with basic instruction on Maurice Farman Shorthorns. Then, on 30 August 1916, Lee was transferred to No.66 Squadron at Filton where he started receiving more advanced tuition, first on the Avro 504A, and then progressing to the B.E.2b, 2c, 2d, 2e, and B.E.12.

Unfortunately, it was in an Avro that he suffered a stall on take off caused by an inlet valve breaking at the critical moment, an accident which resulted in delaying the completion of his course and the accumulation of more than average flying hours. Another incident, but luckily not involving any injury or damage to his aircraft, occurred during an afternoon in mid-December 1916 while Lee, then flying a B.E.2b, was performing his height test, one of those listed for the award of his pilot’s wings.

“The test consisted of climbing to 6000 feet, then gliding down without using the engine, in imitation of a forced landing, but of course the pupil was supposed to keep the engine ticking over during the descent, and to open it up to help in the approach for landing. Having achieved the 6000 feet, I decided on the spur of the moment, just to show how clever I was, not merely to throttle down but to switch off, and so make a real forced landing, with a stopped engine and stationary propeller. It never occurred to me that several planes might be doing take-off and landing practice on the small, obstruction-surrounded aerodrome, which would get in my way when I had to land. Gliding blissfully down, and quite unaware that I would almost certainly crash, I circled the aerodrome until as I came lower the dead prop was spotted from below, and all preparations made for the inevitable pile-up”.

“The ambulance and fire engine moved from their usual stations by the hangers to the grass a hundred yards out, and waited with engines running. Flying stopped, the sick-bay was put at the ready, pupils got their cameras out. Unconscious of all this fuss, and perfectly happy, I came in on my final approach in a series of S-turns (I had never been told how to do a sideslip) and to everybody's surprise made a good dead-prop touchdown in the centre of the aerodrome. Applause at what all regarded as a brilliant forced landing ceased abruptly when it was found that I had switched off deliberately, and I was hauled to the Squadron Commander's office for a severe wigging”.

Nevertheless, Lee finally soloed in a B.E.2, prior to being appointed a Flying Officer on 10 January 1917, while on 13 January he was allowed to collect B.E.2d, 6237, from No.38 Reserve Squadron at Rendcomb. Subsequently selected as a scout pilot, 2nd Lieutenant Lee next attended an Aerial Gunnery Course at Hythe before being posted to No.40 Training Squadron at Port Meadow, Oxford, to convert to the Sopwith Pup and finally become operational in France with No.48 Squadron.

During early 1917 No.66 Squadron started re-equipping with operational aircraft in the form of Sopwith Pup fighters. The first to arrive was A6151, which had been built by Whitehead Aircraft Ltd, of Richmond in Surrey. It was collected from the factory on 2 February by 7562 Sergeant William Henry Dunn (ex-Royal Tank Corps) who then flew it for checking at the Sopwith works located nearby at Kingston upon Thames. The following day he completed the delivery via Upavon, finally landing on Patchway Aerodrome at 3 p.m.

Dunn was unusual in that he was an N.C.O. pilot. Born in London in 1895 he had enlisted in the R.F.C. on 10 August 1915 and, after being promoted to Air Mechanic 1st Class on 1 March 1916, had been awarded Royal Aero Club Certificate 3242 on 24 June, following a flight in a B.E.2c at the Central Flying School at Upavon. Promotion to Sergeant and 1st Class Flyer followed on 25 October 1916 while serving with No.43 Reserve Squadron at Tern Hill in Shropshire. After delivering the Pup in February 1917 Dunn remained at Filton, to where he made a few more delivery flights for No.66 Squadron, before being posted away on 19 March 1917 prior to a transfer to the Western Front.

Unfortunately, No.66 Squadron lost one of its new aircraft on 27 February 1917 when Pup A7302 was crashed by none other than Major Boyd, the Squadron Commander. Nevertheless, Pups continued to be delivered to Filton until early March, but on the 3rd No.66 Squadron finally began leaving, having been ordered to move first to No.1 Aircraft Depot at St Omer in France, and then on to Vert Galand aerodrome. There they received the rest of their Pups and began operating as a scout formation on the Western Front.

No.62 Squadron (8 August 1916 - 17 July 1917)

On 28 July 1916 the nucleus of No.62 Squadron was formed at Netheravon by merging elements of No.42 Squadron and No.7 Reserve Squadron. On 8 August 1916 it moved to Filton with about forty N.C.O.s and during month the main draft of personnel was posted to No.62 Squadron from the Recruits' Depot at Farnborough to complete the formation of the squadron.

Its task was to be the graduating of pilots on the Royal Aircraft Factory B.E. type, and it carried on with this work into the spring of 1917 when steps were put in hand to make the squadron operational with two-seater Bristol F.2b Fighters. During its time at Filton No.62 Squadron is known to have operated eight Avro 504As and two R.E.7s, along with one B.E.2c, one B.E.2d, and two B.E.2es, all used in the training role.

On 8 August 1916 Major John Burgh Talbot Leighton (ex-Scots Guards), a regular army officer, had been appointed Squadron Commander. Born in London in 1892, Leighton had been awarded Royal Aero Club Certificate No.790 on 20 May 1914 following a flight on a Vickers Biplane at the Vickers School at Brooklands. In September 1914 he was posted to No.6 Squadron at Dover, and in October to No.7 Squadron at Netheravon. The following month Leighton travelled to France, where he re-joined No.6 Squadron, before transferring to No.16 Squadron in March 1915, and No.2 Squadron in June. By October 1915 he had returned to England and was serving as a Flight Commander at No.2 Reserve Aeroplane Squadron at Brooklands, prior to being gazetted a Squadron Commander in April 1916.

The nucleus of No.51 Reserve Squadron was formed out of No.62 Squadron on 30 December 1916, prior to moving to Wye in Kent on 8 January 1917 to operate an assortment of aircraft including Martinsyde Elephants. It maintained an independent existence until 1 September 1918.

On 21 January 1917 Major Leighton left to take command of No.23 Squadron at Gosport, which was about to begin working up with SPAD S.VII fighters prior to moving to France. His place at No.62 Squadron was then filled by two temporary Squadron Commanders, these being Captain John Sowrey (ex-6th Battalion, Queen's Regiment) who served between 21 January and 8 February, when Captain Gordon Roy Elliott (ex-3rd Dragoon Guards) took over. Finally, on 3 March 1917 Major Reginald George Douglas Small (ex-Leinster Regiment), who had recently been the Officer Commanding No.33 Squadron at Filton and then the Wing Commander at the 21st (Training) Wing Headquarters at Cirencester, arrived to take command of No.62 Squadron.

On 5 December 1916 Avro 504A, A500, flown by 2nd Lieutenant Henry William Piper (ex-London Regiment), suffered engine failure after take off. As a result he turned back to the aerodrome, but was injured when he crashed into two walls during a forced landing.

Sadly, on 1 February 1917 53996 Air Mechanic 3rd Class Sidney Harold Hayward belonging to No.62 Squadron died aged 34. A native of Dover, and son of George and Caroline Hayward of 30 Colchester Avenue, Manor Park, he was subsequently buried at Woodgrange Park Cemetery, East Ham, memorial reference 23. 6919.

As No.62 Squadron was being trained to operate two-seater fighters over the Western Front potential observers were sent on specialist training courses. These normally lasted about three weeks, and it was while on secondment at No.2 Auxiliary School of Aerial Gunnery, at Turnberry in Ayrshire, that Lieutenant Edward Peregrine Pell Edmonds of No.62 Squadron was injured. It appears that on 14 April he was being flown by 2nd Lieutenant Ernest Blythe in A830, a Royal Aircraft Factory F.E.2b, when it stalled during a turn made near the ground, both men being lucky to survive the subsequent crash.

Towards the end of April No.62 Squadron wrote off two of its own aircraft in serious accidents. The first incident took place on 23 April and involved Avro 504A, A509, which had been built by the Bleriot & SPAD Works at Addlestone. It was being flown by 2nd Lieutenant Robert Hunt, R.F.C. (Special Reserve), when it stalled during a turn and then crashed, seriously injuring the pilot. Unfortunately, on 30 April 1917 Temporary Lieutenant William Bagnall (ex-12th Battalion, Scottish Rifles) a 28 year old pilot belonging to No.62 Squadron, who also undertook work for the A.I.D. Ferry Flight at the Bristol Aircraft Acceptance Park, was involved in the next flying accident. At the time he was flying B.E.2e, A2972, a machine built by the British & Colonial Aeroplane Company which suffered engine failure and crashed into a wood injuring both the pilot and his passenger, 2nd Lieutenant Albert Stanley Rayner (ex-Northamptonshire Regiment) of No.62 Squadron.

Yet another crash took place on 18 May and this involved Avro 504A, A427, flown by 2nd Lieutenant John Raymond Waller. The 22 year old had attended Manchester Municipal Secondary School before joining Manchester University as a student in the education department. Then, in October 1914, he joined the Royal Fusiliers as a private and went to France twelve months later. In May 1916 he returned to the UK to train for a commission and was gazetted to the Royal Flying Corps in September 1916. Unfortunately, during his qualifying flight the aircraft stalled during a sharp turn and, after side-slipping, crashed at Patchway with the engine full on killing the pilot, who was the son of James William and Nellie Mary Waller, of 39 Hyde Grove, Chorlton-on-Medlock, Manchester.

The inquest into his death was held on 22 May by the Bristol Coroner Mr A.E. Barker, and the evidence showed that Waller made an ascent of about 1000 feet, and seemed to get into a side-slip. He made two distinct attempts to right himself, but failed, the machine turning over and nose diving to the ground. He had just previously been up for

the period of 35 minutes, and the machine had been tested and found in perfect order. The jury found that the deceased died from multiple injuries caused by falling from an aeroplane. He was subsequently buried at Canford Cemetery, Bristol, Section F, Grave 287.

A further fatal accident involving No.62 Squadron occurred near Filton on 11 June when B.E.2e, A2972, a machine built by the British & Colonial Aeroplane Company, side-slipped during a test flight and nose dived into the ground. Although Temporary Lieutenant William Bagnall survived the crash his passenger, 82192 Air Mechanic 3rd Class Harry Hargreaves aged 18, the son of Allan and Mary Ann Hargreaves, of 12 Shand Avenue, Holbeck, Leeds, was killed.

The inquest into his death was held on 13 June by the Bristol Coroner Mr A.E. Barker. Lieutenant Nathaniel Taylor Watson (ex-Middlesex Regiment) of No.62 Squadron stated that on the morning of the accident he was standing in front of the sheds just as the aircraft was about to take off. However, it ascended to only about ten feet when the engine appeared to fail forcing it to land. The pilot then attempted another take-off, but after reaching an altitude of about forty feet the engine failed again and the machine went into a short glide. However, it appeared to pick up, allowing the pilot to turn and attempt to return to the aerodrome, but yet again it failed causing the machine to side-slip and crash.

A test pilot subsequently ran the engine and stated that the stoppage was not due to any discernable mechanical defect. An engineer, Honorary Lieutenant Frederick Albert Crouch, Assistant Inspector, Aeronautical Inspection Department, said that the machine was in the air three times previously, he himself being a passenger on one of these occasions. He considered the engine had stopped due to faulty carburetion, and not from an inherent defect. Lieutenant Herbert Greenwood of the Royal Army Medical Corps, a doctor who was attached to Filton aerodrome, stated that Hargreaves passed away within two minutes of being lifted from the wreckage, having suffered a fractured skull and other multiple injuries. A verdict of accidental death was recorded on Harry Hargreaves, a native of Hunslet in Leeds, who was subsequently buried in Hunslet Old Cemetery, Grave ‘C’ 13339.

A further accident occurred on 26 June and involved 5876, a B.E.2d, which had been manufactured by the British & Colonial Aeroplane Company at Filton. After service in France it had been returned to England on 24 April 1917 prior to being allocated to No.62 Squadron. On the day of the accident it was being flown by Captain George Walter Thomas Lindsay (ex-Royal Field Artillery), with 33467 Air Mechanic 1st Class, Charles Edward Sharman R.F.C. as the passenger, both men, who were then serving with No.62 Squadron, being aged 26. The aircraft suffered a fractured longeron in flight due to the excessive strain of a spinning nose dive from 3000 feet, causing it to crash at Stoke Gifford killing both occupants.

The inquest into their deaths was held on 28 June by the Bristol Coroner Mr A. E. Barker, and evidence of identity was given by Captain Gordon Roy Elliott, (ex-3rd

Dragoon Guards), a Flight Commander (Temporary Squadron Commander), of No.66 Squadron at Patchway.

Lieutenant Leonard Roy Kerridge, R.F.C. (Special Reserve), an Equipment Officer 1st Class, said that on the day of the accident, a little after five o'clock, he saw Captain Lindsay flying level in an easterly direction at an altitude of 2000 or 2500 feet. The aircraft then suddenly developed a steep bank to the left and started a rather steep spiral. After about the first turn of the spiral the tail plane was not in the same horizontal plane as the main planes. Captain Lindsay then appeared to try to get out of the spiral to fly level, and while doing so the tail plane appeared to rock up and down laterally. Having got out of the spiral temporarily Captain Lindsay was flying more or less level. However, the tail plane than began to rock in a different manner and the machine got into a steep spiral which developed into a spinning dive, the pilot by that time having apparently lost all control.

The machine then fell a considerable distance gradually turning upside down. It came out of that position and again fell more or less vertically. About 250 feet before it hit the ground it again turned upside down and crashed in that position. Kerridge than stated that either previous to when he was watching the machine, or just before the pilot started the violent spin the longerons in front of the tail plane had fractured.

Lieutenant Charles Turner stated that he had flown the machine on the same afternoon, when it was in a satisfactory condition. Air Mechanic 2nd Class, Ernest Albert Jeffries said that he examined the framework of the machine on the morning of 24 June and it was quite in order. Lieutenant Herbert Greenwood of the Royal Army Medical Corps stated that Lindsay's neck was broken, and Sharman had a broken forearm and a fracture of the base of the skull. A verdict of accidental death was recorded.

Lindsay, the son of Lieutenant-Colonel Morgan Lindsay, of Ystrad Mynach, Glamorgan, was subsequently buried in the family vault under the east end of Holy Trinity church at Ystrad Mynach; while Sharman, the son of Henry and Florence Sharman of 88 Cricket Inn Road, Sheffield, was laid to rest in City Road Cemetery in Sheffield, grave T.1 'C' 9474.

Meanwhile, starting on 19 May 1917, and in preparation for mobilization, No.62 Squadron received an initial allotment of new Bristol F.2B Fighters from the batch A7101 to A7300 which began being delivered to the R.F.C. by the British & Colonial Aeroplane Company at Filton in April 1917. However, on 26 May, the allocation to No.62 Squadron was cancelled, and the aircraft involved A7132, A7133, A7137, A7138, A7139, and probably A7140, A7141, and A7142, were all re-allotted for service in France.

Then, in June 1917 the 'Flying Sikh', the first Indian to fly as a pilot with the R.F.C. in World War One, was posted to No.62 Squadron at Filton. That man was Hardit Singh Malik, the second son of Sardar Bahadur Mohan Singh and Sardarni Lajvanti, who had been born on 23 November 1894 in Rawalpindi, Punjab, British India (now in Pakistan), and had travelled to England at the age of fourteen to attend a prep school. He later

became a pupil at Eastbourne College before entering Balliol College, Oxford, in 1912 to read history in preparation for a career in the Indian Civil Service.

When war broke out many of Malik's contemporaries at Balliol joined up, but he was turned down as the prevailing policy of the War Office was to deny commissions to applicants not of ‘pure European descent’, on the grounds that ‘a British private will never follow a half-caste or native officer.’ As a result Malik continued his studies, finally graduating in 1915. Nevertheless, during his university vacations he’d volunteered at the American Hospital in Neuilly-sur-Seine and, after being refused a commission for the second time, in 1916 he joined the French Red Cross and drove an ambulance at the front. As a French speaker, Malik then offered his services to the French Aéronautique Militaire, which was prepared to accept him.

However, whilst in France he’d kept in touch with an old Oxford tutor who used his influence with Lieutenant-General David Henderson, Officer Commanding the R.F.C., to secure Malik a cadetship. As a result, on 6 April 1917 he received an honorary temporary commission as a 2nd Lieutenant, substantive from 13 April. After a brief spell at No.1 School of Military Aeronautics at Reading, on 22 May he was posted to the R.N.A.S. Training Establishment at Vendôme in France which gave initial flying instruction to potential pilots, both naval and military. Then, for his ‘higher instruction’, on 22 June he was transferred to No.62 Squadron at Filton where he received his wings, was recommended for service as a fighter pilot and, on 13 July, was granted the duty of Flying Officer.

As by then many of No.62 Squadron’s own pilots and observers were being posted overseas, on 17 July 1917 the unit, along with 2nd Lieutenant Malik, transferred from Filton up to Rendcomb to continue with the graduation of new pilots. Malik remained with the Squadron until 1 September when he left for a short course with No.1 School of Aerial Fighting (Auxiliary) at Turnberry in Scotland, followed by another with No.55 Training Squadron (School of Special Flying) at Gosport. Finally, he was posted to the newly formed No.28 Squadron at Yatesbury in Wiltshire and, on 8 October 1917, he flew with the unit over to France to become operational on Sopwith Camel fighters. As an observant Sikh, Malik wore a turban instead of a helmet, and later wore a specially designed flying helmet that fitted over his turban. Consequently, because of his unusual headgear he became nicknamed the ‘Flying Hobgoblin’.

No.35 (Reserve) Squadron (1 to 16 February 1917)

Unlike No.51 and No.55 Reserve Squadrons, which had formed out of No.62 and No.66 Squadrons respectively, No.35 Reserve Squadron was created from scratch at Filton on 1 February 1917. It was pre-ordained as a ‘Higher Reserve Squadron’ for prospective Bristol F.2B pilots with an establishment of six Avro 504s, six R.E.7s, and six Bristol Fighters. It transferred to Northolt near London on 16 February and, commanded by Major L. Henderson, was given temporary Home Defence duty over the summer of 1917.

Mobilization Station - 1918

As a result of a major re-organization of training which took place between March and April 1918, it was envisaged that new operational squadrons would be formed and sent to a designated Mobilization Station two months before they were scheduled to be deployed overseas. Although Filton was selected as a South-West Area Mobilisation Station for one service squadron, the whole system was brought to an abrupt end by the Armistice in November.

The only unit to even begin the process was No.121 Squadron which, after operating in a training role with R.E.8s at Narborough in Norfolk, moved to Filton on 10 August 1918 to start working up on the D.H.9A light bomber, prior to a planned deployment to France on 20 September. However, instead the squadron was disbanded on 17 August, and although it was scheduled to re-form at Filton on 14 October, again with the D.H.9A, prior to moving to France on 14 December 1918, this never took place.

Final Military Days - 1919

A cadre of No.101 Squadron, which had operated B.E.12as as night bombers, arrived at Filton from Laneffe in Belgium on 18 March 1919. It stayed there until 11 October when it finally transferred to Eastleigh in Hampshire where it was finally disbanded.

On 1 May 1919 civil flying was once again permitted in Britain, and one of the new authorized air routes was Bristol (Filton) to London (Hounslow). This was inaugurated that morning by Uwins who flew Herbert Thomas, the British & Colonial's works manager, from Filton to Hounslow aerodrome in the Bristol Coupé H1460, the landing of which a little after 11 a.m. signalled the completion of Britain's first post-war commercial flight. Thomas then called upon General Seely, President of the Air Council, and presented him with a model of the Bristol Fighter on behalf of the directors of the Company.

In late July, the following advertisement appeared in the local press, "Royal Air Force Filton, Carnival. Flying, Avro Joy Rides. Good pilots, good machines. Weather and circumstances permitting. This afternoon, July 26 1919. Fee £1.1s per flight." Then, in mid-August, the Air Ministry issued a list of aerodromes and landing grounds open to civil aviation, in which it was noted that although Filton was to be temporarily retained for service purposes, it was also available for civil use.

Early on the morning of 22 September "an alarm of fire was received at the Central Station from the Aircraft Acceptance Park, Filton. The fire brigade attended, under Inspector Hyatt, with the engine from the Central Station, and a turbine from Redland. It was found that fire had broken out in a wooden building of one floor in use as an officers' mess and billiard room. Two hydrants were quickly at work, and the fire was extinguished in about 2½ hours. The building and contents were partially destroyed. Store rooms and other sheds in the rear were damaged. The cause of the outbreak is at present unknown".

At the end of the month a Bristol F.2B Fighter, carrying the Dutch military serial BR401, flew over to England to undertake a short tour during the course of which it paid a visit to

Filton, its birthplace. A small part of its story was featured in a British & Colonial Aeroplane Company advertisement inserted in the 'Aeroplane' magazine on 8 October. In addition on 23 October 'Flight' carried a photograph of BR401 stationary on Filton Aerodrome with the hangars in the background (see Appendix 2 for further details).

Then, on 27 October, it was announced in the 'Western Daily Press' that, "The Commanding Officer Royal Air Force, Filton, hereby notifies all creditors that the unit is being closed down and all accounts should be rendered before October 31 for settlement."

Finally, on 22 December 1919, the same newspaper carried the first official notification concerning the disposal of the establishment: "G.R. Ministry of Munitions. By direction of the Disposal Board (Land, Buildings and Factories Section), for sale, Filton Aerodrome near Bristol, Gloucestershire: area about 133 acres."

"The board are considering the question of disposing of the above as a whole, or of the buildings and the land on which they stand, without the aerodrome itself. The buildings include several large hangars, officers' quarters, barrack blocks, womens' hostel. technical buildings, &. Electric light plant, water supply, drainage, permanent roads."

"In addition to its use as an aerodrome the buildings are suitable for factory or storage, and other similar purposes. The site is at present occupied by the Government under the Defence of the Realm regulations, but it can (if necessary) be purchased under and subject to the provisions of the Defence of the Realm (Acquisition of Land) Act, 1919. For further particulars apply to the Disposal Board, Room 135, Charing Cross Buildings, Villiers Street, London W.C.2."

Disposal - 1920

On 3 January 1920 the following notice appeared in several publications:- Ministry of Munitions - by direction of the Disposal Board (lands, buildings and factories section) for sale Filton Aerodrome near Bristol, Gloucestershire, area about 133 acres. The Board are considering the question of disposing of the above as a whole, or of the buildings and the land on which they stand, without the aerodrome itself. The buildings include several large hangars, officers' quarters, barrack blocks, women's hostel, technical buildings etc, electric light plant, water supply, drainage, permanent roads.

In addition to its use as an aerodrome the buildings are suitable for factory or storage and other similar purposes. The site is at present occupied by the Government under the Defence of the Relm Regulations, but it can (if necessary) be purchased under and subject to the provisions of the Defence of the Relm (Acquisition of Land) Act, 1919.

In mid-January the Air Ministry announced in its 'Notices to Airmen' that the service station at Filton was open to civilian aviation, while on 5 February 1920 relinquishment of the aerodrome was notified. On 31 July 1920 the Disposal Board advertised the sale of building materials and surplus stores at Filton Aerodrome (Depot 216), which were to be auctioned by Edward W. Brown & Co., on 12 August 1920.

Although the expenditure incurred on preparing the Filton site and erecting and maintaining its buildings during the war was said to have been £210,000, it had been acquired by the Disposals Board of the Ministry of Munitions for £11,500, and the board had sold it to the Bristol Aeroplane Company for £59,000, which included £47,500 as the value of the buildings, fixtures, fittings and electrical plant. In turn the company disposed of items surplus to their requirement, and on 24 December 1920 advertised their sale:-

By direction of the Bristol Aeroplane Company Limited, Filton Aerodrome:- Important sale of timber built sectional huts formerly used in the officers' and men's quarters, camp kitchen, and other equipments and effects (formerly in the occupation of the Royal Air Force), suitable for bungalows, public halls, recreation rooms, pavilions etc.

Messrs C.H. Tucker & Co. will sell by auction at the aerodrome at on Thursday, 20 January 1921 at 12 noon precisely the timber buildings and effects, comprising (amongst other items) five six-room & corridor huts, ten single room huts, one camp kitchen with pantry, scullery etc., one special hut, and two non-sectional huts.

The huts are principally built and removable in sections, and are asbestos lined and ceiled, have boarded floors, and are wired for electric lights, fitted with doors, window sashes, sky lights and ventilators, with boarded 'ruberoid' roofs, forming accommodation for from 15 to 44 men per building. Also a number of slow combustion stoves, kitchen range, earthenware sinks and other miscellaneous equipment forming certain portions of the aerodrome as erected by H.M. Air Ministry. Terms: strictly cash.

SOME INDIVIDUAL AIRCRAFT CONFIRMED ON FILTON AERODROME 1915 to 1919

1) Aircraft Acceptance Park

British & Colonial Aeroplane Company products

Production batch of 38 Bristol Scout C, 4662 to 4699 built under contract A3242, were delivered between July and December 1915. Confirmed at the Bristol A.A.P:-

4665, 4668, ***13/8/15***; 4670, ***16/8/15***; 4669, ***19/8/15***.

Production batch of 37 Bristol Scout D, 5291 to 5327 built under contract A3242, were delivered between December 1915 and February 1916. None confirmed at the Bristol A.A.P.

A production batch of 150 Royal Aircraft Factory B.E.2d Corps reconnaissance aircraft, 5730 to 5879 built under contract 87/A/115 dated 31 August 1915, was delivered between January and July 1916. Confirmed at the Bristol A.A.P:-

5731, ***16/5/16***; 5774, 5775, ***17/5/16***; 5790, 5791, ***26/5/16***; 5812, 5813, ***10/6/16***; 5814, 5815, ***12/6/16***; 5824, ***19/6/16***; 5868, 5869, 5870, 5871, 5872, 5873, 5874, 5875, 5876, 5877, ***13/7/16***; 5878, 5879, ***19/7/16***.

Production batches of 80 Bristol Scout D, 5554 to 5603 and 7028 to 7057 built under contract 87/A/185 dated 18 October 1915, were delivered without engines between February and July 1916. None confirmed at the Bristol A.A.P.

A production batch of 200 Royal Aircraft Factory B.E.2d/e Corps reconnaissance aircraft, 7058 to 7257 built under contract 87/A/115 dated 31 August 1915, was delivered between about August and December 1916. Confirmed at the Bristol A.A.P:-

7066, 7067, 7068, 7069, 7070, 7071, ***9/8/16***; 7072, 7073, ***10/8/16***; 7084, 7085, ***17/8/16***; 7086, 7087, ***18/8/16***; 7088, 7089, 7090, 7091, ***19/8/16***; 7092, 7093, 7094, 7095, 7096, 7097, 7098, 7099, 7100, ***21/8/16***; 7101, 7102, 7103, 7104, ***24/8/16***; 7105, ***29/8/16***; 7106, 7107, ***31/8/16***; 7108, ***4/9/16***; 7130, 7131, 7136, 7137, 7138, 7139, 7140, 7141, 7142, 20/9/16; 7143, 7144, 7145, ***25/9/16***; 7150, 7151, 7152, 7153, 7154, 7155, ***28/9/16***; 7156, 7157, 7158, 7159, 7160, ***7/10/16***; 7166, 7167, 7168, 7169, 7170, 7171, 7172, 7173, 7174, ***9/10/16***; 7176, 7177, 7181, 7182, 7183, 7184, 7185, 7186, 7187, 7188, 7189, 7190, ***16/10/16***; 7191, 7192, 7193, 7194, 7195, 7196, ***20/10/16***; 7198, 7199, 7200, 7201, 7202, 7203, 7204, 7205, 7206, 7207, 7208, 7209, 7210, 7211, ***28/10/16***; 7212, 7213, 7214, 7215, 7216, 7217, 7223, ***11/11/16***; 7222, ***18/11/16***; 7235, 7236, ***18/11/16***; 7241, ***25/11/16***; 7242, ***28/11/16***; 7246, 7248, 7249, 7250, 7251, 7252, 7253, 7254, ***30/11/16***; 7255, 7256, 7257, ***7/12/16***.

A production batch of 50 Bristol F.2A Fighters, A3305 to A3354 built under contract 85/A/552 dated 28 August 1916, was delivered between December 1916 and March 1917. None confirmed at the Bristol A.A.P.

A production batch of 250 Royal Aircraft Factory B.E.2e Corps reconnaissance aircraft, A2733 to A2982 built under contract 87/A/571 dated 1 August 1916, was delivered between December 1916 and April 1917. Confirmed at the Bristol A.A.P:-

A2733, A2734, A2735, A2736, A2737, A2738, ***12/12/16***; A2739, A2740, A2741, A2746, ***20/12/16***; A2743, A2744, A2745, ***22/12/16***; A2472, A2747, A2748, A2749, A2761, A2762, A2763, ***30/12/16***; A2751, A2752, A2753, A2754, ***3/1/17***; A2755, A2766, A2768, A2769, ***4/1/17***; A2756, A2757, A2758, A2759, A2760, ***8/1/17***; A2786, A2787, A2788,A2789, A2790, ***27/1/17***; A2809, A2810, A2811, A2812, ***27/1/17***; A2799, A2800, A2801, A2802, A2803, A2804, A2805, A2806, A2807, A2808, ***29/1/17***; A2813, ***31/1/17***; A2815, A2816, A2817, A2818, ***3/2/17***; A2820, A2821, A2822, A2823, A2835, A2836, A2837, A2838, ***9/2/17***; A2833, A2834, A2839, A2840, A2841, A2842, A2843, A2844, A2845, A2846, A2847, A2848, A2849, A2850, A2851, A2852, A2853, A2854, A2855, A2856, A2857, ***12/2/17***; A2858, A2859, A2860, A2861, A2862, A2863, A2864, A2865, A2866, A2867, A2868, ***20/2/17***; A2875, A2876, A2877, ***3/3/17***; A2825, ***6/3/17***; A2894, A2895, A2896, A2898, A2900, ***18/3/17***; A2932, A2933, A2934, A2935, A2936, A2937, A2938, A2939, A2940, A2941, A2942, A2943, A2944, A2945, A2946, A2947, ***19/3/17***; A2897, A2899, ***22/3/17***; A2920, A2921, A2923, ***28/3/17***; A2922, A2924, A2925, ***29/3/17***; A2948, A2949, A2950, A2951, ***13/4/17***; A2952, A2953, ***17/4/17***; A2954, A2955, A2956, ***18/4/17***; A2963, A2964, A2965, A2966, A2967, A2968, A2969, A2970, A2971, A2972, A2973, A2974, A2975, ***21/4/17***; A2982, ***30/4/17***.

A production batch of 100 Royal Aircraft Factory B.E.2e Corps reconnaissance aircraft, A8626 to A8725 built under rolling contract 87/A/571, was delivered between April 1917 and June 1917. Confirmed at the Bristol A.A.P:-

A8626, ***30/4/17***; A8627, A8628, A8629, A8630, ***3/5/17***; A8634, A8635, A8636, A8642, A8644, A8646, A8648, A8650, A8652, A8654, A8656, A8658, A8660, A8662, A8664, A8666, A8668, A8670, ***7/5/17***; A8645, A8647, A8649, ***19/5/17***; A8657, A8659, A8661, A8663, ***25/5/17***.

The first production batch of 200 Bristol F.2B Fighters, A7101 to A7300 built under rolling contract 85/A/552, was delivered between April and September 1917. Confirmed at the Bristol A.A.P:-

A7101, ***17/4/17***; A7102, A7103, A7104, A7105, ***21/4/17***; A7106, A7107, ***25/4/17***; A7108, ***26/4/17***; A7109, ***28/4/17***; A7110, A7111, A7112, ***30/4/17***; A7113, A7114, A7115, A7116, ***4/5/17***; A7117, A7118, ***7/5/17***; A7119, A7120, A7121, ***10/5/17***; A7123, A7124, A7125, A7126, ***15/5/17***; A7127, A7128, A7129, ***16/5/17***; A7130, A7131, A7132, ***19/5/17***; A7133, A7134, ***21/5/17***; A7137, A7138, A7139, ***26/5/17***; A7140, A7141, A7142, ***29/5/17***; A7143, A7144, A7145, A7146, ***4/6/17***; A7149, A7150, A7151, ***7/6/17***; A7147, A7152, A7153, A7154, A7155, A7156, A7157, ***11/6/17***; A7158, A7159, ***13/6/17***; A7160, A7161, A7162, A7163, ***16/6/17***; A7164, A7165, A7166, ***20/6/17***; A7167, A7168, A7169, ***22/6/17***; A7170, A7171, A7172, ***25/6/17***; A7174, A7175, A7176, ***28/6/17***; A7177, A7178, A7179, ***2/7/17***; A7181, A7182, ***4/7/17***; A7185, ***6/7/17***; A7187, ***11/7/17***; A7189, ***12/7/17***; A7191, A7193, ***13/7/17***; A7195, ***16/7/17***; A7201, ***21/7/17***; A7203, A7204, ***23/7/17***; A7205, ***24/7/17***; A7197, ***25/7/17***; A7207, A7208, ***26/7/17***; A7209, A7210,A7211, ***28/7/17***; A7199, ***29/7/17***; A7213, ***31/7/17***; A7214, A7215, ***2/8/17***; A7216, A7217, ***4/8/17***; A7212, ***5/8/17***; A7219, A7220, ***7/8/17***; A7221, ***10/8/17***; A7222, A7223, ***11/8/17***; A7224, ***13/8/17***; A7226, ***16/8/17***; A7225, ***18/8/17***; A7233, ***22/8/17***; A7234, ***23/8/17***; A7235, ***25/8/17***; A7239, A7240, ***27/8/17***; A7241, ***28/8/17***; A7243, ***29/8/17***; A7244, ***30/8/17***; A7245, ***31/8/17***; A7246, ***1/9/17***; A7242, ***2/9/17***; A7247, A7248, ***4/9/17***; A7261, ***14/9/17***; A7263, ***15/9/17***; A7264, ***17/9/17***; A7266, ***18/9/17***; A7268, A7269, ***21/9/17***; A7270, A7271, ***22/9/17***; A7267, ***23/9/17***; A7275, A7276, ***27/9/17***; A7277, A7279, ***29/9/17***; A7280, A7281, ***1/10/17***; A7282, ***3/10/17***; A7298, ***17/10/17***; A7300, ***18/10/17***; A7299, ***19/10/17***.

A production batch of 200 Royal Aircraft Factory B.E.2e Corps reconnaissance aircraft, B4401 to B4600 built under rolling contract 85/A/571, was delivered between June and December 1917. Confirmed at the Bristol A.A.P:-

B4401, B4402, B4403, B4404, B4405, B4406, ***18/6/17***; B4451, B4453, B4454, B4456, ***31/7/17***; B4461, B4463, ***18/8/17***; B4501, ***5/9/17***; B4502, B4503, B4504, B4505, B4507, ***9/9/17***; B4509, B4510, ***15/9/17***; B4516, B4517, ***20/9/17***; B4515, B4522, ***21/9/17***; B4519, B4520, ***23/9/17***; B4582, ***8/11/17***; B4583, ***19/11/17***.

The second production batch of 250 Bristol F.2B Fighters, B1101 to B1350 built under rolling contract 85/A/552, was delivered between September 1917 and January 1918. Confirmed at the Bristol A.A.P:-

B1101, ***21/7/17***; B1102, B1103, ***24/7/17***; B1104, B1105, ***4/8/17***; B1106, ***7/8/17***; B1108, B1109, ***15/8/17***; B1107, ***18/8/17***; B1110, B1111, ***20/8/17***; B1112, ***22/8/17***; B1113, ***27/8/17***; B1114, ***29/8/17***; B1117, ***4/9/17***; B1121, ***17/9/17***; B1121,B1122, B1123, B1124, ***19/9/17***; B1125, B1126, ***20/9/17***; B1130, B1131, ***22/9/17***; B1133, B1134, ***24/9/17***; B1132, B1135, ***27/9/17***; B1136, B1137, ***5/10/17***; B1138, B1139, ***6/10/17***; B1141, ***10/10/17***; B1144, ***17/10/17***; B1142, B1143, ***19/10/17***; B1152, B1154, ***27/10/17***; B1153, B1155, ***29/10/17***; B1156, ***1/11/17***; B1158, B1162, B1163, ***9/11/17***; B1164, ***12/11/17***; B1172, ***16/11/17***; B1170, B1171, ***19/11/17***; B1177, ***21/11/17***; B1182, B1183, ***26/11/17***; B1119, ***27/11/17***; B1184, B1186, ***28/11/17***; B1185, B1187, B1189, B1190, ***29/11/17***; B1191, ***30/11/17***; B1192, B1193, B1194, B1196, ***3/12/17***; B1217, B1221, ***14/12/17***; B1230, B1232, ***20/12/17***; B1231, B1234, ***21/12/17***; B1233, B1235, B1239, ***22/12/17***; B1244, ***8/1/18***; B1246, ***9/1/18***; B1248, ***10/1/18***; B1262, B1264, ***12/1/18***; B1266, B1268, ***25/1/18***; B1299, B1300, ***31/1/18***; B1301, B1302, B1305, ***1/2/18***; B1307, B1309, ***4/2/18***; B1312, B1314, ***6/2/18***; B1328, ***16/2/18***; B1334, B1335, B1336, ***26/2/18***; B1330, B1331, B1332, B1339, ***28/2/18***.

One production batch of 125 Bristol M.1C Scouts, C4901 to C5025 built under contract AS 8236 dated 3 August 1917, was delivered between September 1917 and February 1918. None confirmed at the Bristol A.A.P.

The third production batch of 300 Bristol F.2B Fighters, C4601 to C4900 built under rolling contract 85/A/552, was delivered between October 1917 and March 1918. Confirmed at the Bristol A.A.P:-

C4808; ***26/10/17***; C4810, **27/10/17**; C4885, C4814, ***31/10/17***; C4813, C4816, ***1/11/17***; C4818, ***2/11/17***; C4817, C4819, ***3/11/17***; C4821, ***5/11/17***; C4820, ***6/11/17***; C4825, ***9/11/17***; C4827, C4829, C4830, ***12/11/17***; C4831, ***14/11/17***; C4832, ***14/11/17***; C4833, ***15/11/17***; C4834, C4835, ***16/11/17***; C4836, C4837, ***17/11/17***; C4838, C4839, ***19/11/17***; C4842, ***22/11/17***; C4843, C4844, ***23/11/17***; C4845, C4846, ***24/11/17***; C4847, C4848, ***26/11/17***; C4849, C4850, **28/11/17**; C4601, ***29/11/17***; C4602, C4603, ***30/11/17***; C4604, C4605, ***1/12/17***; C4606, ***3/12/17***; C4615, ***11/12/17***; C4616, C4617, ***12/12/17***; C4618, ***18/12/17***; C4622, ***20/12/17***; C4628, C4629, ***22/12/17***; C4630, C4631, ***27/12/17***; C4632, C4633, ***31/12/17***; C4640, C4641, ***7/1/18***; C4672, C4673, ***14/2/18***; C4699, ***21/2/18***; C4700, C4701, ***22/2/18***; C4706, C4707, ***25/2/18***; C4709, C4855, C4856, C4857, ***27/2/18***; C4710, C4860, C4864, ***28/2/18***; C4719, C4859, C4861, C4862, C4882, C4888, ***7/3/18***; C4868, ***8/3/18***; C4744, C4746, C4747, C4886, C4887, C4894, ***25/3/18***; C4745, ***26/3/18***; C4748, C4749, C4750, C4751, ***28/3/18***; C4752, C4753, ***29/3/18***; C4763, C4764, ***12/4/18***; C4765, ***13/4/18***.

Note - C4823 (Brislington built) is also confirmed on Filton aerodrome in factory fresh condition with a stand under its tail to enable photographs to be taken.

(In addition - recorded at the No.3 (Western) Aircraft Repair Depot at Yate on 14/2/18, - Bristol F.2Bs C4657, C4658, C4659, C4662, C4663, C4664).

The fourth production batch of 300 Bristol F.2B Fighters, C751 to C1050 built under contract AS17573/17 dated 20 August 1917, was delivered between March and May 1918. Confirmed at the Bristol A.A.P:-

C779, C791, C794, C795, C796, ***22/3/18***; C792, C793, C797, ***23/3/18***; C813, ***26/3/18***; C814, ***27/3/18***;C805, C807, C808, C815, C816, C817, C818, ***28/3/18***; C819, C820, C822, C832, C825, ***29/3/18***; C775, C776, C781, C783, C788, ***30/3/18***; C821, ***6/4/18***; C840, C842, C843, ***10/4/18***; C845, C846, ***11/4/18***; C841, ***12/4/18***; C850, C852, ***13/4/18***; C855, C856, C859, C866, C867, C869, C871, ***15/4/18***; C874, ***18/4/18***; C870, C872, C877, ***20/4/18***; C878, C879, C882, ***22/4/18***; C883, C886, ***24/4/18***; C889, ***26/4/18***; C895, C898, C901, ***29/4/18***; C900, ***30/4/18***; C892, ***1/5/18***; C911, C914, ***2/5/18***; C925, ***3/5/18***; C952, **8/5/18**; C950, C951, ***9/5/18***; C924, C953, C955, C957, ***10/5/18***; C927, C930, C958, C959, C960, C962, ***11/5/18***; C933, C936, C939, C942, C945, C961, C965, C967, C968, C970, C973, C976, ***13/5/18***; C978, C979, C980, ***15/5/18***; C956, C983, C986, ***16/5/18***; C987, C989, C1000, C1002, C1003, ***24/5/18***; C982, C1034, C1035, C1036, C1037, ***30/5/18***; C1040, ***31/5/18***; C985, C988, C995, C998, C1001, C1004, C0117, C1010, C1013, C1016, C1019, C1022, C1025, C1028, C1031, ***3/6/18***; C948, C966, C969, C972, C975, C1038, C1041, C1044, ***5/6/18***; C963, ***6/6/18***; C1047, ***7/6/18***; C1050, ***13/6/18***.

The fifth production batch of 300 Bristol F.2B Fighters, D7801 to D8100 built under rolling contract AS17573/17, was delivered between May and November 1918. Confirmed at the Bristol A.A.P:-

D8021, D8022, D8023, D8024, D8025, D8026, D8027, D8028, ***28/5/18***; D8067, D8073, D8074, ***24/6/18***.

The sixth production batch of 500 Bristol F.2B Fighters, E2151 to E2650 built under contract AS3117 dated 9 March 1918, was delivered between July and December 1918. Confirmed at theBristol A.A.P:-

E2452, E2453, E2455, E2457, ***20/7/18***; E2181, E2483, ***25/7/18***; E2518, ***20/8/18***; E2256, E2258, E2259, E2519, E2527, E2529, ***25/8/18***; E2320, ***9/9/18***.

The seventh production batch of 700 Bristol F.2B Fighters, F4271 to F4970 built under contract 35A/779/C658 dated 5 June 1918, was delivered between September 1918 and February 1919. Confirmed at the Bristol A.A.P:-

F4440, F4470, ***16/10/18***; F4523, F4525, F4526, F4527, F4528, F4530, F4538, F4540, ***24/10/18***; F4576, F4577, F4578, F4579, F4580, ***29/10/18***; F4276, F4283, F4289, ***2/11/18***; F4276, ***5/11/18***; F4295, F4300, ***7/11/18***; F4316, F4318, ***12/11/18***; F4355, ***7/12/18***; F4764, F4774, ***16/12/18***; F4333, F4334, F4336, F4337, F4677, F4678, F4679, F4680, ***17/1/19***; F4403, F4404, F4406, F4855, F4856, F4857, F4859, F4861, F4864, F4871, F4872, ***24/1/19***; F4377, F4378, F4381, F4383, F4385, F4386, F4388, F4405, F4407, F4408, F4571, F4736, F4800, F4805, F4806, F4808, F4821, F4829, F4837, F4847, F4848, F4850, F4853, F4854, F4858, F4860, F4862, F4863, F4865, F4866, F4867, F4868, F4874, F4875, ***25/1/19***; F4409, F4410, F4411, F4869, F4870, F4873, F4876, F4877, F4878, F4891, F4892, ***29/1/19***; F4413, F4879, ***30/1/19***; F4414, F4880, F4893, F4894, ***31/1/19***; F4418, F4898, F4899, ***5/2/19***; F4419, F4900, ***6/2/19***; F4895, F4896, F4897, ***7/2/19***; F4839, ***24/3/19***; F4852, ***27/3/19***; F4387, F4393, F4395, F4851, ***28/3/19***; F4400, ***3/4/19***; F4397, F4845, ***7/4/19***; F4830, F4838, ***11/4/19***; F4384, F4849, ***14/4/19***; F4390, F4392, ***18/4/19***; F4394, F4396, F4398, ***19/4/19***.

The Westland Aircraft Works products

First production batch of 100 Airco D.H.9 light bombers, B7581 to B7680 built under contract AS17570/17 dated 25 July 1917, was delivered between December 1917 and May 1918. Most aircraft up to and including B7626 were delivered to No.10 Brooklands A.A.P., but confirmed at the No.5 Bristol A.A.P. from late March 1918 were:-

B7629, ***20/3/18***; B7628, ***25/3/18***; B7634, B7641, B7642, B7643, ***27/3/18***; B7627, B7630, B7632, B7635, B7637, B7638, ***30/3/18***; B7638, ***30/3/18***; B7636, ***5/4/18***; B7656 tested four days after arrival, B7659, ***25/4/18***; B7668, B7670, ***26/4/18***; B7667, B7669, B7673, ***27/4/18***; B7674, ***1/5/18***; B7675, ***29/4/18***; B7660, ***3/5/18***; B7677, ***4/5/18***; B7671, ***5/5/18***; B7678, ***6/5/18***; B7679, B7680, ***20/5/18***.

Second production batch of 48 Airco D.H.9 light bombers, D7201 to D7214 and D7217 to D7250 built under contract AS42381 (BR.228) dated 10 January 1918, was delivered between May and June 1918. Confirmed at the Bristol A.A.P:-

D7203, D7204, D7206, ***17/5/18***; D7201, D7202, D7221, ***20/5/18***; D7222, ***22/5/18***; D7223, ***24/5/18***; D7224, D7225, D7226, D7227, ***28/5/18***; D7228, D7229, ***30/5/18***; D7230, ***31/5/18***; D7239, ***3/6/18***; D7205, D7207, D7208, D7210, ***4/6/18***; D7242, D7243, ***11/6/18***; D7245, D7246, D7248, ***12/6/18***; D7247, ***13/6/18***; D7249, ***14/6/18***; D7240, D7241, ***-/6/18***.

Third production batch of 150 Airco D.H.9A light bombers, F951 to F1100 built under contract 35A/415/C293 dated 21 March 1918, was delivered between June and October 1918. Confirmed at the Bristol A.A.P:-

F952, ***25/6/18***; F951, ***27/6/18***; F953, ***30/6/18***; F955, ***28/6/18***; F958, F959, ***30/6/18***; F956, ***1/7/18***; F964, ***3/7/18***; F963, ***7/7/18***; F961, ***18/7/18***; F966, F984 rigging inspection nine days later, F985 engine test, F986 engine test, ***24/7/18***; F987 engine test - bowed spar nine days later, F988 engine test three days later, ***25/7/18***; F962, F983, F989 flight test, F991 flight test, ***27/7/18***;

Fourth production batch of 50 Airco D.H.9A light bombers, F1603 to F1652 built under contract 35A/573/C472 dated 28 March 1918, was delivered between October and November 1918. Confirmed at the Bristol A.A.P:-

F1634 engine test, ***27/11/18***.

Fifth production batch of 150 Airco D.H.9A light bombers, H3396 to H3545 built under contract 35A/2077/C2410 dated 17 July 1918 was delivered between December 1918 and August 1919. Confirmed at the Bristol A.A.P:-

H3424, ***4/1/19***; H3425, H3427, ***10/1/19***; H3406, ***28/1/19***; H3440, ***1/2/19***; H3436, H3437, ***5/2/19***; H3434, ***10/2/19***; H3435, H3437, H3439, ***12/2/19***; H3408, H3409, H3410, H3426, H3427, ***14/2/19***; H3438, ***18/2/19***; H3411, ***19/2/19***; H3467, ***21/2/19***; H3469, ***8/3/19***; H3468, H3472, ***14/3/19***; H3466, H3471, ***28/3/19***; H3474, ***1/4/19***; H3470, H3475, ***3/4/19***; H3477, ***7/4/19***.

The Gloucestershire Aircraft Company products

The first production batch of 150 Bristol F.2B Fighters, C9836 to C9985 built under contract AS32796 dated 6 November 1917, was delivered between April and September 1918. Confirmed at the Bristol A.A.P:-

C9837, ***17/5/18***; C9838, C5839, C9841, ***27/5/18***; C9840, C9842, C9843, C9844, C9847, ***3/6/18***; C9895, ***29/7/18***; C9850 delivery, ***5/11/18***; C9853 delivery, ***27/9/18***; C9869 delivery, ***30/10/18***.

The second production batch of 150 Bristol F.2B Fighters, E9507 to E9656 built under contract 35A/428/C307 dated 9 April 1918, was delivered between September 1918 and April 1919. Confirmed at the Bristol A.A.P:-

E9619, ***24/12/18***.

(Noted at No.3 (Western) Aircraft Repair Depot at Yate, - Bristol F.2B E9593, E9596, ***8/2/19***; E9613, E9614, ***1/3/19***).

The third production batch of 222 Bristol F.2B Fighters, H834 to H1055 built under contract 35A/2114/C2448 dated 7 August 1918, was delivered between March and August 1919. Confirmed at the Bristol A.A.P:-

H902, ***14/1/19***; H905, ***15/1/19***.

[Noted at No.3 (Western) Aircraft Repair Depot at Yate, - Bristol F.2B H837, ***8/2/19***].

The National Aircraft Factory No.3 products

One production batch of 126 Bristol F.2B Fighters, D2126 to D2251 built under contract AS34276 dated 5 December 1917, was delivered between June 1918 and January 1919. Confirmed at the Bristol A.A.P.:-

D2126, ***13/6/18***.

2) Training Squadron Station

Aircraft recorded as having been associated with No.20 Squadron while at Filton

1681, B.E.2c, (c/n 377), built by the British & Colonial Aeroplane Company at Filton. Fitted with a 70 hp Renault engine. Taken on charge by the R.F.C. in March 1915. Transferred to No.8 Reserve Aeroplane Squadron (Netheravon) on 8/1/16.

1788, B.E.2c, built by Armstrong Whitworth at Gosforth. Fitted with a 70 hp Renault engine (s/n 23557). Taken on charge by the R.F.C. on 10/4/15 and served on the Western Front prior to being returned to England on 15/11/15. Arrived by road at 'C' Flight in shaky condition on 28/11/15. Handed over for nucleus flight of No.33 Squadron (Filton) on 31/12/15.

2862, Blériot XI Parasol, French built. Fitted with an 80 hp Gnome engine (s/n 2943). Taken on charge by the R.F.C. on 15/4/15. Arrived from No.22 Squadron (Gosport) on 10/1/16. Fate unknown.

2880, Vickers F.B.5/5a 'Gunbus', built by Vickers at Erith. Fitted with a 100 hp Gnome engine. Taken on charge by the R.F.C. on 16/8/15 and noted at No.10 Reserve Aeroplane Squadron (Joyce Green) on 6/9/15. Transferred to No.32 Squadron (Netheravon) on 8/1/16 to be used for nucleus flight of No.19 Squadron (Netheravon).

2883, Vickers F.B.5/5a 'Gunbus', built by Vickers at Erith. Fitted with a 100 hp Gnome engine. Taken on charge by the R.F.C. on 24/8/15 and noted at No.10 Reserve Aeroplane Squadron (Joyce Green) on 4/9/15. Transferred to No.32 Squadron (Netheravon) on 8/1/16 to be used for nucleus flight of No.19 Squadron (Netheravon).

4235, Martinsyde S.1 Scout, built by Martin & Handsyde at Brooklands. Taken on charge by the R.F.C on 25/6/15. Delivered from No.18 Squadron (Mousehold Heath) on 15/11/15 by the officer commanding No.9 Reserve Aeroplane Squadron (Norwich) for nucleus flight of No.20 Squadron. Handed over for nucleus flight of No.33 Squadron (Filton) on 8/1/16.

4661, Blériot XI Monoplane, French built. Fitted with a 50 hp Gnome engine (s/n 824). Taken on charge by the R.F.C. on 9/8/15. Arrived from No.22 Squadron (Gosport) on 16/12/15. Fate unknown.

Operational Machines

No Royal Aircraft Factory F.E.2b appears to have been received until after No.20 Squadron had left Filton.

Aircraft recorded as having been associated with No.33 Squadron while at Filton

751, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 20865). Taken on charge by the R.F.C. on 18/1/15 and noted at No.8 Reserve Aeroplane Squadron (Netheravon) on 8/1/16. Handed over to No.19 Squadron (Filton) on 4/4/16.

783, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 4085). Taken on charge by the R.F.C. on 19/6/15 and served on the Western Front. Noted at No. 3 Reserve Aeroplane Squadron (Netheravon) on 5/3/16. Handed over to No.19 Squadron (Filton) on 4/4/16.

787, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 20130). Handed over to No.19 Squadron (Filton) on 4/4/16.

792, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 20131). Taken on charge by the R.F.C. in August 1915 and noted at No.3 Reserve Aeroplane Squadron (Netheravon) on 1/3/16. Handed over to No.19 Squadron (Filton) on 4/4/16.

1788, B.E.2c, built by Armstrong Whitworth at Gosforth. Arrived from No.20 Squadron (Filton) on 31/12/15 to form nucleus flight No.33 Squadron. Transferred to the Reserve Aircraft Pool at Farnborough on 6/3/16.

4235, Martinsyde S.1, built by Martinsyde at Brooklands. Arrived from No.20 Squadron (Filton) on 8/1/16 to form nucleus flight No.33 Squadron. Fate unknown.

Operational Machines

4326, B.E.2c, built by G. & J. Weir at Glasgow. Fitted with an 80 hp Renault engine (s/n 145). Dispatched by rail from No.22 Squadron (Gosport) on 2/2/16.

4415, B.E.2c, built by G. & J. Weir at Glasgow. Dispatched by rail from No.22 Squadron (Gosport) on 2/2/16.

4471, B.E.2c, built by G. & J. Weir at Glasgow. Fitted with an 80 hp Renault engine. Dispatched from No.22 Squadron (Gosport) on 2/2/16.

4462, B.E.2c, built by G. & J. Weir at Glasgow. Fitted with an 80 hp Renault engine (s/n/ 153). Dispatched by rail from No.22 Squadron (Gosport) on 2/2/16.

4515, B.E.2c, built by G. & J. Weir at Glasgow. Fitted with an 80 hp Renault engine. Dispatched by rail from No.22 Squadron (Gosport) on 2/2/16.

4516, B.E.2c, built by G. & J. Weir at Glasgow. Fitted with an 80 hp Renault engine. Dispatched in cases from No.22 Squadron (Gosport) on 2/2/16.

4559, B.E.2c, built by G. & J. Weir at Glasgow. Fitted with an 80 hp Renault engine (s/n 139). Dispatched in cases by rail from No.22 Squadron (Gosport) on 29/1/16.

4560, B.E.2c, built by G. & J. Weir at Glasgow. Fitted with an 80 hp Renault engine (s/n 142). Dispatched in cases by rail from No.22 Squadron (Gosport) on 29/1/16.

Aircraft recorded as having been associated with No.42 Squadron while at Filton

508, Henry Farman F.20, built by Airco at Hendon. Fitted with an 80 hp Gnome engine. Transferred from No.19 Squadron (Filton). Struck off charge as worn out on 13/4/16.

751, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine. Transferred from No.19 Squadron (Filton). Written off 2/7/16.

783, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine. Transferred from No.19 Squadron (Filton). Wrecked 25/7/16.

1774, Royal Aircraft Factory B.E.2c, built by Vickers at Weybridge. Fitted with an 80 hp Renault engine (s/n 144). Handed over to No.66 Squadron (Filton) on 15/7/16.

2365, Royal Aircraft Factory R.E.7, built by Siddeley-Deasy at Coventry. Fitted with a 120 hp Beardmore engine (s/n 350). Transferred to No.35 Squadron (Narborough) on 5/7/16.

2936, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 20843). Noted at Southern Aircraft Depot (Ascot) 23/5/16. Handed over to No.66 Squadron (Filton) by 31/8/16.

4059, Avro 504A, built by Bleriot Aeronautics at Hendon. Fitted with an 80 hp Gnome engine (s/n 20864). Handed over to No.66 Squadron (Filton) on 15/7/16.

4111, Royal Aircraft Factory B.E.2c, (c/n 662) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 23219). At the Royal Aircraft Establishment (Farnborough) on 15/2/16. Converted from B.E.2e and tested at the Central Flying School (Upavon) on 30/3/16. Taken on charge on 5/7/16. Noted at No.20 Reserve Squadron (Wye) by 28/12/16.

4266, Royal Aircraft Factory F.E.2b, built by G. & J. Weir at Glasgow. Fitted with a 120 hp Beardmore engine. Written off 12/7/16 and sent to Boulton & Paul at Norwich.

5329, Armstrong Whitworth F.K.2, built by Armstrong Whitworth at Gosforth. Fitted with a 70 hp Renault engine (s/n 42658). Noted at No.7 Reserve Aeroplane Squadron (Netheravon) on 8/1/16. Transferred to the 4th Wing Aircraft Repair Section (Netheravon) on 30/7/16.

5330, Armstrong Whitworth F.K.2, built by Armstrong Whitworth at Gosforth. Noted at No.7 Reserve Aeroplane Squadron (Netheravon) on 8/1/16. Written off 2/7/16 and reduced to spares.

5519, Armstrong Whitworth F.K.2, built by Armstrong Whitworth at Gosforth. Taken on charge without engine 7/7/16. Noted at No.52 Squadron (Hounslow) by 8/11/16.

A462, Avro 504A, French built. Fitted with an 80 hp Gnome engine. Noted at the Aeronautical Inspection Department (Farnborough) on 11/6/16. Written off and reduced to spares 4/7/16.

Operational Machines

5753, Royal Aircraft Factory B.E.2d, (c/n 917) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 21995). Taken on charge 27/7/16.

5760, Royal Aircraft Factory B.E.2d, (c/n 924) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 22934). Taken on charge 2/8/16.

5761, Royal Aircraft Factory B.E.2d, (c/n 925) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 25888). Taken on charge 5/7/16. Transferred to No.66 Squadron (Filton) 29/7/16 with 90 hp RAF engine (s/n 21972).

5772, Royal Aircraft Factory B.E.2d, (c/n 936) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 8679). Taken on charge 1/8/16.

5790, Royal Aircraft Factory B.E.2d, (c/n 954) built by the British & Colonial Aeroplane Company at Filton. At Bristol Aircraft Acceptance Park 25/5/16, taken on charge 2/8/16.

5805, Royal Aircraft Factory B.E.2d, (c/n 969) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 739). Taken on charge 4/8/16.

5825, Royal Aircraft Factory B.E.2d, (c/n 989) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 727). Taken on charge from Bristol Aircraft Acceptance Park on 9/7/16.

5826, Royal Aircraft Factory B.E.2d, (c/n 990) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 724). Taken on charge from Bristol Aircraft Acceptance Park on 11/7/16.

5840, Royal Aircraft Factory B.E.2d, (c/n 1004) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 478). Taken on charge 5/7/16. Transferred to Bristol Aircraft Acceptance Park on 10/7/16 for dispatch to France.

5845, Royal Aircraft Factory B.E.2d, (c/n 1009) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 23254). Taken on charge 1/8/16.

5848, Royal Aircraft Factory B.E.2d, (c/n 1012) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 25890). Taken on charge 30/7/16.

5850, Royal Aircraft Factory B.E.2d, (c/n 1014) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 21972/WD288). Taken on charge 30/7/16.

5856, Royal Aircraft Factory B.E.2d, (c/n 1020) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 22046). Taken on charge 27/7/16.

5857, Royal Aircraft Factory B.E.2d, (c/n 1021) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 22035). Taken on charge 28/7/16.

5860, Royal Aircraft Factory B.E.2d, (c/n 1024) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 22118). Taken on charge 14/7/16.

5863, Royal Aircraft Factory B.E.2d, (c/n 1027) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 1272). Taken on charge 14/7/16.

5864, Royal Aircraft Factory B.E.2d, (c/n 1028) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n E771). Taken on charge 16/7/16.

5865, Royal Aircraft Factory B.E.2d, (c/n 1029) built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 22968). Taken on charge 16/7/16.

6237, Royal Aircraft Factory B.E.2d, built by Ruston Proctor at Lincoln. Fitted with a 90 hp Raf engine (s/n 23223). Taken on charge 30/7/16.

6256, Royal Aircraft Factory B.E.2d, built by Ruston Proctor at Lincoln. Fitted with a 90 hp Raf engine (s/n 770/WD3117). Taken on charge 3/8/16.

6257, Royal Aircraft Factory B.E.2d, built by Ruston Proctor at Lincoln. Fitted with a 90 hp Raf engine (s/n E776/WD3125). Taken on charge 26/7/16.

6258, Royal Aircraft Factory B.E.2d, built by Ruston Proctor at Lincoln. Fitted with a 90 hp Raf engine (s/n 1341/WD1511). Taken on charge 30/7/16.

6260, Royal Aircraft Factory B.E.2d, built by Ruston Proctor at Lincoln. Fitted with a 90 hp Raf engine (s/n 786/WD3125). Taken on charge 3/8/16.

6261, Royal Aircraft Factory B.E.2d, built by Ruston Proctor at Lincoln. Fitted with a 90 hp Raf engine (s/n 785). Taken on charge 6/8/16.

Aircraft recorded as having been associated with No.19 Squadron while at Filton

508, Henry Farman F.20, built by Airco at Hendon. Ordered 22/7/14. Fitted with an 80 hp Gnome engine. On 5/3/15 it was being operated by No.11 Squadron (Netheravon). On 8/1/16 it transferred from No.8 Reserve Aeroplane Squadron (Netheravon) to No.32 Squadron (Netheravon) to form the nucleus of No.19 Squadron. Handed over to No.42 Squadron (Filton).

751, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 20865). Taken over from No.33 Squadron (Filton) on 4/4/16. Flown at Patchway on 25/4/16 by Bristol born No.91 Flight Sergeant William Hedley Butt. Handed over to No.42 Squadron (Filton).

783, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 4085). Taken over from No.33 Squadron (Filton) on 4/4/16. Handed over to No.42 Squadron (Filton).

787, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 20130). Taken over from No.33 Squadron (Filton) on 4/4/16.

792, Avro 504, built by A.V.Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 20131). Taken over from No.19 Squadron (Filton) on 4/4/16. Flown at Patchway on 26/4/16 by Bristol born No.91 Flight Sergeant William Hedley Butt.

2187, Royal Aircraft Factory R.E.7, built by Coventry Ordnance Works. Fitted with 120 hp Beardmore engine (s/n 352). Taken on charge from No.21 Squadron (Netheravon) on 2/2/16. Transferred to No.35 Squadron (Narborough) on 5/7/16, by then fitted with 120 hp Beardmore engine (s/n 229).

2236, 'Sind', Royal Aircraft Factory R.E.7. Taken on charge on 5/1/16. Probably served at Filton.

2359, Royal Aircraft Factory R.E.7, built by Siddeley-Deasy at Coventry. Fitted with 120 hp Beardmore engine (s/n 349). Noted in France from 24/1/16 to 21/4/16. Transferred to No.35 Squadron (Narborough) on 7/7/16.

2361, 'The Akyab Burma', Royal Aircraft Factory R.E.7, built by Siddeley-Deasy at Coventry. Noted on charge on 8/1/16. Photographed dismantled in a hangar at Filton.

2363, 'Newfoundland No.1', Royal Aircraft Factory R.E.7, built by Siddeley-Deasy at Coventry. Fitted with 120 hp Beardmore engine. Noted on charge on 17/1/16. Probably served at Filton. At No.35 Squadron (Narborough) by 28/9/16.

4050, Avro 504A, built by A.V.Roe at Manchester. Known to have been flown at No.3 Reserve Aeroplane Squadron (Shoreham) on 9/3/16 by Bristol born No.91 Flight Sergeant William Hedley Butt. Taken on charge on 5/6/16. Written off on 9/6/16.

6143, Royal Aircraft Factory B.E.12, built by the Standard Motor Co., at Coventry. Fitted with a 140 hp Raf engine (s/n 3564). Taken on charge from the Southern Aircraft Depot (Farnborough) on 22 June 1916. Handed over to No.66 Squadron (Filton) on 31/7/16.

6145, Royal Aircraft Factory B.E.12, built by the Standard Motor Co., at Coventry. Fitted with a 140 hp Raf engine (s/n 287). Taken on charge from the Southern Aircraft Depot (Farnborough) on 22 June 1916. Handed over to No.66 Squadron (Filton) on 15/7/16.

6148, Royal Aircraft Factory B.E.12, built by the Standard Motor Co., at Coventry. Fitted with a 140 hp Raf engine (s/n 297). Taken on charge new on 29/6/16 and posted to 'B' Flight. Transferred to the Southern Aircraft Depot (Farnborough) on 20/7/16.

6502, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25122/WD5624). Taken on charge new on 24/6/16. Transferred to the Southern Aircraft Depot (Farnborough) on 20/7/16.

6506, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25180/WD5627). Taken on charge new by 'B' Flight on 28/6/16. Transferred to the 4th Wing Aircraft Repair Section (Netheravon) on 25/7/16.

6514, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf 4a engine. Taken on charge new on 22/6/16. Handed over to No.66 Squadron (Filton) on 23 August 1916.

6415, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25133). Taken on charge new by 'A' Flight on 25/6/16. Transferred to No.48 Squadron (Rendcomb) on 22/7/16.

6516, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25136). Taken on charge new by 'B' Flight on 25/6/16. Handed over to No.66 Squadron (Filton) on 31/7/16.

6518, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25134). Arrived from the Southern Aircraft Depot (Farnborough) on 22/6/16 and taken on charge by ‘C’ Flight. Handed over to No.66 Squadron (Filton) on 31/7/16.

6519, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25147). Arrived from the Southern Aircraft Depot (Farnborough) on 1/7/16 and taken on charge by ‘C’ Flight. Transferred to No.48 Squadron (Rendcomb) on 28/7/16.

6520, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25131). Taken on charge new on 18/7/16. Written off 22/7/16 and reduced to spares.

6521, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25143). Arrived from the Southern Aircraft Depot (Farnborough) on 20/7/16 and taken on charge by ‘A’ Flight. Handed over to No.66 Squadron (Filton) on 31/7/16.

6522, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25141). Taken on charge new by ‘A’ Flight on 1/7/16. Transferred to No.48 Squadron (Rendcomb) on 22/7/16.

6523, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf4a engine. On 22/6/16 re-allotted from Expeditionary Force in France to No.19 Squadron. Written off on 5/7/16 and reduced to spares.

6524, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25142). Arrived from the Southern Aircraft Depot (Farnborough) on 1/7/16 and taken on charge by ‘B’ Flight. Handed over to No.66 Squadron (Filton) on 15/7/16.

6525, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25146). Transferred to No.48 Squadron (Rendcomb) on 22/7/16.

6527, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25130). Taken on charge by ‘C’ Flight on 1/7/16. Transferred to No.48 Squadron (Rendcomb) on 28/7/16.

6530, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25127/WD5652). Arrived from the Southern Aircraft Depot (Farnborough) on 10/7/16 and taken on charge by ‘B’ Flight. Transferred to No.48 Squadron (Rendcomb) on 28/7/16.

6536, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25153/WD5658). At Southern Aircraft Depot (Farnborough) on 10/7/16. Allocated to ‘C’ Flight but crashed on its ferry flight on 11/7/16. Nevertheless, still taken on charge but handed over to No.66 Squadron (Filton) on 23/8/16.

6550, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25170). Taken on charge new by ‘C’ Flight on 14/7/16, but arrived damaged. Handed over to No.66 Squadron (Filton).

Operational Machines

6479, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 324). Arrived from the Southern Aircraft Depot (Farnborough) and was posted to ‘A’ Flight on 20/7/16.

6513, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25129). Taken on charge by ‘C’ Flight on 19/7/16.

6528, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25105/WD5639). Arrived from the Southern Aircraft Depot (Farnborough) on 10/7/16 and taken on charge by 'C' Flight.

6537, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25140/WD5650). Taken on charge new by 'A' Flight on 10/7/16.

6538, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25149). Taken on charge new by 'A' Flight on 13/7/16.

6539, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25156). Taken on charge new by 'B' Flight on 13/7/16.

6540, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25144). Taken on charge new by 'C' Flight on 12/7/16.

6541, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25163). Taken on charge new by 'C' Flight on 20/7/16.

6542, Royal Aircraft Factory B.E.12, built by Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25179). Taken on charge new by 'B' Flight on 20/7/16.

6543, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25161). Taken on charge new on 9/7/16.

6544, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25164). Taken on charge new on 9/7/16.

6545, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 2517). Taken on charge new on 9/7/16.

6546, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25159/WD5666). Taken on charge new by 'A' Flight on 10/7/16.

6547, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25165). Taken on charge new by 'A' Flight on 11/7/16.

6548, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25173). Taken on charge new by 'B' Flight on 14/7/16.

6549, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25172). Taken on charge new by 'C' Flight on 11/7/16.

6551, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25175). Taken on charge new on 16/7/16.

6552, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25171). Taken on charge new by 'B' Flight on 18/7/16.

6553, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25194). Taken on charge new by 'B' Flight on 18/7/16.

6554, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25182). Taken on charge new by 'A' Flight on 19/7/16.

Aircraft recorded as having been associated with No.66 Squadron while at Filton

1774, Royal Aircraft Factory B.E.2c, built by Vickers at Weybridge. Fitted with an 80 hp Renault engine (s/n 144). Taken over from No.42 Squadron (Filton) on 16/7/16. It was smashed while landing and sent to the 21st Wing Aircraft Repair Section (Rendcomb) on 8 August. It was last noted on the squadron strength on 2/11/16, before being struck off charge on 10/11/16.

2110, Royal Aircraft Factory B.E.2c, built by the Daimler Company Ltd at Coventry. Fitted with a 90 hp Raf engine. Originally taken on charge by the R.F.C. on 8/12/15. Handed over to No.62 Squadron (Filton) on 17/10/16.

2782, Royal Aircraft Factory B.E.2b, built by Joucques Aviation at Willesden. Fitted with 70 hp Renault engine (s/n 42881). Taken on charge new on 30/9/16. Transferred to No.58 Squadron (Cramlington) on 12/2/17 with engine (s/n 42493).

2783, Royal Aircraft Factory B.E.2b, built by Joucques Aviation at Willesden. Fitted with 70 hp Renault engine (s/n 75). Taken on charge new on 20/9/16. Forced landing on 18/1/17 while being flown by Lieutenant Alfred Reginald Boeree. Transferred by rail to No.58 Squadron (Cramlington) on 13/2/17.

2784, Royal Aircraft Factory B.E.2b, built by Joucques Aviation at Willesden. Fitted with 70 hp Renault engine (s/n 26). Taken on charge new on 20/9/16. Transferred by rail to No.58 Squadron (Cramlington) on 13/2/17.

2936, Avro 504A, built by S.E. Saunders Ltd at East Cowes. Fitted with an 80 hp Gnome engine (s/n 20843). Taken on charge new on 29/7/16. Handed over to No.62 Squadron (Filton) on 31/8/16.

4049, Avro 504A, built by Bleriot Aeronautics at Hendon. Fitted with an 80 hp Gnome engine (s/n 3928). Taken on charge new on 17/7/16. Transferred to the Royal Aircraft Factory on 6/9/16.

4059, Avro 504A, built by Bleriot Aeronautics at Hendon. Fitted with an 80 hp Gnome engine (s/n 23787). Taken on charge new on 14/7/16. Transferred to the 6th Wing at Dover on 14/8/16, by which time it was fitted with an 80 hp Gnome engine (s/n 20864/WD4257).

4430, Royal Aircraft Factory B.E.2c, group built under G. & J. Weir Ltd of Glasgow. Fitted with a 90 hp Raf engine (s/n E717). Taken on charge new from the Southern Aircraft Depot (Farnborough) on 14/9/16. Wrecked and sent to the 21st Wing Aircraft Repair Section (Rendcomb) on 25/9/16.

4745, Avro 504A, built by A.V. Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 20866). Known to have been flown at No.3 Reserve Aeroplane Squadron (Shoreham) four times between 18/1/16 and 10/2/16 by Bristol born No.91 Flight Sergeant William Hedley Butt. Taken on charge on 20/7/16. Transferred to the 6th Wing at Dover on 14/8/16, by which time it was fitted with an 80 hp Gnome engine (s/n 20131).

5434, Royal Aircraft Factory B.E.2c, built by Vickers at Weybridge. Fitted with a 90 hp Raf engine (s/n 658). Taken on charge 4/8/16. Spun in at Filton. Wreckage sent to the 21st Wing Aircraft Repair Section (Rendcomb) on 22/9/16 (Photo exists).

5761, Royal Aircraft Factory B.E.2d (c/n 925), built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n 21972). Taken over from No.42 Squadron (Filton) on 29/7/16. Sent to the 21st Wing Aircraft Repair Section (Rendcomb) on 11/9/16. Taken back on charge 10/11/16. Written off in crash 2/1/17, at which time it was fitted with the 90 hp Raf engine (s/n E658/WD3007).

5842, Royal Aircraft Factory B.E.2d, (c/n 1006), built by the British & Colonial Aeroplane Company at Filton. Taken on charge on 17/11/16. Write off submitted 30/11/17. Wreck to the 21st Wing Aircraft Repair Section (Rendcomb).

6143, Royal Aircraft Factory B.E.12, built by the Standard Motor Co., at Coventry. Fitted with a 140 hp Raf engine (s/n 3564). Taken over from No.19 Squadron (Filton) on 31/7/16.

6145, Royal Aircraft Factory B.E.12, built by the Standard Motor Co., at Coventry. Fitted with a 140 hp Raf engine (s/n 287). Taken over from No.19 Squadron (Filton) on 15/7/16. Sent to the 21st Wing Aircraft Repair Section (Rendcomb) on 16/7/16. Tested on 18/7/16 with small tail and large fin. On 23/7/16 returned to No.66 Squadron. Transferred by air to Beaulieu aerodrome on 20/10/16, by which time it was fitted with a 140 hp Raf engine (s/n 25141).

6237, Royal Aircraft Factory B.E.2d, built by Ruston, Proctor & Company at Lincoln. Collected from No.38 Reserve Squadron (Rendcomb) by 2nd Lieutenant Arthur Stanley Gould Lee on 13/1/17.

6514, Royal Aircraft Factory B.E.12, built by the Daimler Company Ltd at Coventry. Taken over from No.19 Squadron (Filton) on 23/8/16. To the Central Flying School (Upavon) on 24/8/16 and at the 4th Wing Aircraft Repair Section (Netheravon) on 31/8/16. Last noted by No.66 Squadron on 7/12/16 when it transferred from the Central Flying School to No.16 Reserve Squadron (Beaulieu).

6516, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25136). Taken over from No.19 Squadron (Filton) on 31/7/16. Awaiting write off on 16/10/16.

6518, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25134). Taken over from No.19 Squadron (Filton) on 31/7/16. On 9/11/16 it was sent to the Southern Aircraft Depot (Farnborough) wrecked, and by then was fitted with a 140 hp Raf engine (s/n SD377).

6521, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25143). Taken over from No.19 Squadron (Filton) on 31/7/16. Last noted on strength on 1/12/16.

6524, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25142). Taken over from No.19 Squadron (Filton) on 15/7/16. To the 4th Wing Aircraft Repair Section at Netheravon on 24/8/16. Returned from Netheravon on 7/12/16.

6536, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25153/WD5658). Taken over from No.19 Squadron (Filton) in a damaged condition on 23/8/16. Write off confirmed on 31/8/16.

6550, Royal Aircraft Factory B.E.12, built by the Daimler Co. Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 25170). Taken over from No.19 Squadron (Filton). Last noted on strength on 12/1/17.

6735, Royal Aircraft Factory B.E.2d, built by the Vulcan Motor & Engineering Co. Ltd at Southport. Fitted with a 90 hp Raf engine (s/n 658). Taken on charge new from the Southern Aircraft Depot (Farnborough) on 7/9/16. Crashed and written off on 21/12/16.

7211, Royal Aircraft Factory B.E.2e (c/n 1327), built by British & Colonial Aeroplane Company at Filton. Allotted for use on the Western Front on 28 October. Temporarily on the strength of No.66 Squadron, the new aircraft was being delivered to the Southern Aircraft Depot (Farnborough), when it crashed and was written off.

7716, Avro 504A, built by A.V. Roe at Manchester. Fitted with an 80 hp Clerget engine (s/n 1000). Taken on charge new on 18/7/16. Last noted on strength on 23/1/17.

7717, Avro 504A, built by A.V. Roe at Manchester. First noted on strength on 3/8/16. Last noted on strength 23/11/16.

7718, Avro 504A, built by A.V. Roe at Manchester. Fitted with an 80 hp Gnome engine (s/n 23918). Flown at Patchway on 3/7/16 by Bristol born No.91 Flight Sergeant William Hedley Butt. Taken on charge on 28/7/16. Sent wreck to the 21st Wing Aircraft Repair Section (Rendcomb) on 18/9/16.

7719, Avro 504A, built by A.V. Roe at Manchester. Fitted with an 80 hp Clerget engine (s/n 1003). Taken on charge 18/7/16. Sent wrecked to the 21st Wing Aircraft Repair Section (Rendcomb) on 21/9/16.

A420, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 4032). Taken on charge new on 25/9/16. Written off in crash on 27/11/16, by then fitted with an 80 hp Gnome engine (s/n 5069).

A421, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 3825). Taken on charge new on 28/9/16. Written off 28/11/16.

A423, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 2395). Taken on charge new on 16/10/16. Crashed on 21/11/16 and written off.

A424, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 5069). Taken on charge new on 15/10/16. Last noted on strength on 22/1/17.

A427, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 4553). Taken on charge new on 17/10/16. Last noted on strength on 22/1/17. Later recorded at No.62 Squadron (Rendcomb).

A429, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 27293). Taken on charge new on 4/10/16. Last noted on strength on 21/1/16.

A482, Avro 504A, built by the Bleriot & SPAD Works at Addlestone. Fitted with an 80 hp Gnome engine (s/n 5066). Originally with No.8 Reserve Squadron (Netheravon). First noted on strength of No.66 Squadron on 18/1/17. Last noted 21/1/17.

A485, Avro 504A, built by the Bleriot & SPAD Works at Addlestone. Fitted with an 80 hp Gnome engine (s/n 3532). Taken on charge new 6/8/16. Sent wrecked to the 21st Wing Aircraft Repair Section (Rendcomb) on 5/10/16, by which time it was fitted with the 80 hp Gnome engine (s/n 4027).

A488, Avro 504A, built by the Bleriot & SPAD Works at Addlestone. Fitted with an 80 hp Gnome engine (s/n 20586). Taken on charge new on 9/8/16. Last noted on strength on 23/11/16. Write off submitted on 25/11/16. Sent to by rail to No.37 Reserve Squadron (Scampton) on 18/2/17, by which time it was fitted with the 80 hp Gnome engine (s/n 27391).

A3355, Avro 504A, built by A.V. Roe at Manchester. First noted on strength on 10/1/17, forced landed on 16/1/17, last noted on strength on 23/1/17.

A3356, Avro 504A, built by A.V. Roe at Manchester. First noted on strength on 10/1/17.

A3357, Avro 504A, built by A.V. Roe at Manchester. First noted on strength on 10/1/17. Crash on 13/1/17.

A5918, Avro 504A, built by A.V. Roe at Manchester. First noted on strength 23/11/16. Last noted on strength 21/1/17.

Operational Machines

A632, Sopwith Pup, built by the Standard Motor Company at Coventry. Fitted with an 80 hp Le Rhône engine. Allotted on 24/2/17 following repair at the Southern Aircraft Depot (Farnborough).

A650, Sopwith Pup, built by the Standard Motor Company at Coventry. Fitted with an 80 hp Le Rhône engine. Allotted 23/2/17.

A662, Sopwith Pup, built by the Standard Motor Company at Coventry. Fitted with an 80 hp Le Rhône engine. Allotted 23/2/17.

A663, Sopwith Pup, built by the Standard Motor Company at Coventry. Taken on charge new on 5/2/17. Collected from No.1 Aircraft Acceptance Park (Coventry) by 2nd Lieutenant H.A. Johnston.

A664, Sopwith Pup, built by the Standard Motor Company at Coventry. Taken on charge new on 10/2/17. Collected from No.1 Aircraft Acceptance Park (Coventry) by 2nd Lieutenant H.A. Johnston. Not taken to France and recorded at Rendcomb on 27/3/16.

A665, Sopwith Pup, built by the Standard Motor Company at Coventry. Taken on charge new on 5/2/17. Collected from No.1 Aircraft Acceptance Park (Coventry) by 7562 Sergeant William Henry Dunn. Transferred to the Southern Aircraft Depot (Farnborough) by 27/03/17.

A675, Sopwith Pup, built by the Standard Motor Company at Coventry. Taken on charge new on 5/2/17. Collected from No.1 Aircraft Acceptance Park (Coventry) by Captain John Whitaker Woodhouse.

A6151, Sopwith Pup, built by Whitehead Aircraft at Richmond, Surrey. Arrived without engine. On strength from 3/2/17 and sent to the 21st Wing Aircraft Repair Section (Rendcomb) on 10/2/17. Returned to No.66 Squadron by road on 24/2/16. Not taken to France, at Croydon by 27/3/17.

A6152, Sopwith Pup, built by Whitehead Aircraft at Richmond, Surrey. Taken on charge new on 8/2/17. Collected from the Southern Aircraft Depot (Farnborough) by 2nd Lieutenant H. A. Johnston.

A6153, Sopwith Pup, built by Whitehead Aircraft at Richmond, Surrey. Taken on charge new on 13/2/17. Collected from the Southern Aircraft Depot (Farnborough) by Lieutenant F. A. Smith, not taken to France.

A6155, Sopwith Pup, built by Whitehead Aircraft at Richmond, Surrey. Fitted with an 80 hp Le Rhône engine (s/n 577). Arrived by air on 13/2/17.

A6160, Sopwith Pup, built by Whitehead Aircraft at Richmond, Surrey. Allotted on 24.2.17.

A7302, Sopwith Pup, built by the Standard Motor Company at Coventry. Taken on strength on 8/2/17. Collected for Bristol by 2nd Lieutenant Patrick Gordon Taylor. Crashed by Major Owen Tudor Boyd on 27/2/17.

A7305, Sopwith Pup, built by the Standard Motor Company at Coventry. Taken on strength on 26/2/17. Collected from No.1 Aircraft Acceptance Park (Coventry) by Captain John Whitaker Woodhouse.

A7313, Sopwith Pup, built by the Standard Motor Company at Coventry. Allotted on 24/2/1917. Taken on strength on 24/2/17. Not taken to France.

A7314, Sopwith Pup, built by the Standard Motor Company at Coventry. Taken on strength on 1/3/17.

A7315, Sopwith Pup, built by the Standard Motor Company at Coventry. Allotted on 24/2/1917.

A7316, Sopwith Pup, built by the Standard Motor Company at Coventry. Allotted on 24/2/17. Taken on strength on 1/3/17.

Aircraft recorded as having been associated with No.62 Squadron while at Filton

2110, Royal Aircraft Factory B.E.2c, built by the Daimler Company Ltd at Coventry. Fitted with a 90 hp Raf engine. Originally taken on charge by the R.F.C. on 8/12/15. Handed over by No.66 Squadron (Filton) on 17/10/16.

2317, Royal Aircraft Factory R.E.7, built by D. Napier & Sons at Acton in London. Fitted with a 90 hp Raf engine (s/n 25103). Arrived by road from the Southern Aircraft Depot (Farnborough) on 19/2/17.

2390, Royal Aircraft Factory R.E.7, built by Siddeley-Deasy Motor Company at Coventry. Received from the 21st Wing Aircraft Repair Section (Rendcomb) on 19/2/17.

2936, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 20843). Handed over by No.66 Squadron (Filton) on 31/8/16.

5876, Royal Aircraft Factory B.E.2d (c/n 1040), built by the British & Colonial Aeroplane Company at Filton. Fitted with a 90 hp Raf engine (s/n E770/WD3120). crashed and written off on 26/6/17.

6482, Royal Aircraft Factory B.E.12, built by the Daimler Company Ltd at Coventry. Fitted with a 140 hp Raf engine (s/n 140). Damaged at the Central Flying School (Upavon). Arrived by road from the 21st Wing Aircraft Repair Section (Rendcomb) on 26/2/17.

7719, Avro 504A, built by A.V. Roe in Manchester. Seriously damaged by No.66 Squadron (Filton) and sent to the Aircraft Repair Section (Rendcomb) on 21/9/16. Delivered from the Aircraft Repair Section (Rendcomb) on 17/2/17.

A427, Avro 504A, built by S.E. Saunders at East Cowes. Fitted with an 80 hp Gnome engine (s/n 4553). Taken on charge new on 17/10/16. Handed over by No.66 Squadron (Filton). Crashed 18/5/17.

A500, Avro 504A, built by the Bleriot & SPAD Works at Addlestone. Crashed 5/12/16.

A504, Avro 504A, built by the Bleriot & SPAD Works at Addlestone. Fitted with an 80 hp Gnome engine (s/n 23876). Transferred by air to No.55 Reserve Squadron (Yatesbury) on 21/2/17.

A509, Avro 504A, built by the Bleriot & SPAD Works at Addlestone. Fitted with an 80 hp Gnone engine (s/n 2991/WD371).Delivered by road from the 21st Wing Aircraft Repair Section (Rendcomb) on 23/2/17. Crashed 23/4/17.

A543, Avro 504A, built by A.V. Roe at Manchester. Delivered by road from 21st Wing Aircraft Repair Section (Rendcomb) on 23/2/17.

A1994, Avro 504A, built by the Bleriot & SPAD Works at Addlestone. Fitted with an 80 hp Gnome engine (s/n 4110/1510). Transferred by air to No.55 Reserve Squadron (Yatesbury) on 14/2/17.

A2967, Royal Aircraft Factory B.E.2e, (c/n 1721), built by the British & Colonial Aeroplane Company at Filton. Delivered from the makers on 5/6/17. Crashed during a test flight on 11/6/17.

A2972, Royal Aircraft Factory B.E.2e, (c/n 1726), built by the British & Colonial Aeroplane Company at Filton. Fitted with 90 hp Raf engine (s/n 13808). Crashed on 30/4/17 during delivery from the Aeronautical Inspection Department at Filton.

Operational Machines

No Bristol F.2B Fighters appear to have been received until after No.62 Squadron had left Filton for Rendcomb.

APPENDIX

(Visit of the Dutch Bristol F.2B Fighter, BR401, to Filton on 9 October 1919)

British & Colonial Aeroplane Company Advertisement 8 October 1919
(In 'The Aeroplane' magazine)

In September 1917, a Bristol Fighter was delivered from the 'Bristol' works and put into commission in the fighting area. It was unfortunately landed in Holland and soon afterwards was acquired by the Dutch Government. From that time until now, though in continuous use by the Dutch pilots, it has never been repaired or renovated in any way, every unit being exactly as when it left the 'Bristol' works. Even the 'Cellon' dope has never been renewed. (Includes photograph of Bristol Fighter C4823).

Cellon Advertisement 15 October 1919
(In 'The Aeroplane' magazine)

In September 1917, a Bristol Fighter was delivered from the 'Bristol' works and put into commission in the fighting area. It was unfortunately landed in Holland and soon afterwards was acquired by the Dutch Government. From that time until now, though in continuous use by the Dutch pilots, the 'Cellon Dope' has never been renewed and is still in perfect condition. The machine has never been repaired or renovated in any way, every unit being exactly as when it left the 'Bristol' works. (Includes photograph of Bristol Fighter C4823).

'The Aeroplane', 22 October 1919, page 1444

A Bristol Fighter in the Dutch Army. A Bristol fighter belonging to the Dutch Army is now at Hendon. It was flown from Holland to England some time ago by Lieut. Versteegh, Royal Netherlands Army, with an officer-observer as passenger. The machine has been flown to various parts of England during its stay in the country.

One of these visits was to its birthplace at Bristol. In view of the common arguments as to the durability of aircraft it should be here stated that this Bristol fighter 'is two years old and has been in continuous use both on the Western Front and in Holland. A red cock has been painted on the sides of the fuselage by those in whose charge it is.

'Flight', 23 October 1919, page 1406

Still going strong. The short life of an aeroplane is a weapon much beloved by those who refuse to believe in the possibilities of commercial aviation. As a matter of fact, with reasonable care, the life of a well-built machine is much longer than is generally thought. By way of an example, we publish above a photograph of a Bristol Fighter which has been in continuous commission on the fighting front and in Holland for over two years without, we are assured, the expenditure of a single penny on renewals or repairs. Recently this machine paid a visit to this country, piloted by the famous Dutch pilot, Versteegh, who was accompanied by another Dutch officer. While in this country the machine paid several flying visits to places in various parts of the country, including its

old home and birthplace at Filton, Bristol. (Includes photograph of aircraft on the ground at Filton).

‘The Aeroplane’, 29 October 1919, page 1509

A Bristol Fighter belonging to the Royal Netherlands Army. This machine was recently flown from Holland to England. (Includes photograph of aircraft on the ground showing fighting cock insignia).

Notes

The photograph included in the ‘British & Colonial’ and ‘Cellon’ adverts is of Bristol F2.B Fighter, C4823, which is well known from B&C publicity shots, while the aircraft which landed in Holland was in fact B1124. Bristol F.2B Fighter, B1124, (construction number 2292) was one of a batch of 250 built by British & Colonial Aeroplane Company at Filton under contract 87/A/552. It was fitted with a 250 h.p. Rolls-Royce Falcon II engine, serial number 249/WD18401.

19 September 1917 - At the Bristol Aircraft Acceptance Park and allotted to the Expeditionary Force in France.

23 September 1917 - Delivered directly by air to No.1 Air Depot at St Omer.

25 September 1917 - Ferried to No.48 Squadron at Leffrinckoucke aerodrome just north-east of Dunkirk. The unit had been the first fighter squadron to be equipped with the Bristol Fighter.

29 September 1917 - With 2nd Lieutenant Frank Leslie Smith as pilot, and 2nd Lieutenant James Frost as observer, B1124 took off from Leffrinckoucke at 2.20 p.m. as part of a bombing mission to Zebrugge.

The machine was last observed in the formation near Zebrugge with its engine failing, after which it was seen to turn away and glide down in the direction of Holland. It was then hit in the engine by anti-aircraft gunfire while over Aardenburg in the Netherlands before being forced landed at Oostburg, between Sluis and Zuidzande in Zeeland at 3 p.m. Both crewmen were subsequently interned in the Netherlands.

8 October 1917 - B1124 was moved to Soesterberg aerodrome.

23 January 1918 - After repairs had been carried out Lt. William Carel Johan Versteegh made the first test flight from Soesterberg. In 1918 B1124 was purchased by the Dutch Government, given new national markings and the Luchtvaarttafdeling serial BR401. While in LvA service it also carried an engine type number on the fuselage, in this case RR250. It later had a white fighting cock with a red head and orange legs painted on both sides of the fuselage ahead of the orange circle national insignia.

15 November 1918 - The British crew were repatriated from the Netherlands via Rotterdam having been interned in ‘het Engelse Kamp’ (the English Camp) at Groningen.

30 September 1919 - Lt. Versteegh, pilot, and Lt. Hofstee, observer, flew BR401 over to England and paid flying visits to several places in the country, including Filton near Bristol, where it had been built, and later Hendon near London.

9 October 1919 - BR401 photographed on Filton Aerodrome.

13 October 1919 - BR401 flew back to the Netherlands.

26 March 1925 - BR401 was finally struck off charge by the LvA.

The RFC crew

Pilot - 2nd Lieutenant Frank Leslie Smith, *said to have been from Clifton/Redland, Bristol* (born 3/3/1899). 5/9/16 - To be Probationary Temporary 2nd Lieutenant for duty with R.F.C. 31/3/17 - No.5 Reserve Squadron at Castle Bromwich - Instruction (hospital). 4/6/17 - To be Flying Officer.

Observer - 2nd Lieutenant James Frost (born 21/8/1900). September 1917 - Observer (probationary) with No.48 Squadron. 27/9/17 - To be Flying Officer (Observer) with seniority from 15/8/17 and to be confirmed in his rank.

The first Dutch pilot

William Carel Johan Versteegh, who was born at Soerakarta on 19 May 1886, joined the Royal Military Academy (KMA) in 1905. At his own expense he was taught to fly by Igor Etrich in a Taube II aircraft at Wiener Neustadt in Austria. He became the first in the Dutch military to obtain a pilot’s license, which was granted on 2 November 1911, and went on to make the first Dutch military flight in July 1913. From 1919 to 1935 Versteegh was Commander and Chief Instructor at the military flying school in Soesterberg. He then retired and joined the airline business. Generaal-majoor vlieger William Carel Johan Versteegh died in The Hague on 6 January 1975.

YATE AERODROME DURING WORLD WAR ONE

Overview

During May 1917 a new aerodrome at Yate was completed in a location about ten miles north-east of Bristol, on the northern side of what is now the main A432 road. By the autumn of 1918 the site (centred roughly on ST 706 829) covered 193 acres, of which 40 acres were occupied by station buildings. It possessed a grass airfield measuring some 1100 yards by 800 yards, within which aircraft could use 700 yards in the north-south direction, 600 yards east-west and north-east to south-west, and 750 yards south-east to north-west.

At that time the site was bounded to the west by the Bristol to Gloucester railway line, on the south by Station Road, on the north by the River Frome, and to the east by an irregular border running down from the river to a point approximately half way between the junction of Westerleigh Road and Church Road. Land across Station Road adjacent the Chemical Works at Eggshill Common, was also attached to the aerodrome (centred roughly on ST 706 823).

From June 1917 until April 1920 an Aircraft Repair Depot was in residence on the airfield, its job being to undertake the rebuilding of seriously damaged military aeroplanes and aero engines prior to delivering them back for service use. The Yate A.R.D. was a Royal Flying Corps establishment until it passed to the Royal Air Force, which had been formed on 1 April 1918 by the amalgamation of the Army's Royal Flying Corps and the Royal Naval Air Service.

Western Aircraft Repair Depot - later No.3 (Western) Aircraft Repair Depot

During 1916 and 1917 Robert McAlpine & Sons Government Contracting Company had taken over nearly all the farm land on the left hand side of Station Road from the railway bridge to the fork leading to Westerleigh, and there, to plans prepared by the Air Board, they constructed the aerodrome which was to provide flight test and delivery facilities for the new Western Aircraft Repair Depot.

Some £19,500 had been paid for the land the aerodrome occupied, while the buildings were erected at an additional cost of £86,000, some of the unskilled work being carried out by German prisoners from the internment and prisoner of war camp in nearby Westerleigh Road, which had opened in February 1917.

On 21 May 1917 the Central Aircraft Repair Depot at Kennington in London was absorbed by the newly activated Western Aircraft Repair Depot, which officially opened at Yate on 1 June. Re-designated No.3 (Western) Aircraft Repair Depot on 12 October 1917, it consisted of two distinct parts and the first, adjoining the railway line in the south-western corner of the airfield, was the Aircraft Repair Section.

Accommodation for aeroplanes at the A.R.S. consisted of three sheds, all constructed from timber and asbestos sheeting, and each formed into two bays. Two of these were

standard 1913 pattern side opening coupled Aeroplane Sheds, 210 feet wide and 70 feet long with doors 65 feet wide and 14 feet 6 inches high, facing roughly east-north-east (at ST 70277 82814 and ST 70229 82580), while the third, the salvage shed, was 200 feet in width, 102 feet in length, and had a door 95 feet wide and 19 feet high (at ST 70265 83712), and this still survives inside the Whirlpool factory complex.

In addition, the A.R.S. also possessed a 90 feet by 220 feet workshop, another 70 feet by 240 feet, and an engine workshop which measured 100 feet by 330 feet, all of which were built behind the hangars in a line running alongside the railway line (approximately ST 70240 82891 south to ST 70185 82711). To begin with it handled Royal Aircraft Factory B.E.2e and R.E.8 aeroplanes; Sopwith 1½ Strutters and 1F.1 Camels; Bristol F.2Bs; and finally at the end of the war, Sopwith Snipes.

By the summer of 1918 the Aircraft Repair Section, which was then engaged mainly in rebuilding and testing Bristol Fighters, had men employed on rigging, wing and fuselage repairs and engine fitting, who were working alongside the sail makers responsible for the fabric covering of the aeroplanes. The repairs were to be carried out in the buildings on the southern boundary, while repaired or reconstructed machines were to be checked out and flown from those on the western edge.

The A.R.S. not only rebuilt damaged aircraft, but also carried out urgently required modifications to new or rebuilt aeroplanes, or to those already in service. This work began at the end of 1917 after it had been recognized that the Bristol F.2B Fighter with the alternative 200hp Hispano-Suiza engine, the variant intended to replace the R.E.8 and Armstrong Whitworth F.K.8 in the corps-reconnaissance squadrons, could not be expected to have a performance comparable to the Rolls-Royce Falcon III powered version. However, in late 1917 the Hispano-Suiza was needed to power the Royal Aircraft Factory S.E.5as and Sopwith 5F.1 Dolphins then in large scale production.

Consequently, a change of engine for the Bristol Fighter was announced in a War Office letter dated 19 December 1917, which stated that the corps-reconnaissance version of the Bristol Fighter was to be fitted with the Sunbeam Arab. As a result two F.2Bs, both No.3 (Western) Aircraft Repair Depot rebuilds, were fitted with Arab engines at Yate. This work was carried out quickly, and on 28 January 1918 B8914 arrived for evaluation with No.11 Squadron at La Bellevue in France, while on 8 February 1918 B8915 was sent for trials at the Aeroplane Experimental Station at Martlesham Heath.

So hastily had these two aircraft been modified that the Rolls-Royce engine bearers and Falcon radiator were retained, while six more Bristol Fighters, C4657 to 4659 and C4662 to 4664, all British & Colonial Company built and fitted with Arab engines by No.3 (Western) Aircraft Repair Depot, also retained their Rolls-Royce engine bearers. In addition they had alarmingly unsatisfactory radiator installations and C4663, which arrived at No.12 Squadron at Soncamp in France on 2 April, subsequently suffered innumerable problems with its Arab engine. Eventually vibration was established as the main cause, a finding confirmed by the Aeroplane Experimental Station, where by then B8915 with its Arab engine had been extensively tested.

A large amount of urgent modification work was also carried out on Sopwith Camels, with which by March 1918 a total of seven Home Defence squadrons had been equipped. This was necessary as the Germans had switched to undertaking night-time bombing raids on Britain, and although the Camel was capable of being successfully flown after dark, it required certain modifications to turn it into an effective night fighter.

All required the fitting of navigation lights, while a smaller number of Camels were more extensively reconfigured, their Vickers machine guns being replaced by over-wing Lewis guns, while the cockpit was moved rearwards so the pilot could reload the guns. This modification, which became known as the ‘Sopwith Comic’, allowed the guns to be fired without affecting the pilot's night vision, and allowed the use of new, more effective incendiary ammunition that was considered unsafe to fire from synchronised Vickers guns.

The second part of the Aircraft Repair Depot was the Engine Repair Section sited at the top end of Station Road near Poole Court, which was then being used as the R.F.C. Officer’s Mess. The E.R.S. consisted of brick built repair shops and test beds, (centred roughly on ST 711 826) and it appears to have opened on 30 October 1917.

Initially it handled Royal Aircraft Factory 90 and 140 hp Raf engines, and finally Bentley BR 1s, but during the spring of 1918 the Engine Repair Section was kept busy rebuilding 130 hp Clerget; Gnome Monosoupape; and Le Rhône rotary engines received in a wrecked condition from aerodromes all over England, as well as from France. As soon as an engine arrived at Yate it would be sent to the Dismantling Room, prior to being stripped down and its individual parts placed in a large tray. From there it went to the Reviewing Room where each component was examined in detail, defects listed, and replacement parts ordered from the Stores Section.

The engine never lost its original serial number identity unless the cost of repair was estimated at more than 50% of the original purchase price, in which case it would be ‘written off’ and any salvageable parts used in other engines. The Machine Shop, and a branch of the Engine Shop, overhauled the parts that could be re-used, undertaking work such as cylinder re-boring and valve grinding, before the engine was finally re-assembled in the main room of the Engine Section.

It was then tested on what was known as the ‘escargot’, or test bench, but whether the result was satisfactory or not it would be stripped down again, examined in detail, then re-assembled and given a second test. Then, upon receipt of an order from the Air Board in London, the engine would be crated and shipped. The records of the daily movements of the engine were kept by the Technical Office, while the E.R.S. also contained auxiliary departments such as the Tin Smiths, the Blacksmith Shop, Carpenter Shop, Power House, Photostat Room, Drawing Office, and Orderly Office.

During World War One women had been employed with units of the R.F.C. and R.N.A.S., so that when the R.A.F. was formed in April 1918 there was a nucleus of female personnel to form the Woman's Royal Air Force, recruiting for which began

immediately. Those who joined the W.A.A.F undertook to serve for a year, or the duration of the war, whichever was the longer period.

W.R.A.F. personnel actually fell into two categories, one being the 'Immobiles' who lived at home and went to work each day at their assigned station. A considerable number of the other ranks were ‘Immobiles’, and although their direct value to the service was less than that of the 'Mobiles', who could be transferred elsewhere if required, they nevertheless released men for active service with the R.A.F. At Yate some women were in the clerical and domestic categories, but the greater number were employed on engineering work in the Engine Repair Depot, taking the place of men wherever possible in skilled, semi-skilled and unskilled work. Although the majority received reasonable remuneration, those allocated to the Household Section worked long hours for low pay.

From the summer of 1918, of the 400 or so females from the W.R.A.F. who were working at Yate, the majority belonged to the Immobile Branch of the Force who travelled daily to and from their homes in the Bristol area. The others were accommodated at the W.R.A.F. Hostel situated in Westerleigh Road, opposite the junction with Eggshill Lane (ST 70899 82220).

The male R.F.C/R.A.F. personnel were also accommodated off-site, but at the combined Army and Prisoner of War camp which had been laid out on the Westerleigh Road at the corner of what is now Stanshawes Drive (ST 70743 82023), while the ladies of the Women’s Army Auxiliary Corps/Women's Royal Air Force, were housed in their own specially built camp, also set up on the same side of Westerleigh Road, but a little closer to the centre of Yate. At their peak the camps were said to have been able to accommodate some 2000 British military personnel and 1000 German prisoners. By mid-1918 personnel serving at the Yate A.R.D. comprised 48 officers, 104 Warrent Officer and Non Commissioned Officers, 116 Corporals, 1028 Other Ranks, 452 Women and 46 Household Women.

Americans at the Yate A.R.D.

On 2 April 1917 U.S. President Woodrow Wilson asked a special joint session of the United States Congress for a declaration of war against the German Empire, but towards the end of the year it had become evident to the aviation powers in America and France that the United States did not have sufficient facilities for the expeditious training of a plentiful supply of man-power, while Britain possessed the facilities but lacked the man-power, a situation quite the converse.

Logically, therefore, a reciprocal and mutually advantageous agreement for the wholesale training of American mechanical personnel in England began to take form and substance. This agitation culminated in a formal agreement ratified on 5 December 1917, by General John J. Pershing, for the United States, and Lord Northcliffe, on behalf of Lord Rothermere, for Great Britain.

That required the United States to provide 15,000 American mechanics for allocation to British training stations in the U.K. Some 4000 were to be despatched within one month,

an additional 5000 to be forwarded within two months, and the remaining 6000 within three months, thus permitting the British to release their own trained personnel for use with Service Squadrons in France.

It was further agreed that the British should be judges as to the fitness of the Americans for service work, and, that when fully trained American personnel were to be released for use in France, the untrained men replacing the trained should arrive in Great Britain fourteen days before the releasing of the trained men.

The first two United States Army Air Service Aero (Repair) Squadrons, each comprising about 150 men, arrived in Britain for training at the end of January 1918, with one being sent to No.1 (Southern) Aircraft Repair Depot at South Farnborough, and the other to No.2 (Northern) Aircraft Repair Depot at Coal Ashton, near Sheffield.

Further units followed in April, including the 822nd Aero (Repair) Squadron which had been organized at Camp McArthur at Waco in Texas on 24 January 1918. After initial training it was transferred to the Aviation Concentration Camp at Garden City, New York, on 2 March, prior to boarding the RMS ‘Aquitania’, which set sail from New York Docks on 2 April. The unit arrived at Liverpool on the 20th, and the following day travelled to the Romsey American Rest Camp, where it remained until transferring to Yate A.R.D. on 20 April 1918. The 822nd Aero (Repair) Squadron, consisting of about 150 men, remained at Yate until 29 June 1918, when it began its move to France, transferring first to Flower Down Camp, near Winchester, and then, on 2 July, travelling to Southampton to board former destroyer ‘France’ en-route for Le Havre.

Next American unit to arrive at Yate was the 840th Aero (Repair) Squadron which had been organized at Kelly Field, in San Antonio, Texas, on 4 February 1918. After initial training it was transferred to the Aviation Concentration Camp at Garden City, New York, on 4 March, prior to boarding the White Star liner ‘Canopic’, which set sail from Long Island City on 16 April. The unit arrived at Liverpool on the 28th, and on the same day travelled to the Romsey American Rest Camp, where it remained until transferring to Yate A.R.D. on 4 May 1918. The 840th Aero (Repair) Squadron, consisting of about 150 men, remained at Yate until 13 August 1918, when it began its move to France, transferring first to the Southampton Rest Camp before, the following day, boarding the ‘King Edward VII’, arriving at Le Havre on the 15th.

At least one other American Repair Squadron (designation unknown) served at Yate, as American personnel were confirmed as being resident there on 21 September 1918, and appear still to have been there on 15 November. Shortly after, the fourteen American Aero (Repair) Squadrons still under training in Britain began embarking at Liverpool, en-route for the United States, leaving in four batches between the 22 November and 1 December 1918.

Meanwhile, on 4 July 1918 some the 300 or so Americans from the two Aero (Repair) Squadrons then at Yate had travelled by train to Bristol to attend lavish Independence Day celebrations specially arranged by the civic authorities. Then, on Saturday 17 August 1918 a group Americans from Yate, under the command of Captain Laurison,

visited the YMCA at Kingswood. There, in front of a crowd of over 700, they played a game of baseball on the Chequers ground against a party of Canadian soldiers from Bath under Captain Corey. All proceeds were in aid of the Kingswood YMCA funds. While at Yate the Americans had been ultimately responsible to Captain A.J. MacElroy, the U.S. Air Service Area Inspector, who based at the South West Area Headquarters, at R.A.F. Chafyn Grove at Salisbury in Wiltshire.

Closure of the Yate Aircraft Repair Depot

On 11 January 1919 several hundred men of the aircraft, repair depot at Yate marched to Bristol, and formed in Broad Street, whilst deputation waited upon the Lord Mayor at the Council House. Colonel Ingram, who commands the troops in Bristol, was present during the interview, and explained certain points of the regulations regarding demobilisation for the assistance of the Lord Mayor.

The Lord Mayor afterwards, in the presence of the delegates, made the following statement to the press:- Between 600 and 700 men, from No.3 (Western) Aircraft Depot at Yate, waited upon the Council House lay before certain grievances that they consider they are labouring under. The first point was that they required a greater speeding up of demobilisation, and that the men who joined first should have the opportunity of being the first to be discharged. They further suggest that they should sent their homes pending their demobilisation. They say they strongly object to men who have only been six months in the service getting their discharge because they have jobs waiting them. They would like to have the opportunity of going on leave in order to get in touch with their former employers, because many them, they say, joined up at the very beginning and left their employment, and there are new managers and new foremen in some of their works who would not remember them until they went back and had interview. They also raised complaints with reference to the arrangements at their camp, as to the messing, cooking, and such but I understand that these special points are now process of being rectified.

Lieutenant Ellard Hughes, assistant director the appointments department of the Ministry of Labour for the County of Gloucester, dealt with some of the men's points, and explained the regulations. He stated that the object of the Government was to do the best they could for industry, and that men who were released after a brief period of service or at an early age would be pivotal men or students and apprentices.

With regard to factories where new managers or foremen might have been appointed, he remarked that invariably proper books were kept, and men ought to be able to prove easily that they were former employees. He explained that it was better for them that they should remain in the Army until they obtained work, and he advised them as to the steps they ought to take to secure employment. He mentioned that the War Office were carrying out a huge system of demobilisation in accordance with the principles laid down, and were receiving applications to the number of hundreds of thousands daily. He advised the men to make themselves thoroughly acquainted with the regulations, and not block or hamper the smooth working of the machinery of demobilisation.

Later, the Lord Mayor addressed the men drawn up in Broad Street. His Lordship said I don't suppose I can make my voice heard by you all, but I want to tell you that the men you appointed to see me have put your case very well and very fully before me, and I have had the assistance of some officers. You have come from Yate in very orderly manner this very nice morning, and I hope you have enjoyed the march. I want you to back to Yate in the same orderly way, and hope you will enjoy your march back. I can assure you that your case will be fully looked into, and everything that can be done will be done meet your grievance. Now, form up properly and get away. The men, after cheering for the Lord Mayor, marched away in excellent humour.

Unfortunately aeroplane accidents were all too common during World War One, and the best documented incident connected with Yate aerodrome involved the death of an Australian Flying Corps instructor. His name was John Henry Weingarth who had been born in Marrickville, New South Wales, on 17 May 1892. Jack, as he was universally known, was working as a Civil Engineer and Licensed Surveyor when he enlisted in the Australian Army at Darling Point, Sydney, on 22 January 1916. After local service with a Field Artillery Brigade Weingarth transferred to the Australian Flying Corps and graduated as a pilot from the First Course at the N.S.W. State Aviation School at Richmond on 22 December 1916. Due to his qualifications he was commissioned in February 1917 prior to embarking at Melbourne for overseas service on 11 May.

On arrival in Britain he was appointed a Flying Officer and processed through specialist training before joining No.4 Squadron in France in March 1918, after promotion to Lieutenant the previous month. However, in August Weingarth was posted to Home Establishment and sent to No.1 School of Special Flying at Gosport for training as a flying instructor prior to being assigned to No 5 Training Squadron, Australian Flying Corps, based at Minchinhampton aerodrome in Gloucestershire.

His last flight began at 2.25 pm on 4 February 1919 when he flew as an instructor in Avro 504, E9310, although it was his pupil, Lieutenant W.H. Millard, who took the controls as they set out from Minchinhampton to search for an aircraft which had forced landed earlier that day due to a lack of petrol. After locating and refueling the downed machine Weingarth took off and made for Yate aerodrome where his own aircraft could take on petrol but, with the airfield in sight, its engine began missing due to a shortage of fuel. He immediately took control of the Avro, but after making a steep left turn the engine stopped completely and the aircraft, which was then flying at low speed, stalled at an altitude of around 500 feet, spun twice and crashed on to Yate aerodrome at 4.25 p.m. Weingarth sustained a broken neck and was killed instantly, but in spite of Millard being badly hurt about the head face and legs and suffering several fractures, he survived and was taken away to hospital.

Jack Weingarth, the son of John Leopold and Gertrude Weingarth, of 10 Castlereagh Street, Sydney, New South Wales, was finally laid to rest in Leighterton Church Cemetery, Gloucestershire, during the afternoon of Saturday 8 February 1919. His "In Memoriam" card had three portraits of him on it including one with him standing beside a Sopwith Camel aircraft, possibly whilst training in Scotland.

In Parliament on 4 June 1919 Athelstan Rendall, the MP for Thornbury, asked Major-General John Seely, the Under-Secretary of State to the Air Ministry, "whether girls and women who had volunteered for work at the Yate aerodrome have been recently discharged, and why; whether a yet larger number of women not before employed have been taken on in their stead, and why; whether those discharged are receiving out-of-work donation as the result of this method of procedure; if those discharged were regarded as inefficient, how long had they previously been employed without such defect being discovered; why, if the work has diminished at the aerodrome, there are now employed a greater number of women than were employed a month ago; and what are the reasons for the unusual methods of business adopted by the Air Ministry at Yate?"

Seely replied that "in April last the work in connection with the construction of aeroplanes at Yate had greatly diminished, and this opportunity was taken to recommend the demobilization of certain women who were considered inefficient, but with whose services it had not been possible previously to dispense. These women's places had to be filled. A further twelve of the 'yet larger number' referred to by Mr Rendall were taken on to replace women discharged on compassionate grounds; six were merely converted from the status of civilian subordinate to that of member of the Women's Royal Air Force. At the same time the growth of salvage work has tended to more than counterbalance the diminution of construction work."

On 25 June 1919 the third annual sports in connection with the Royal Air Force (No.3 Western Repair Depot) took place, under very favourable conditions, in the Poole Court grounds, Yate. There was a large and attractive programme. The events were run off well up to time, and the course officials discharged the arrangements with much ability. A feature the programme was a mile Marathon race from the. Beaufort Arms, Westerleigh main road, to the camp, Chipping Sodbury main road, from camp to the main gates of Poole Court, and one mile round the track. Music was provided by the Tytherington Prize Band, and much amusement was created by "Arry" and "Arriat" in their donkey (A.C. Goldsmith and Charlie Chaplin [A.C. Colston]). The prizes were distributed Mrs R. G. Law Markham, wife of the Major Commanding. In the evening there was a cinema performance, an open-air concert the Air Force Band, and a dance.

The Officer Commanding was Reginald Gascoigne Law Markham. He had been born at Sevenoaks in Kent in 1871, and by 1881 was boarding at Padcroft College at Hillingdon in Middlesex. In 1887 he entered Keyham Royal Naval Engineering College in Devonport, and passed into the Navy afloat in 1892. Markham then served continuously in various ships as an Assistant Engineer, then Engineer. In 1899, as an Engineering Lieutenant, he became the engineer in charge of H.M.S. ‘Sandfly’ in the Mediterranean. However, in 1900 he resigned from the Royal Navy, became a member of the Institution of Mechanical Engineers, was boarding in Chiswick and working as a mechanical engineer.

Markham married Dorothy Gertrude Nichols at Peterborough in 1902 and in 1911 the family was living in Balham, at which time he was described as a Consulting Motor Engineer. In February 1913 his naval commission was restored and he was placed on

the ‘Emergency List’, while Engineering Lieutenant Commander Markham R.N. was elected a Member of the Royal Aero Club of the United Kingdom in February 1918. He died at Dartford in Kent in 1953.

In the House of Commons on 10 July 1919 Mr Athelstan Rendell (*MP for Thornbury*) asked the Under-Secretary the Air Ministry if he was aware that two lady shorthand writers were engaged at the Royal Air Force (Yate), depot in January last, and that after training in exceedingly technical work they were informed about five or six weeks after being engaged that unless they joined the Women's Royal Air Force they would be discharged; whether after consideration they informed their officer, 2nd Lieutenant Barton, that they would join the Women's Royal Air Force, but heard nothing more until the last Friday or Saturday in March, when without any previous warning, they received a week's notice to go; whether thereupon two other ladies were engaged - one whom had no previous knowledge of office work - and both them required considerable training make them efficient; whether he would state what reasons caused this change and would he insist on an impartial inquiry into the chief section leader's conduct, he being responsible indirectly for the dismissals.

General Seely, in written reply states: The question apparently refers two ladies who were engaged at on the 29 January and 10 February last respectively, the former being a shorthand writer and the latter a general clerk. The work on which they were engaged was ordinary clerical work, and was only technical so far as it involved a certain knowledge of technical terms. Shortly after they were engaged it was decided that the office at Yate should be staffed entirely members of the Women's Royal Air Force, and consequently all the civilian women clerks were asked by the officer responsible whether they were willing to join the W.R.A.F., the question being repeated, were replaced two members of the W.R.A.F.

These two clerks both refused the offer to transfer in the first instance, but about a fortnight later applied to be enrolled in the W.R.A.F. Sufficient names however, had then been put forward complete the establishment their particular category and recruiting for the immobile section the W.R.A.F. was coming to an end, so that they could not be accepted. They were, however, not actually dismissed until the 5th April. The standard form of engagement for civilian subordinates, which both these clerks signed, only prescribes a week's notice, and this they received. They were replaced by two members of the W.R.A.F., one of whom was an expert shorthand writer. The other, after being employed on probation for month as general clerk, was confirmed in her appointment as she proved herself efficient.

A chief section leader of the W.R.A.F. has no control over civilian subordinate, and to beyond putting to these two clerks the question whether they wished join the W.R.A.F. the chief section leader at Yate was not concerned, directly or indirectly, with their dismissal. I am not satisfied with the action in this case and am having the grounds of it further investigated.

In August 1919 the Air Ministry issued a list of aerodromes and landing grounds open to civilian machines in an emergency. That included Yate which, although a station temporarily retained for service purposes, was also available for civil use.

On 8 November 1919 the by then Squadron Leader Reginald Gascoigne Law Markham was recorded as still commanding No.3 (Western) Aircraft Repair Depot, R.A.F., at Yate. Then, on 19 November 1919 at 11.30 a.m., Albert Ford of Albion Chambers, Bristol, was instructed to sell by auction at the Sergeants Mess, near Poole Court, Yate, all the mess effects.

On 28 February 1920 the Ministry of Munitions Disposal Board advertised that they were considering the question of disposing of the Aeroplane Repair Depot at Yate, either as a whole, together with the landing ground, or the Engine Repair Section, Aeroplane Repair Section and Camp in separate lots. It noted that buildings of the ARS and ERS were principally of permanent construction, and comprised machine shops, aeroplane sheds, stores, power station, vehicle sheds, offices, and subsidiary buildings which were eminently suitable for engineering works, factory or other commercial purposes.

Electric generating plant was installed in ERS, while the Camp consisted of buildings of concrete slab and timber construction comprising mess rooms, regimental institute, storage and living accommodation. The site adjoined a railway station with private siding and wharf to the ARS There was also a mains water supply, an adequate fire service, water borne drainage to a sewage works and permanent tarmac roads.

On 13 April 1920 Albert Ford of Albion Chambers, Bristol, auctioned off Officers and Sergeants' Mess effects at Poole Court, Yate. The items sold included furniture, china, glass, office effects, linen, games, garden tools, greenhouse plants and miscellaneous sundries. No.3 (Western) Aircraft Repair Depot at Yate finally closed on 30 April 1920 and as a result it was announced that the aerodrome was no longer open to civilian aeroplanes in an emergency. The site then became Command Supply Depot No.237. (C.S.D. 237).

On 8 May 1920 it was advertised that the Disposal Board of the Ministry of Munitions were considering disposing of the Woman’s Hostel and hutment camp, that was then occupied by the Government. It stated that the buildings there were mainly built in concrete slab, and included a Recreation Room, Canteen, Dining Rooms, Sergeant's Mess, Reception Station, Gymnasium, and Stores etc. Then, on 21 December 1920 it was announced that Douglas Motors, Ltd. of Kingswood had given up the idea of purchasing the E.R.S. at Yate, expressing the view that it was pity so many difficulties had been placed in the way by the Government.

On 15 November 1923 the War Office applied for an order for the closing of a footpath across the Yate Aircraft Repair Depot leading from Warren Farm to St Mary's Church. Captain Wiseman, supervising valuer to the Director of Works and Buildings, said he believed that it was intended to use the depot not only for the Regular Forces, but also for the Auxiliary Territorial Air Force, and as a repair depot and aerodrome. They desired to close footpath as an alternative path had been provided.

Finally, the old Yate Aircraft Depot was disposed of by the Government, and on 12 December 1925 it was announced that George Parnall & Co. Ltd, the Bristol aeroplane manufacturer, had acquired Yate Aerodrome. Mr Parnall stated that he hoped that in a few weeks the whole of the work at the Bristol Coliseum would be transferred to Yate, and then with the aerodrome and the manufacturing facilities at their disposal, they would be able to cope with any orders that the Air Ministry gave them.

Unfortunately during the 1920 the vast majority of documents concerning World War One military activities at home were purposely destroyed by the Air Ministry, and that included those concerning the old Yate Aircraft Repair Depot held by the Air Historical Branch, in particular files A1525 - Western Aircraft Repair Depot: 1/6/1917 to 18/9/17: 19/9/1917 to 22/1/1918: 23/1/1918 to 30/3/1918: No.3 (W) ARD to 28/7/1919: along with A1526 - 30/10/1917 to 3/11/1917, which concerned only the Engine Repair Section.

Aircraft known to have been rebuilt at the Yate A.R.D.

During World War One No.3 (Western) Aircraft Repair Depot was assigned blocks of serial numbers for rebuilt aircraft, but exactly how many were taken up is unknown. However, those that were rebuilt included Avro 504s; Royal Aircraft Factories B.E. 2s, R.E. 8s, and S.E. 5s; Bristol F.2B Fighters and Sopwith 1½ Strutters and 1F.1 Camels, in addition to an unknown number of engines. Unfortunately, so many documents were destroyed in the immediate post-war period that it's now impossible for any definitive listing of the repairs and rebuilds carried out to be compiled.

B8841 to B9030
Serial Numbers Allocated to No.3 (Western) Aircraft Repair Depot for Rebuilds
(Not all appear to have been taken up)

Royal Aircraft Factory B.E.2e
(B8831 to B8836 not specifically allocated to the Western Aircraft Repair Depot)

B8831, B.E.2e - 90 hp Raf engine, at Western Aircraft Repair Depot on 21/9/17.

B8832, B.E.2e - 90 hp Raf engine.

B8833, B.E.2e - 90 hp Raf engine, at Western Aircraft Repair Depot on 29/9/17.

B8834, B.E.2e - Built from spares.

B8835, B.E.2e - At Western Aircraft Repair Depot on 12/10/17.

B8836, B.E.2e - Built from spares.

Royal Aircraft Factory B.E.2e

B8843, B.E.2e - From Western Aircraft Repair Depot. Tested at Southern Aircraft Repair Depot at Farnborough on 7/12/17 by Temporary 2nd Lieutenant Eardley Haydon Lawford.

B8844, B.E.2e - 90 hp Raf engine.
B8845, B.E.2e - 90 hp Raf engine.

B8847, B.E.2e -

B8849, B.E.2e -
B8850, B.E.2e -
B8851, B.E.2e -
B8852, B.E.2e -
B8853, B.E.2e -
B8854, B.E.2e -

B8863, B.E.2e -
B8864, B.E.2c - ?

Royal Aircraft Factory R.E.8

B8860, R.E.8 -

B8871, R.E.8 - 140 hp Raf engine.

B8872, R.E.8 - 140 hp Raf engine.

B8874, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 12/11/17. Flown Yate to Lympne Aircraft Acceptance Park on 29/11/17 by Temporary 2nd Lieutenant Eardley Haydon Lawford. Note: In January 1917 Lympne was designated as No. 8 Aircraft Acceptance Park for delivery of aircraft to, and reception from, France.

B8875, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 13/11/17. Dispatched by air to France 4/12/1.

B8876, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 13/11/17. Flown Yate to Lympne Aircraft Acceptance Park on 1/12/17 by Temporary 2nd Lieutenant Eardley Haydon Lawford.

B8877, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 6/11/17.

B8878, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 6/11/17. Dispatched by air to France 6/11/17.

B8879, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 12/11/17. Dispatched by air to France 12/12/17.

B8880, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 5/12/17.

Dispatched by air to France 12/12/17.

B8881, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 5/12/17. Dispatched by air to France 5/12/17.

B8882, R.E.8 - at Western Aircraft Repair Depot on 4/12/17, then to Southern Aircraft Repair Depot, Farnborough, and struck off charge on 1/1/18.

B8883, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 4/12/17. Dispatched by air to France 4/12/17.

B8884, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 8/12/17. Dispatched by air to France 14/1/18.

B8885, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 20/12/17. Dispatched by air to France 24/1/18.

B8886, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot then dispatched by air to France 9/1/18.

B8887, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 13/12/17. Dispatched by air to France 10/1/18.

B8888, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 14/12/17. Dispatched by air to France 3/18.

B8889, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 17/12/17. Dispatched by air to France 21/1/18.

B8890, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 11/1/18. Dispatched by air to France 5/3/18.

B8891, R.E.8 - At Western Aircraft Repair Depot on 20/12/17. To Lympne Aircraft Acceptance Park on 28.1.18.

B8892, R.E.8 - At Western Aircraft Repair Depot on 20/12/17. To Southern Aircraft Repair Depot, Farnborough, and struck off charge on 15/6/18.

B8893, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 15/1/18. Allotted for training on 16/2/18.

B8894, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 16/1/18. Dispatched by air to France 8/2/18.

B8895, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 19/12/17. Dispatched by air to France 29/1/18.

B8896, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 9/1/18. Dispatched by air to France 7/3/18.

B8897, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 9/1/18. Allotted for training on 16/2/18.

B8898, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 11/1/18. Allotted for France, but on 7/2/18 was recorded as struck off charge while en route Winchester to the Southern Aircraft Repair Depot at Farnborough.

B8899, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 3/1/18. Allotted for France, but on 5/2/18 was struck off charge at the Southern Aircraft Repair Depot at Farnborough.

B8900, R.E.8 - 140 hp Raf engine, at Western Aircraft Repair Depot on 11/1/18. Dispatched by air to France 29/1/18.

B8902, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 17/1/18. Allotted for training on 16/2/18.

B8903, R.E.8 - 140 hp Raf engine.

B8904, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 19/1/18. Allotted to France, but struck off charge at Western Aircraft Repair Depot on 2/2/18.

B8906, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 19/1/18. Allotted for training on 16/2/18.

B8907, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 19/2/18. Dispatched by air to France on 16/3/18.

B8909, R.E.8 -

D4961, R.E.8 -
D4962, R.E.8 -
D4963, R.E.8 - 140 hp Raf engine.
D4964, R.E.8 -
D4965, R.E.8 - 140 hp Raf engine.

D4966, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 19/2/18. Despatched by air to France on 11/3/18.

D4967, R.E.8 -

D4968, R.E.8 - 140 hp Raf engine.

D4969, R.E.8 -

D4970, R.E.8 - 150 hp Raf 4a engine, at Western Aircraft Repair Depot on 21/2/18. Despatched to France by air on 6/3/18.

D4971, R.E.8 -
D4972, R.E.8 - 140 hp Raf engine.
D4973, R.E.8 - 140 hp Raf engine.
D4974, R.E.8 -
D4975, R.E.8 - 140 hp Raf engine.
D4976, R.E.8 -
D4977, R.E.8 - 140 hp Raf engine.
D4978, R.E.8 - 140 hp Raf engine.
D4879, R.E.8 -
D4980, R.E.8 - 140 hp Raf engine.
D4981, R.E.8 -
D4982, R.E.8 -
D4983, R.E.8 -
D4984, R.E.8 -
D4985, R.E.8 - 140 hp Raf engine.
D4986, R.E.8 -
D4987, R.E.8 -
D4988, R.E.8 -
D4989, R.E.8 -
D4990, R.E.8 -
D4991, R.E.8 -
D4992, R.E.8 -
D4993, R.E.8 -
D4994, R.E.8 -
D4995, R.E.8 -
D4996, R.E.8 -
D4997, R.E.8 -
D4998, R.E.8 -
D4999, R.E.8 -
D5000, R.E.8 -

D9737, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9738, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9739, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.

D9790, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9791, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9792, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9793, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9794, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9795, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9796, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9797, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.

D9798, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
D9799, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.

E9957, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
E9958, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
E9959, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
E9960, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
E9961, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
E9962, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.
E9963, R.E.8 - Taken on charge from the Western Aircraft Repair Depot on 12/4/18.

Sopwith 1½ Strutter

B8911, Sopwith 1½ Strutter -
B8912, Sopwith 1½ Strutter -

Bristol F.2B Fighter

B8914, Bristol F.2B - 200 hp Sunbeam Arab engine, at Western Aircraft Repair Depot on 16/1/18 when despatched by air to France.

B8915, Bristol F.2B - 200 hp Sunbeam Arab engine, at Western Aircraft Repair Depot on 16/1/18. Despatched to the Aeroplane Experimental Station at Martlesham Heath on 26//18.

B8917, Bristol F.2B -
B8918, Bristol F.2B - 220 hp Rolls-Royce Falcon II engine.
B8919, Bristol F.2B -

B8922, Bristol F.2B - 220 hp Rolls-Royce Falcon II engine.
B8923, Bristol F.2B -

B8925, Bristol F.2B -

B8928, Bristol F.2B -

B8930, Bristol F.2B - 220 hp Rolls-Royce Falcon II engine.

B8937, Bristol F.2B - 250 hp Rolls-Royce Falcon III engine.

B8938, Bristol F.2B - Rolls-Royce engine. On 28/6/18 flown by Temporary 2nd Lieutenant Eardley Haydon Lawford from Yate to the Southern Aircraft Repair Depot at Farnborough with Brigadier-General Huggins as passenger.

B8941, Bristol F.2B - 250 hp Rolls-Royce Falcon III engine, at Western Aircraft Repair Depot on 20/6/18. Despatched to France on 5/8/18.

B8942, Bristol F.2B - Rolls-Royce engine.

B8943, Bristol F.2B -

B8945, Bristol F.2B - 220 hp Rolls-Royce Falcon II engine.

B8946, Bristol F.2B - 220 hp Rolls-Royce Falcon II engine.

B8948, Bristol F.2B -

B8950, Bristol F.2B - Rolls-Royce engine.

F9396, Bristol F.2B -
F9403, Bristol F.2B - 220 hp Rolls-Royce Falcon II engine.
F9406, Bristol F.2B -

Sopwith 1F.1 Camel

B8920, Sopwith 1F.1 Camel -
B8921, Sopwith 1F.1 Camel -

B8926, Sopwith 1F.1 Camel -

E9964, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9965, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9966, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9967, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9968, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9969, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9970, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9971, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9972, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9973, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9974, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18.

E9975, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18. Still at the Western Aircraft Repair Depot on 18/5/18.

E9976, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge at the Western Aircraft Repair Depot on 20/4/18. Still at the Western Aircraft Repair Depot on 18/5/18.

E9977, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18. Still at the Western Aircraft Repair Depot on 29/5/18.

E9978, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18. Still at the Western Aircraft Repair Depot on 29/5/18.

E9979, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18. Still at the Western Aircraft Repair Depot on 29/5/18.

E9980, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18.

E9981, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18.

E9982, Sopwith 1F.1 Camel - 130 hp Clerget engine. Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18.

E9983, Sopwith 1F.1 Camel - Built under April 1918 emergency arrangements. Taken on charge from the Western Aircraft Repair Depot on 20/4/18.

F2189, Sopwith 1F.1 Camel -
F2190, Sopwith 1F.1 Camel -
F2191, Sopwith 1F.1 Camel -
F2192, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F2193, Sopwith 1F.1 Camel -
F2194, Sopwith 1F.1 Camel -

F2195, Sopwith 1F.1 Camel -
F2196, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F2197, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F2198, Sopwith 1F.1 Camel -
F2199, Sopwith 1F.1 Camel -
F2200, Sopwith 1F.1 Camel -
F2201, Sopwith 1F.1 Camel -
F2202, Sopwith 1F.1 Camel -
F2203, Sopwith 1F.1 Camel -
F2204, Sopwith 1F.1 Camel -
F2205, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F2206, Sopwith 1F.1 Camel -
F2207, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F2208, Sopwith 1F.1 Camel - 130 hp Clerget engine.

F4177, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F4179, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F4180, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F4181, Sopwith 1F.1 Camel -
F4182, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F4183, Sopwith 1F.1 Camel -
F4184, Sopwith 1F.1 Camel -
F4185, Sopwith 1F.1 Camel -
F4186, Sopwith 1F.1 Camel -
F4187, Sopwith 1F.1 Camel -
F4188, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F4189, Sopwith 1F.1 Camel - 130 hp Clerget engine.

F4190, Sopwith 1F.1 Camel - 130 hp Clerget engine. At the Western Aircraft Repair Depot on 28/9/18.

F4191, Sopwith 1F.1 Camel -
F4192, Sopwith 1F.1 Camel -
F4193, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F4194, Sopwith 1F.1 Camel -
F4195, Sopwith 1F.1 Camel -

F4196, Sopwith 1F.1 Camel - 130 hp Clerget engine. At the Western Aircraft Repair Depot on 28/9/18.

F4197, Sopwith 1F.1 Camel -
F4198, Sopwith 1F.1 Camel -
F4199, Sopwith 1F.1 Camel -
F4200, Sopwith 1F.1 Camel -
F4201, Sopwith 1F.1 Camel -
F4202, Sopwith 1F.1 Camel -
F4203, Sopwith 1F.1 Camel -

F4204, Sopwith 1F.1 Camel -
F4205, Sopwith 1F.1 Camel -
F4206, Sopwith 1F.1 Camel -
F4207, Sopwith 1F.1 Camel - 130 hp Clerget engine.
F4208, Sopwith 1F.1 Camel -

F4209, Sopwith 1F.1 Camel - 130 hp Clerget engine. At the Western Aircraft Repair Depot on 23/8/18.

F4210, Sopwith 1F.1 Camel -
F4211, Sopwith 1F.1 Camel -
F4212, Sopwith 1F.1 Camel -
F4213, Sopwith 1F.1 Camel -
F4214, Sopwith 1F.1 Camel -
F4215, Sopwith 1F.1 Camel -

F4216, Sopwith 1F.1 Camel - 130 hp Clerget engine. At the Western Aircraft Repair Depot on 28/9/18.

F9407, Sopwith 1F.1 Camel -
F9410, Sopwith 1F.1 Camel -
F9411, Sopwith 1F.1 Camel -
F9413, Sopwith 1F.1 Camel -
F9417, Sopwith 1F.1 Camel -140 hp Clerget 9Bf engine.
F9426, Sopwith 1F.1 Camel - Clerget LS engine.

F9576, Sopwith 1F.1 Camel - 130 hp Clerget engine.

F9582, Sopwith 1F.1 Camel - 130 hp Clerget engine. At the Western Aircraft Repair Depot on 16/9/18.

F9583, Sopwith 1F.1 Camel - 130 hp Clerget engine. At the Western Aircraft Repair Depot on 16/9/18.

F9584, Sopwith 1F.1 Camel - 130 hp Clerget engine. At the Western Aircraft Repair Depot on 16/9/18.

F9608, Sopwith 1F.1 Camel - 130 hp Clerget engine.

F9617, Sopwith 1F.1 Camel - 130 hp Clerget engine.

Royal Aircraft Factory S.E.5A

B8932, S.E.5A - 200 hp Wolseley W.4A Viper engine.

B8947, S.E.5A -

Airco D.H.9

B8960, Airco D.H.9 -

Royal Aircraft Factory Aerial Target

B8962, Royal Aircraft Factory Aerial Target - Converted to a manned aircraft at No.3 (Western) Aircraft Depot.

Avro 504

B8897, Avro 504 -

APPENDIX

(Notes on the post-war use of Yate Aerodrome)

George Parnall & Company

As some 970 military aircraft had been constructed in Bristol by Parnall & Sons before World War One ended, George Parnall considered that the future lay with aviation. Consequently, in 1919, he resigned as Managing Director of Parnall & Sons in order to form is own company George Parnall & Company, which in 1920 began leasing the Coliseum Works as his headquarters, and where high class shop fitting work and aircraft manufacture were to be undertaken side by side.

The new company's first project was the construction of three prototypes of an amphibious reconnaissance aircraft known as the Puffin, the first machine being completed in the autumn of 1921. This was followed by the Parnall Plover, a single-seat carrier-borne fighter, some six of which subsequently entered service in 1923. Harold Bolas's next project was to build two prototype Possums, experimental three-seat triplanes described by the Air Ministry as medium range postal aircraft. Unfortunately, as no order was forthcoming for these, and during 1923 Parnall's decided to try their by designing the Pixie, a single-seat ultra-light low wing monoplane, but only five of these sports aircraft were completed before production ceased in 1924.

However, with premises then spread across Bristol at the Coliseum, Mivart Street, Quakers Friars and Feeder Road, and with no airfield of their own it was time for the firm to re-locate its aircraft production.

By this time it was obvious that it would be unreasonable to continue using the Bristol Aeroplane Company's airfield at Filton for much longer, and consequently George Parnall began searching for a suitable aerodrome of his own somewhere in the Bristol area. Fortunately, it was not necessary to look far as just twelve miles away at Yate, was an abandoned Air Ministry facility which not only possessed a small grass covered aerodrome with a landing area measuring some 750 x 600 yards, but also a number of intact aircraft hangers, and it was to here that George Parnall & Company moved in stages from 1924 to 1925 .

Yate Airfield

Following closure of the Yate Aircraft Repair Depot in 1920 the site remained empty until taken over by George Parnall, who transferred his aircraft manufacturing business there from Bristol in 1925. At Yate between then and 1930 his firm built a number of prototype experimental naval aircraft of their own design. These included the Perch, a two-seat trainer, first flown from their new airfield in December 1926; the Pike, a dual role reconnaissance machine; the diminutive Peto, a submarine-borne spotter plane; the Pipit a single-seat fighter; and the Prawn a single-seat flying boat.

In 1926 George Parnall & Company obtained a contract for the refurbishment of 18 de Havilland DH 9A biplanes for the R.A.F., and this was followed by a contract to build a batch of 12 De Havilland DH 9A dual-control trainers, again for the RAF, while in 1927 they completed a single Imp biplane intended for private or sporting use. This was followed by two Elfs of somewhat similar design, and in 1931 by the Parasol, a research aircraft for the Air Ministry which was capable of testing wing characteristics in flight. Another aeroplane designed to meet an Air Ministry specification was the Parnall G4/31, a prototype general purpose biplane, although this was not flown until 1935. Between 1929 and 1934 the company also constructed a few aircraft for other designers, such as two Autogiros, a Hendy 302 sporting monoplane, a small sporting biplane known as the Miles Satyr, and 23 Percival Gull three seat cabin monoplanes.

Nevertheless, with retirement looming on the horizon during 1932, when the company were still operating from the Coliseum, Park Row and Mivart Street, in addition to Yate, George Parnall sold off some of his assets, including his shop fitting side of the undertaking, which was acquired by his old rival Avery's who transferred the business to their premises in Lodge Causeway, Fishponds.

In 1934 the Engine Repair Depot section at Yate, also known as the top works, including both Poole Court and the Depot Guard House which had been used as a drawing office by Parnall’s, was sold to Stephen Newman, father of brothers Augustus James and Hedley, who purchased the premises for £7000, prior to moving their electric motor repair and engineering business from Bristol to Yate. Initially known as Newman Sons & Company, in 1936 it became a public limited company and was renamed Newman Industries, by which time it was employing about 200 people.

The old Depot Guard House later became Newman’s Social Club, while the factory itself remained in production until 1988, when its new owners and old rivals, Brook Crompton Parkinson Ltd, closed it down and sold it to Safeways who demolished it shortly after. However, Poole Court, often referred to as the Guest House by Newman’s employees, escaped destruction and was sold to Yate Town council in 1990.

Parnall Aircraft Ltd

Meanwhile, in 1935 George Parnall sold his final asset, the Yate airfield and the remaining buildings, to Nash & Thompson Ltd. of Tolworth in Surrey, which together with the Hendy

Aircraft Company, set up a new undertaking at Yate to be known as Parnall Aircraft Ltd, which was incorporated on 23 May 1935. Sadly, Parnall's retirement was to be very short lived, as on June 21st 1936 he died at his home at 4 Cecil Road, Clifton, after suffering a cerebral hemorrhage, before being buried alongside his ancestors in the churchyard at St Gennys, near Bude in Cornwall.

After building the Parnell Heck, the last of which appeared in 1938, aircraft production ceased as the new company's main interest switched to power-operated gun turrets which were to equip such bombers such as the Whitley and Wellington, as well as the Blackburn Botha reconnaissance bomber and torpedo aircraft and the Sunderland flying boat. Consequently, a large new factory was built alongside the railway line in the south-west corner of the Yate airfield, and this was in full production by late 1939. At that time had three subsidiaries, Powered Mountings Ltd, which held the rights to the Frazer-Nash patents for tanks and armoured cars (Parnall already held the rights for aeronautical purposes); Magnal Products Ltd, which had been formed to safeguard the supply of light alloys, from a foundry near Bristol; and Yate Development Company Ltd, which was a housing concern, to provide living facilities for the employees.

Just prior to the outbreak of war the Luftwaffe's elite strategic reconnaissance group, using aircraft painted in Lufthansa colours pretending to be carrying out route proving flights, secretly flew over a number of potential targets in Britain, and on 29 August 1939 they took a photograph of the Parnall Aircraft factory at Yate. Such images were to be used to help bomber pilots identify their objectives, and the target folders they carried also included maps, which in the case of Britain were suitably re-marked extracts from pre-war Ordnance Survey publications!

As the main producer of Frazer-Nash gun turrets, the Yate works of Parnall Aircraft was an obvious target for the Luftwaffe. Nevertheless, although a total of 19 bomber sorties were flown against the plant by day night and dusk on seven occasions between 1 August 1940 and 22 February 1941, all either failed to locate their objective, aborted their missions, or were brought down by the local air defences. However, on the afternoon of 27 February 1941 the situation changed dramatically when a lone raider finally reached Yate and released six delayed action bombs over the works. The effect was catastrophic, for not only were 53 workers killed and 150 others injured, but considerable damage was also caused to the factory and drawing office.

Amazingly, the same crew returned on the afternoon 7 March, but although on this occasion only three workers were killed and 20 injured, such was the additional damage inflicted that production came to a complete standstill and the Ministry of Aircraft Production immediately ordered the total dispersal of the factory to satellite works established all over South Gloucestershire and North Bristol. In spite of this the Yate factory was soon rebuilt, and well before the war ended was back in full production, employing around 3000 people. They were engaged in manufacturing nose and tail turrets for Lancaster bombers, Spitfire airframes and wing components, for which the firm were the country's largest sub-contractor, as well as Lincoln bomber parts and components for the revolutionary Gloster Meteor jet fighter.

Parnall (Yate) Ltd

When peace finally returned in 1945 Parnall Aircraft Ltd, quickly severed all connections with aviation, and was re-titled Parnall (Yate) Ltd on 31 May 1946. The undertaking then concentrated its efforts on the production of domestic appliances. In 1946 they introduced onto the market their first domestic appliance, the Parnall Wringlet, which was a compact open-ended clothes wringer which could be fitted to the kitchen sink or draining board, and a quarter of a million were sold. Then came the alarm clock, home ironers and vacuum cleaners, quickly followed in 1948 by a range of utility electric cookers suitable for both the home and overseas markets. At that time the company's subsidiaries were

However, of all the products manufactured at Yate after the war, the Parnall washing machine was perhaps the best known, not only in this country, but in some 60 others around the world. The Thor, a spinner type, was introduced in 1947, and three years later production of the Parnall electric self-emptying washer was started. This proved to be one of the outstanding machines of the immediate post war period, and so great was demand that the Yate factory, which was then employing some 1500 people, needed to have its floor space increased. By 1948 the company's subsidiaries were Ascot Gas Water Heaters Ltd; Magnal Products Ltd; and James Bruton and Sons Ltd.

In 1955 Parnall's acquired Thor Appliances Ltd from Thor Corporation of Chicago as for some years Parnalls had manufactured Thor automatic washing machines, which had been distributed by Thor Appliances. In the same year the first Parnall tumble dryer appeared, but as the market was not really ready for such a revolution in domestic drying habits, sub-contract work was undertaken which involved the manufacture of parts for air compressors, exhausters and brake and clutch units for Westinghouse, and hydraulic controls and jet engine fuel pumps for the Dowty Group. During this period in its history Parnall's also owned a subsidiary company known as Magnal Products Ltd, which specialised in the casting of light alloys, together with the associated machining and assembly work.

However, in July 1958, Parnall (Yate) Ltd merged with the Radiation Group of Companies, thus becoming an important part of the largest manufacturers of domestic appliances in the country, and in 1961 the production of Jackson electric cookers was transferred from Luton to Yate. The infusion of this well established brand considerably increased the factory's throughput, and for the next 15 years some 2000 Trimline, Highline, Topline and Hallmark cookers left the assembly lines each week.

In 1967 Radiation were taken over by Tube Investments Ltd, a major international engineering group, while the advent of a new family of tumble dryers in that year helped the firm to secure a major share in this field. Although dryers then became the mainstay of Parnalls, the Yate plant still concerned itself with the production of cookers as well as manufacturing conversion units to adapt Ascot and New World domestic appliances for natural gas. Later other products included Russell Hobbs electric kettles, air conditioning units and electric motors for the Creda range of domestic appliances, went on to be produced in the factory.

Jackson Electric Ltd to Whirlpool

In the early 1970's Creda, a part of Tube Investments, which had produced the first ever spin dryer and the first fully automatic tumble dryer, acquired the Yate premises, with the result that Parnall (Yate) Ltd was renamed Jackson Electric Ltd on 14 January 1972. Nevertheless, the Yate plant continued the large scale manufacture of tumble dryers, and on 31 May 1977 Jackson Electric Ltd was officially re-named T.I. Jackson Ltd.

On 5 March 1987 the T.I. Group announced its decision to effect the divestment of its domestic appliance interests. The companies forming the T.I. Group Domestic Appliance Division were brought together in various groups for the purpose of disposal. The Creda Group comprised T.I. Jackson Ltd; T.I. Creda Manufacturing Ltd; T.I. Creda Ltd; T.I. Airdun Ltd; and T.I. Domestic Appliance Service Ltd.

On 2 June 1987, the T.I. Group plc announced that it had entered into an agreement with the General Electric Company plc (GEC) for the sale of the companies in the Creda Group. Completion of the sale was effected on 18 June 1987 when the company became a totally owned subsidiary of GEC, and on 10 September 1987 T.I. Jackson Ltd changed its name to Jackson Appliances Ltd. Then, on 1 April 1988, the business undertakings of Jackson Appliances Ltd were acquired by Creda Ltd.

Under the terms of an agreement dated 7 April 1989 between the General Electric Company plc (GEC) and the General Electric Company of the USA (GE) Hotpoint Ltd acquired the entire share capitals of Creda Ltd, Cannon (Holdings) Ltd, GEC-Xpelair', and Redring Electric Ltd. Hotpoint Ltd then became the holding company for the GEC Consumer Products Group, and 50% of the share capital of Hotpoint Ltd was sold to GE. On 30 March 1990 Hotpoint Ltd was re-named General Domestic Appliances Ltd and Jackson Appliances Ltd became a dormant company.

On 1 April 1998 General Domestic Appliances Ltd it became the main trading company of General Domestic Appliances Holdings Ltd. Then, on 7 March 2000 the General Electric Company plc (GEC) changed its name to the Marconi Corporation plc before, on 8 March 2002, Merloni Elettrodomestici UK Ltd, a totally owned subsidiary of Merloni Elettrodomestici SpA of Italy, who were responsible for the such major European appliance brands as Ariston and Indesit, purchased Marconi's 50% holding in General Domestic Appliances Limited for £120 million. As they were keen to take control of the whole the business, on 5 June 2002 they signed an agreement allowing them to acquire GE's share over a seven year period ending in December 2009.

On 8 July 2003 Merloni Elettrodomestici UK Ltd changed its name to Merloni Elettrodomestici UK Holdings Ltd, and General Domestic Appliances Ltd changed its name to Merloni Elettrodomestici UK Ltd. On 10 January 2004 20% of GE's shares were sold to Merloni, and a further 25% followed on 1 April 2005. Then annually more of GE's shares were acquired until, on 30 December 2008 the final 8% purchase gave Merloni its 100% holding.

Meanwhile, on 1 January 2005, Merloni Elettrodomestici had officially changed its name to the Indesit Company UK Ltd. However, on 13 October 2014 the American Whirlpool Corporation acquired General Domestic Appliances Holdings Ltd as part of its acquisition of the Indesit Company SpA of Italy. Consequently, the Indesit Company UK Ltd was re-titled Whirlpool UK Appliances Ltd.

INTERNMENT/PRISONER OF WAR CAMP AT YATE

The first German military prisoners were brought to England in August 1914, when 1000 arrived from France to be put into a hastily converted army camp in Dorchester, which later became a permanent prisoner of war facility. In addition, at the beginning of the war there were also about 70,000 German, Austro-Hungarian, and Turkish subjects in the UK, and the Aliens' Restriction Act of 5 August 1914 gave the British government legislative power to deal with them as they saw fit to protect the home front.

Within an hour of the Act being passed an Order in Council was also made which gave the Home Office and the police stringent powers to deal enemy aliens of German or Austrian nationality. It also introduced a system for the registration of enemy aliens of 18 years of age and upwards entering British ports, or resident in Britain. Every district in which there was a separate police force was a registration district, with the Chief Constable, which in the case of Gloucestershire was Major Chester-Masters at Cheltenham, as the chief registration officer. Registration began on 10 August, and by the end of the month 136 people had registered in Gloucestershire, all Germans except for 13 who were Austrian citizens.

From the beginning, any Germans or Austrians who were deemed by the police to be likely to be dangerous were apprehended, handed over to the military authorities, and detained as prisoners of war. As the military authorities desired it, and subject to certain exceptions, general action was also taken to arrest and hand over to military custody enemy aliens of military age, and by the second week of October 1914 about 9000 Germans and Austrians living in Britain had been arrested and held in detention camps. Among them were those regarded by the police "as likely in any possible event to take part in any outbreak of disorder or incendiarism."

Then, on 27 October 1914, the Home Secretary notified the public that under the Aliens Restriction Order the areas in Gloucestershire where the Admiralty or War Office considered it undesirable that enemy aliens should reside were the County Borough of Bristol; the Urban Districts of Coleford and Kingswood; and the Rural Districts of Chipping Sodbury, Lydney, Thornbury, Warmley, and West Dean.

The detentions continued until about 20,000 enemy aliens, all men, had been interned in Britain, most after May 1915. Consequently, as the war progressed the number of prisoner of war and internment camps increased rapidly. By the end of December 1916 there were 48 in the British Isles and 165 a year later, while in July 1918 the figure stood at 518. So many were need, as in November 1918 the number of Germans and their allies held in Britain peaked at 115,950, made up of 24,522 civilian internees and 91,428 military prisoners.

Meanwhile, due to the shortage of labour, as well as food, by 1917 extensive use was being made of German prisoners for work outside the camps as under the terms of the Hague Convention it was permissible to use the labour of all prisoners of war, except officers, according to their capacity. However, the work was not to be excessive, or

connected with the operation of the war, and by 1918 all German prisoners, barring the officers and the physically unfit, were working.

Prisoners were paid for their work at the same rate as British soldiers. The work was varied, but no prisoners worked underground, although some did in quarries, while others were employed in building work, putting up huts, road repairs, and land reclamation. in fact by the autumn of 1918 some 70,000 prisoners were working, of which 30,000 brought in the harvest under the direction of local Agricultural Committees. Employers were charged for the use of prisoner labour at the customary local rate, and out of this the prisoners were paid, while the remainder was put to the cost of their keep.

Only four German prisoners succeeded in escaping from Britain, but of these two are believed to have died in the North Sea, and consequently only two succeeded in reaching Germany. However, most were content with their lot and gave little trouble to their guards, who were mainly officers and men from the Royal Defence Corps, a formation which had been promulgated by Army Order No.115 dated 19 March 1916.

The Corps was initially created by converting the (Home Service) Garrison battalions of line infantry regiments, which were composed of soldiers either too old or medically unfit for active front-line service. Its role was to provide troops for security and guard duties inside the United Kingdom, protecting ‘Vulnerable Points’ such as ports, special military areas, main roads, railway yards and bridges. It also provided independent Protection Companies for guarding prisoner-of-war camps. In April 1918 some 27,000 men were serving in the Royal Defence Corps, of which 14,000 were employed at prisoner of war camps.

During World War One a German Labour Internment Camp, later Prisoner of War Camp, existed in Westerleigh Road, on the corner of Stanshawes Drive, and opposite Westerleigh Common. It was first opened in February 1917 to accommodate civilian internees, but on 14 March two of these escaped from the facility, both being dressed in fustian jackets and short trousers.

One was named as Karl Perus, an Austrian waiter, who had previously resided in London and who spoke in broken English. He was 29 years of age, 6 feet high, with fair hair and brown eyes. The other escapee was Tuno Chyleanzi, a Hungarian sailor, previously living in Liverpool, who also spoke only broken English. He was described as being 29 years, 5 feet 7 inches tall, of slim build, with blue eyes, fair hair and complexion. He was also tattooed on both forearms and had a slight moustache.

The pair was finally recaptured in the street at Twyford on Saturday night, 17 March, and subsequently stated that upon on escaping from the camp they had walked to Cirencester. They then walked 25 miles and lost their way, afterwards taking train to Reading, and walking to Twyford in Berkshire, with the object of reaching London. During their period at large they bought their food in shops and slept ‘rough’ at nights.

The inmates were then returned to the Isle of Man, where the majority of civilian internees were held during World War One, and on 23 March 1917 several hundred

soldiers arrived from the Prisoner of War Camp at Dorchester camp, a number which was subsequently increased. Captain M.C. Macfarlane, (General Service), of the Royal Defence Corps, was appointed the Commandant the new Prisoner of War Camp.

Representatives of the Swiss Legation in London visited the camp on 26 May 1917 and prepared a detailed report in which it was stated that at that time there were 499 German prisoners in the camp, 497 military and two naval, and that the senior German officer was Stellvertreter Xaver Volsmeier.

The fenced in compound measured 150 by 100 yards and was fairly spacious, while the paths in the camp were well arranged and covered with cinders (ashes). Garden beds had also been laid out and were kept in good order by the men. There were twenty wooden huts each measuring 80 by 30 feet, and giving ample room for thirty beds, and also for dining tables and benches. The men had the standard ‘three board’ beds with trestles, good straw mattresses, and, for the summer but three blankets. The Feldwebels' quarters were at one end of the recreation hut, while another hut was used as a barber's shop and a workshop for the camp’s two tailors and shoemakers.

The huts were heated by stoves and latrines, using the pail system, were provided in sufficient quantity, along with forty shower baths with hot and cold water. There was a well arranged ablution room, but the 22 wash bowls appeared too few for the 500 men, though of course they were at liberty to use the many bathing cabins as well, which they did, so that there was really no lack of opportunity for washing. The men did their own laundry in the washing room, and there was a good and sufficiently large drying room.

The water supplied was good and sufficient, from the village water main, but although at the time of the visit there was only street drainage, regular drainage was just being arranged. The sewerage was carted off by contractor, while the garbage was to be destroyed in the camp as a large destroyer had been completed.

The kitchen and storerooms were good, and a Saturday noon meal was observed, which consisted of a thick puree' of bread and meat, which appeared to be present in the quantity prescribed. The nutrition was according to the Government ration for working men, and everybody in the camp received this ration. A canteen was run by a local shop-keeper, and eggs could be bought for 2½d, milk for 1/8d a gallon, some 10 to 12 gallons being sold a day. Figs, dates, canned fish, etc. were also on sale, and 10% of the profits reverted to the ‘Canteen Fund’.

There was one hospital hut, with a consultation room and six beds. Two Royal Army Medical Corps men and two German orderlies helped in the infirmary, under the direction of a visiting doctor from Chipping Sodbury. When visited there was one man in the hospital while another, who a few days previous had fallen about 25 feet from the roof of a shed where he was working, was in the infirmary. Luckily he had sustained only bruises. Serious cases would be sent to the Beaufort War Hospital at Fishponds in Bristol.

The men were employed by three firms, one of which was the McAlpine Government Contracting Company, which undertook hut and shed construction and street making, and it was understood that they were insured under the Workman's Compensation Act. The general pay was 1d per an hour, skilled carpenters and locksmiths getting 1½d, and the men working in camp as tailors and boot-makers 1/- a day, while the two barbers were paid by the prisoners at the rate of ½d for shaving and 1d for a hair cut.

A gramophone was provided by the Commandant and there was also a small library which was due to be expanded. During the visit no complaints of importance were made, and only a few small matters were brought to the attention of the Commandant. Although being strict, he was a very just and gentlemanly officer who was well liked by the men, while his adjutant was a broad minded man. The report concluded that the prisoners at Yate were very well treated, and that the camp made such an excellent impression in every respect that it might well be taken as a model of what a prisoner of War Camp should be.

After closure following the end of the war the site went on to become an important part of Yate's growing manufacturing industry when Hollybrook brickworks moved in during the 1930s. This was followed by silos and storage manufacturer undertaken by H. Cooper & Sons engineering, which took over after World War Two, the firm having been incorporated in Bristol on 23 March 1953. However, in 2011 it was finally decided to demolish the old 70,000 square feet factory in order to build seventy houses on the site, including a retirement living home named 'Coopers Court'.

NATIONAL CONCRETE SLAB FACTORY AT YATE

During World War One over 8700 companies and factories in the U.K. produced munitions of various sorts, but of these only 218 were the so called National Factories. These were in fact established following the passage of the 1915 Munitions of War Act that led to the creation in June 1915 of the Ministry of Munitions, which was brought into being to organize the supply of munitions and control the supply of materials deemed crucial for war production. The new Ministry also had the power to create special National Factories to produce vital war material, and although theoretically under direct Ministry control, a number were actually run by private firms. However, this was carried out under an agency scheme whereby the entire construction and running of the plant was funded by the Ministry, while the companies paid on a 'cost plus percentage' basis. One such facility was National Factory No.212, the Concrete Slab Factory at Yate (ST 69949 82452), while the other National Concrete Slab Factory, No.211, was built adjacent to J.A. King & Company's plaster factory at Gotham in Nottinghamshire.

Prior to the outbreak of war McAlpine and Sons, a major civil engineering contractor to the government which had built up much experience in concrete construction, had developed a very hard and durable 'ferrolithic' concrete. Made from Portland cement and crushed slag from open hearth steel furnaces, several large industrial contracts had already been carried out using this material. The firm had also taken out a licence for François Hennebique's 'Beton Armé' (armoured concrete) and jointly formed the McAlpine-Hennebique Ferro-Concrete Co. Ltd to use patented 'improvements in the construction of joists, girders and the like with cement strengthened with iron or the like'. In addition McAlpines had made an agreement with another Frenchman, Edmond Coignet, to use the Coignet System of reinforcement.

Although the war caused McAlpine's workforce to decline by about 5000 as men joined the Army, the company was nevertheless awarded contracts to build hutting for the thousands of troops needing accommodation in France, as well as armament factories and aerodromes around Britain. Their expertise in reinforced concrete was put to use when the National Concrete Slab Factory at Yate was opened in 1917, an establishment which was to be run by McAlpines on behalf of the Government. Wood had become a scarce commodity due to the German U-Boat blockade in the Channel and the company began to produce pre-cast concrete slab huts, fence and telegraph poles, reinforced concrete joists and other items previously made of wood. These were some of the earliest utility items to be made from this material.

The contribution to the war effort made by Robert McAlpine's company was rewarded by the King who, on 31 May 1918, conferred a Baronetcy on Robert McAlpine. The citation in the 'London Gazette' stated that it was 'for continuous public and patriotic service for many years in the provision of Workman's Dwellings and the creation of Garden Cities, and for meritorious war work in the construction of Shell Factories in Scotland and England'. The company thereafter was known as Sir Robert McAlpine and Sons.

Early on the morning of 5 June 1919 Dr. Addison, the President of the Local Government Board, paid a brief visit to the parochial offices Warmley, and addressed

the members and officers of Kingswood Urban Council, Warmley District Council, Chipping Sodbury District Council, and representatives of the local Parish Councils. Mr R. Wilson (clerk Chipping Sodbury District Council) referred to the closing of the concrete slab factory at Yate. It was grievance to many workpeople that this factory, opened during the war, was now closed. He had mentioned the matter to the Local Government Board. At that factory could be provided all the windows and doors that would be needed in the district, and it would be giving a great amount of satisfaction to many people if the factory was re-opened.

Then, on 27 June 1919 the 'Western Daily Press' reported that Mr Athelstan Rendell, the MP for Thornbury, had asked the President of the Local Government Board whether he was aware that the Ministry of Munitions had set up a large concrete-slab factory close to the railway station at Yate, that at the date of the armistice in November 1918 had employed some 300 to 400 workers. He went on to state that that since then all the employees had been discharged, and that a large number were still in receipt of out-of-work pay to the extent of hundreds of pounds weekly. He continued by explaining that the factory, which covered an area of 1,107,053 cubic feet, had up-to-date machinery driven by electricity and was capable of turning out a quantity of urgently-needed building necessities, woodwork as well as concrete material. As many hundreds of houses were required in the immediate neighbourhood of the factory, he asked if it could be seen whether immediate use could be made of the premises, specially competent to speed the building of houses?

In reply Mr Kellaway, wrote that representatives of the Ministry of Munitions and the Local Government Board were to visit Yate to ascertain whether the factory could in any way be utilized for the production of material in connection with the Government housing programme. However, on 23 August there appeared in various newspapers a 'Preliminary announcement of sale - Ministry of Munitions by direction of the Disposal Board - National Slab Factory at Yate'.

It was stated that John E. Pritchard & Company would sell by auction at the Bank Auction Mart, Colston Avenue, Bristol, early in October the valuable property at Yate described as covering an area of 18 acres, 3 roods, and 9 perches, or thereabouts including quarry, comprising well designed buildings, offices etc, and the excellent pennant quarry situate some 400 yards to the south-west of the factory. Buildings, casting sheds, lofty and light, floor area 43,200 square feet. Joiners' shop admirably suited for all classes of work, floor area 7200 square feet. Crusher building, three floors, internal construction ferro-concrete, total floor area 10,920 square feet. Other buildings include stores, smithy, reinforcing shop, lavatories, garage, power house and an administrative block with accommodation for twenty clerks. Electric light and power generated at the factory. Heating - exhaust steam and stoves. Water - an abundant supply from main and well upon property.

On 4 February 1920 it was reported that the Clerk to Warmley Rural District Council had written to Sir Robert McAlpine & Sons asking if they would supply number of concrete posts from the National Factory at Yate for their building schemes, and a reply was received saying that they could not get permission from the Minister of Munitions to sell.

The Clerk added that there were thousands of tons of building material lying idle which Housing Committees would glad to get hold of to expedite housing, and yet the Ministry of Supply would not sell it.

Mr Edwards said it was a shame that Building Committees should be insulted in this way. There were hundreds of pounds worth stuff badly wanted, and they would not let them or anyone else have it. He felt they should take steps to let the Ministry know that they wanted these things badly. They urged them to get on with the building scheme and the same time would not sell them available building material. The whole thing was absurd. The Clerk was instructed to write the Ministry of Supply hereon.

However, on 19 May 1920 it was reported that the National Slab Factory at Yate had been sold, and it was probable that it would be occupied during the current year.

HAND GRENADE FILLING BY CRANE & COMPANY AT WARMLEY

Nothing epitomizes the First World War more than trench warfare, which prevailed on the Western Front from 16 September 1914 right up until the Germans launched their Spring Offensive on 21 March 1918. During this period a deadly and grinding attrition became the norm, with casualties on the defenders side often matching those of the attackers, while the amount of ground gained by either side was usually very small.

As the stalemate of trench warfare dragged on hand grenades became a universally employed weapon, as they allowed a single soldier the firepower to dislodge an entrenched foe just by priming the explosive and lobbing it in the enemy's direction. Both sides hoped that the resulting explosion, and subsequent spatter of steel fragments, would kill, maim, or shock the opponent into submission.

On the British side, the War Department believed that something similar to the Belgian designed self-igniting hand grenade patented back in 1912 might be a valuable asset for British soldiers in the trenches, although it was considered that it would need to be completely redesigned to make it safer and more efficient. That task was given to William Mills, (born Sunderland 1856; died Weston super Mare 1932), an experienced engineer who went on to develop a three inch tall cast iron bodied egg shaped grenade weighing 1.7lbs. It resembled a small pineapple due to its segmented outer form, and soon became popularly known as the ‘Mills Bomb’.

By May 1915 prototypes had cleared evaluation and then, officially designated the No.5 Mk I, its inventor opened Mills Munitions Ltd of Bridge Street West, Birmingham, to manufacture the weapon, which also went on to be made by many other British contractors. The ‘Mills Bomb’ was to become the standard hand grenade of the British Army, and as many as 76 millions of its various versions were supplied to Britain and her allies between April 1915 and late 1918.

No.5 Mk I grenades were supplied to the infantry in wooden chests, each containing twelve grenades, with a tin of igniter sets. To use the grenade the safety pin had to be removed, and once it had been pulled out, by use of the attached ring, the user would hold the strike lever down and prepare to throw. Once lobbed, the lever would be jettisoned causing a fuse to be lit which burnt for five seconds before the grenade detonated.

The No.5 Mk I grenade, along with the Mk II, which had a redesigned stronger safety lever, were for hand use only, but the ‘Mills Bomb’ was soon developed into a rifle grenade by attaching a metallic rod to its base. The rod would be put down the barrel of a standard rifle which had been loaded with a special blank cartridge, its stock placed on the ground, and the rifle fired. Introduced in 1916, the modified grenade, known as the No.23 Mk I, had a base plug drilled with a threaded hole to allow the rifle launching rod to be screwed in, while the No.23 Mk II had a new style base plug that was easier to tighten with the fingers without the need for a spanner. Finally, the No.23 Mk III of 1917 had a new style body with a larger filler hole plug and more solid lever lugs.

Finally came the No.36 Mk I, which was first introduced in May 1918 and used the No.23 Mk III body, but with a new style plug which was drilled and threaded for attaching a metal disc, known as a gas check. That made the grenade launchable from a 2½ inch diameter tube with a screw clamp that could be attached to a rifle barrel. Known as a cup discharger it enabled a greater distance to be achieved with more accuracy. There were also the special shellac coated ‘Mesopotamian’ variants, designated ‘M’, which were designed to keep moisture and humidity out of the detonator’s fuses in No.23 and No.36 grenades.

Warmley’s principle contribution to the war effort came from Crane’s fireworks factory, which took on the task of filling hand grenades with explosives, after which the workforce increased to nearly one hundred, mostly young women, and three large additional wooden sheds were built. The company was in fact one of a number of pre-war firework manufacturers engaged by the Ministry of Munitions to fill Trench Warfare stores, mostly grenades.

Crane & Company’s first contract was awarded in November 1915, and was for the filling of one million No.5 grenades with Ammonal at the rate of 25,000 to 100,000 per week. The explosive was made up of ammonium nitrate and aluminium powder, the ammonium nitrate functioning as an oxidizer and the aluminium as the fuel. The use of these relatively cheap materials made Ammonal a good replacement for pure TNT.

In July 1916 Crane & Company’s contract was extended indefinitely for the filling of 30, 000 per week, while in time the firm regularly exceeded the figures to the tune of 55,000 to 100,000 per week, and so the contract was amended to 50,000 a week minimum.

In October 1917 Crane & Company became one of the few small Filling Stations to fill the ‘M’ specification grenades for hot and tropical climates. An initial spot demand for 500,000 of these grenades, mostly No.23 and a small number of No.36 types, was met by Crane & Company and others, and these were then stored locally in the Feeder Road grenade store in Bristol, as ships were loaded at nearby Avonmouth, the preferred port for shipping stores to Egypt and Salonica. A second demand for a further 500,000 ‘M’ specification grenades was placed entirely with Crane & Company, to be met at the rate of 15,000 per week.

In December 1917, the increasing demands for ‘M" specification grenade, both No.23 Mk.III M and No.36 M, for Mesopotamia led to the cancellation of the original filling contract, and a new one put in place at a reduction in price of 10s per thousand, or a saving of £350 on the contract total of 700,000. A new filling system for 100% crystalline Trotyl (TNT) was installed at Warmley, and so Crane & Company became one of a few Filling Stations with a specialized TNT capability outside of the major Trench Warfare Filling Factories.

When packing the boxes of twelve grenades to be shipped to the Front, the Warmley girls would often slip a little note for the ‘Tommies’ to find, and frequently they would receive a reply, sometimes in a foreign language. For recreation, these fit young women formed themselves into a tug-of-war team, calling themselves the 'Warmley Grenadiers',

and they proved formidable opposition during tournaments in the district, including events at Douglas Sports Days and other challenge matches.

It has been variously reported that eight or ten million grenades were handled at Warmley during World War One, but that activity had all ceased by 12 November 1918 when the Ministry of Munitions wrote to Crane & Company upon the conclusion of their contracts for Grenades No.23 and No.36.

The communication, on behalf of the Section Director of A.M.14, stated, “I desire to thank you for the manner in which you have carried out your engagements with the Department, and to express its great appreciation of the spirit which you and your staff have put into the production of these munitions for the provision of fighting material for His Majesty’s Forces, and although it is recognized that payment has of course been due to your efforts, it is equally recognized that the services which you have rendered to the country, are not altogether expressible in terms of money, since they involve the saving of lives, and the preservation of the integrity of the Empire.

It must be a source of considerable satisfaction to yourselves, and to the whole of your staff that you have been thus able to take a personal, and very important part in the great task which the Empire has had to undertake, which with the assistance of your efforts and those of others equally patriotic, has been brought to such a satisfactory conclusion.”

APPENDIX

(Notes on the history of the Warmley Firework Factory)

There had been a firework manufactory in Warmley since about 1877, although the origins of the undertaking can be traced back to mid-nineteenth century Bristol. It was in that City, in late 1850, that one Thomas Boon Clements (1833 to 1890), a toy shop keeper, married Eliza Cook (c.1821 to 1891), who lady who had previously practiced the art of firework making. So it was that, over the years the firework side of their business expanded, so that by 1866 their manufactory at Barton Hill in Bristol was employing around seventy people. However, the following year Thomas Boon Clements decided to sell up and pursue a career as a solicitor. Consequently, he became a solicitor’s articled clerk, and although he passed his intermediate examination in 1870, for various reasons he never took his final solicitor’s examination in 1872, and therefore remained a solicitors managing clerk for the rest of his career.

As Thomas’s income was then insufficient to meet household expenses, Eliza Clements continued firework making. However, in late 1876 Thomas, in whose name the couple’s home, ‘Barton Villas’, Queen Anne Street at Barton Hill, had been registered for keeping explosives, fell foul of the Explosives Act of 1875, and was prosecuted for storing “a large quantity of gunpowder in excess of the amount that firework makers were permitted to keep at one time”. The result was that Thomas Boon Clements was fined £20, while fireworks worth about £70 were also confiscated.

So, in 1877, the Clements decided to move, and finally took up residence at ‘Brook Villa’ in Warmley which, until his death in August 1875 had been the home of Thomas Jefferies. Eliza continued her firework manufacturing business there in a relatively small way, from two well detached magazines and employing just one ‘maid of all work. Then, in 1884, it was recorded for the first time that the Clements were residing at ‘The Orchard’ in Warmley, while the following year the first mention is made of Clements & Company, fireworks makers, sharing premises at 2 Narrow Wine Street in Bristol, which they used as a both a wholesale and retail outlet.

However, nothing lasts for ever, and the company’s last advertisement appeared in November 1889 before, on 11 June 1890, and after a long illness, Thomas Boon Clements died, aged 57, leaving an estate valued at £70, while his widow was buried at St Barnabas in Warmley on 1 July 1891, aged 70. Following the deaths of the childless couple their Warmley firework manufactory was eventually acquired by one Isaac Crane (1855 to 1924).

Born in Compton Martin in Somerset, Isaac Crane was working as a tea dealer and grocer in Pontypool when he married Mary Jane Jenkins, and their second child, George Richard Crane, was born there in 1879. Unfortunately, in 1883 it was announced that Crane had put his business into voluntary liquidation but, after moving to Bristol, by 1887 he had taken over a confectioner’s business at 1 Bond Street. He also became a tobacconist and, in addition, in June 1887 was first reported as being the Bristol agent for James Pain & Sons Ltd, the well know Mitcham based firework makers.

In 1889 a move was made to nearby 4 St James’s Parade, where he continued operating his fireworks agency, and in November 1892 he placed an advertisement in a local newspaper which read, “Paine’s London Fireworks. Sole Bristol agents, I. Crane, London Firework Depot, St James’s Barton”. Nevertheless, that was to be the last mention of his connection with Pain’s as in June 1893 his St James’s Barton depot was being advertised as “Crane’s London Firework Depot”,

After acquiring the Clements old undertaking at Warmley, Isaac Crane later wrote that it had taken him fifteen months to obtain the license to build premises there in accordance with existing regulations under the Explosives Act for the establishment of a firework factory. In October 1893 he made an application to Gloucester County Council their approval of a site for the firework factory at Warmley before, on 4 April 1894, Isaac Crane of 4 St James Parade, Bristol, was granted his first license for his No.3 magazine at Warmley. Then, in January 1894, it was reported that Gloucestershire County Council have at last given permission for the establishment of a large firework factory at Warmley, which, when developed, “will give employment to a large number of workmen.”

Issac Crane continued to live at 4 St James Parade, which continued to act as his company’s wholesale and retail outlet, and in late 1895 he was advertising “Crane’s Fireworks, wholesale direct from factory. No middlemen’s profits. Support home industry and but from Crane & Company, Firework Manufacturers, St James’s Barton, Bristol.” Expansion continued, and on 31 July 1898 a license was granted to permit an increased the amount of explosives that could be held in Warmley’s No.3 Magazine, while in May

1899 the firm advertised for 50 boys and girls, aged from 14 to 16 years, to learn firework making at Crane's factory in Warmley.

By end of the first decade of twentieth century the factory had developed into a large undertaking, and a full description of it appeared in a Crane & Company advertising pamphlet published a few years before the outbreak of World War One, in which Isaac Crane was described as the founder of the business, and his son George the manager of the factory. By that time a third license had been obtained permitting the storage of up to 100,000lbs of fireworks at Warmley.

It was stated that the factory, which consisted of forty workshops, was situated near the Midland Railway Station, and that the workshops were heated with hot water pipes and special precautions taken for the comfort and safety of the workpeople. Those working in twenty-two of the workshops and magazines had to wear special serge clothing and slippers. The magazine over-boots were fastened with wooden pegs, as no iron or steel was allowed to be visible in either of the workshops and magazines where fireworks were charged, finished, and stored. The buildings were all isolated by means of screens, those around the magazines being massive brickwork, while additional protection was given to the powder magazine by a strong embankment, with which the screens were backed.

All shops were numbered, and No.1 was used as a Paper Storing & Cutting Room, which held thirty tons of paper that was cut up by machinery, prior to being conveyed to No.2, the Casemaking Room, where every description of Fifth November and Dispaly Firework cases were made. These were afterwards stored in Nos.3 and 4 Case Storing Rooms, holding about 50,000 gross of cases. No.5 Shop was used for mixing all kinds of black composition, and each batch of mixed composition was tested in No.6 Testing Shop, which was kept expressly for that purpose, and when it was found correct it was conveyed to No.7 Composition Magazine, from where the workmen fetched it when required.

Nos.8, 9, 10, 11, 12, and 13 Shops were used for charging every description of fireworks, while goods not completely finished were stored in No.14, the Unfinished Goods Magazine. No.15 Shop was used for Catherine Wheel Making, of which thousands of gross were made annually. No.16 Shop was used for Cracker Making, where each one has to go through ten different processes before they were complete. No.17, the Whistling Shop, is where Whistling Fireworks were made, a special line for the firm. Nos. 18, 19, and 20, were used as Finishing Shops, where all Fifth November fireworks were covered with fancy papers, and completely finished for sale.

Nos. 21, 22, 23, and 24 Magazines were where the company stored every description of finished goods. No.25 was used as a Packing Shop, where the fireworks were packed for transit, the goods having been conveyed from the various Magazines, which were 50 yards apart, by trollies on a tramway extending 1000 yards, and connected with various workshops throughout the factory.

No.26 was a Coloured Fire and Star Making Shop, used for Shells, Rockets, and Roman Candles, which were conveyed to No.27, Coloured Fire Magazine, while No.28 was a Powder Magazine, specially protected. No.29 was a Casemaking Shop for Display Work, from which the cases were conveyed to No.30, Empty Case Storing & Drying Shop. After being thoroughly dried they were taken to the Charging Shops to be charged, and from there to No.31, Display Goods Magazine, where the firm stored every description of goods for Public Displays, ready to be dispatched at a moment's notice.

No.32 was a Chemical Store, where the firm always had a large stock ready for any emergency. No.33 was used as a Saltpetre & Sulphur Store, while No.34, Wood Storing Room, was where were stored about 50 kinds of Turnery Woodwork. No.35 was a Warehouse for all kinds of materials used in the making of Ship Rockets and Blue Lights for Distress, along with Special Code Signals to order. No.36 was a large room for making Balloons, which were then taken to No.37 Balloon Store. No.38 was a Charcoal Store, and No.39, a Large Empty Box Warehouse, while No.40, Framework Warehouse, was where were stored every description of Framework for Public Displays. The Framework was so arranged on large brackets, and kept in good repair, so as to have been ready to be dispatched at the shortest notice.

The Heavy Iron Mortars, that the firm fired Shells from at Displays, were stored in a raise lean-to on one side of the Warehouse, so that they could easily be rolled on to the Railway Company's trollies, as some of them weighed from 5 to 6 cwt each. The firm's Designing Platform, 30 feet by 20 feet, immediately adjoined, on which they worked out Set Pieces, Portraits, etc, before they were portrayed in Coloured or Brilliant Fire.

In late 1919 Isaac Crane retired, at which time Cranes & Company's holdings consisted of the freehold factory at Warmley, licensed for the manufacture of fireworks, and with electric light and central heating throughout, and gas and water laid on. It was equipped with modern buildings covering about 13,200 feet super, and had a total area of about 3½ acres. In addition there was the freehold shop and dwelling house, No.3 St James' Parade, Horsefair, Bristol, and a leasehold magazine situated at Bridgeyate, for the storage of explosives.

The company was then re-organized as Crane's Firework Company Ltd, with Mr W.B. Tuck, acting as the managing director and George J. Jones as manager. Then, on 4 March 1924, Isaac Crane, who was then living at 'West View', 180 Cheltenham Road, Bristol, finally passed away, while the house was put up for auction on 26 April 1934, following the decease of his widow Mary Jane Crane.

Cranes was considered to be both well managed and productive, but tragedy struck on 16 September 1935, when an explosion took place in one of the Finishing Rooms, which consisted of a small wooden hut with a door at each end as emergency exits and a bench in front of the windows. Without warning a small quantity of gunpowder suddenly burst into flames in one corner. Kitty Brokenbrow, the leader of the small team of five, instantly gave the alarm and as the young women dashed to the nearest door there was a great flash as more powder ignited and four of the girls were enveloped in a sheet of flame.

The fire spread to a box of sky rockets which went off like a machine gun, blowing out all the windows. Luckily, a passing police patrol car was flagged down and instantly rushed the five girls to Cossham Hospital in nearby Kingswood. The girls all suffered burns to the hands and head, two relatively minor, two more were detained in hospital overnight, but Nellie Brewer, aged only 18, who took the full blast protecting the others from a similar fate, died three days later.

Unfortunately, on the afternoon of Saturday 23 October 1937 a fire broke out at the firework factory, where a fire broke out destroying the three large wooden sheds which had been built during World War One, when the factory was busy filling grenades. On arrival the firemen threw a wall of water between the blazing workshops and the powder magazines. Flames shooting up into the night air could be seen for miles around, and bursting fireworks and gunpowder added to the danger.

George Crane, the managing director, who lived at St James's Parade in Bristol, which still acted as the firm's distributing centre, hurried to the scene and reported that everything had been in order when the workmen left the premises at about 3.30 p.m., and that stocks were low as most of the fireworks were by then in the shops in anticipation of 5 November. About 80 to 100 girls, most of them living locally, were employed at the factory, and it was anticipated that most would be thrown out of work for some time, while although the buildings destroyed were wooden structures, Crane estimated the damage at well over £1000.

This really marked the beginning of the end for the firework factory, as on 1 November 1938 it was reported that Cranes had been acquired by Brock's a rival firework manufacturer, and the last advert for Crane's fireworks appeared in the local press the same day. It stated. "Don't be too late this year for 5th November! Go now to your nearest stockists and ask for Crane's fireworks. They're reliably made in Bristol by Bristol labour. Proprietors C.T. Brock & Company, Crystal Palace Fireworks Ltd. Depot 3 St James' Parade, Bristol.

Then, on 5 November, it was announced that Crane's Fireworks Company Ltd was in Voluntary Liquidation, while on 14 January 1939 it was revealed that the 6½ acres of accommodation land, formerly Crane's Firework Factory, with entrance from main road, sewer, gas, company water, and extensive frontage to Brook Road, had been sold by private treaty. On 12 February 1949 George Richard Crane of 22 Cricklade Road, Bishopston, Bristol, died aged 69 leaving an estate valued at £1938 17s 1d, while the site of the old factory, which for a time was known as 'Firework Farm', has now been built over, although the area's previous history is recalled by the names Fireworks, Fawkes, and Cranes Close.

ARMY TRAINING AT CHIPPING SODBURY

5th Battalion Loyal North Lancashire Regiment

The 5th Battalion, Loyal North Lancashire Regiment, was an infantry unit of the pre-war Territorial Force, and had its Headquarters at Fletcher Street in Bolton. It was part of the North Lancashire Infantry Brigade, West Lancashire Division. When war broke out it was mobilized before, on 15 August 1914, and led by Lieutenant-Colonel John William Slater, it moved for training to Chipping Sodbury, where it took over Hartley House as a hospital and stores.

However, on 14 November it was announced that it had been ordered to a Divisional camp, and consequently transferred to Sevenoaks in Kent. Then, in February 1915 the Battalion left the West Lancashire Division and proceeded to France, landing at Le Havre to join the 16th Brigade in the 6th Division.

Unfortunately during their short stay in Chipping Sodbury the 5th Battalion lost three men killed, all of whom had been engaged in guarding railway installations, and one of the trio still lies buried in the town.

1685 Private Samuel Coope aged 28, killed on 19 August 1914

At the inquest into the death of Dumfries born Samuel Coope was held on the evening of 19 August at the Manor School, Coalpit Heath, Captain Philip Austin Ottley Read of the 5th Battalion stated that during the afternoon he was in charge of a section of the railway line near Coalpit Heath. Coope was on patrol duty at post No.9, half a mile east from the village, and both he and the others had been warned as to the danger of trains. The Captain heard of the accident at 2.45 p.m., and at once proceeded to Coalpit Heath, and found the body at the station. He understood that Coope was sat down on the line when an express train from Sodbury came along.

Surgeon-Captain Henry Taylor, of the 5th Battalion, who was stationed at their headquarters at Chipping Sodbury, said that soon after 2 p.m. he was informed of the accident, and immediately went to where it had occurred. He discovered Coope's body half a mile east from Coalpit Heath railway station, the injuries being consistent with his being knocked down by a train.

Private Adam Schofield Wood, of Bridgwater Street, Farnworth, near Bolton, of 'D' Company, 5th Battalion, knew Coope who lived at Price Street, Farnworth, and was next to him on the patrol on the line that day. The accident occurred at 2 p.m. A minute before an express came along he saw Coope sitting on the line instead of patrolling. He shouted to him, and some platelayers also shouted, but he seemed to take no notice. He was sat down with his head on his hands just before the express came, but had not complained to Wood of feeling unwell.

Charles Ernest Simmons, a platelayer, of New Road, Winterbourne Down, said he and six others were working not far from where the accident occurred. Just after they got

back from dinner they saw a man sat on the rails, just as the express was coming. They blew their whistles and shouted, and the whistle of the engine was blown. The man was sitting on the rails with his feet in the four foot way. The train was going at a speed of about 40 miles an hour. His own opinion was that the man was overcome by the heat.

A verdict was returned that Coope had died from a fractured skull, owing to his being accidentally knocked down by an express train whilst on military duty. His funeral took place on 21 August, when he was laid to rest with full military honours in St John the Baptist churchyard extension at Chipping Sodbury, grave H.86. The vicar, the Reverend W.H.P. Harvey conducted the service, which was attended by the headquarters staff, while the mourners included Coope's mother, two brothers, and a cousin. A beautiful wreath, tied in the regimental colours, was placed on the grave by the officers of the regiment, and amongst many others from the townspeople was one from his mother and brothers.

1878 Private James Idle aged 19, killed on 27 August 1914

The inquest into the death of Idle, a single man, who was killed by a passing train at Rodbourne Bottom Viaduct near Malmesbury, was held at Rodbourne. Lieutenant Makant, the officer commanding 'B' Company, 5th Battalion, and Surgeon-Captain Taylor were present, while Sergeant W.F. Lowe gave evidence of identification.

Private Joseph Roland Houghton stated that on 27 August he and Idle were on duty at the Great Western Railway viaduct at Rodbourne Bottom, and that he was doing sentry duty while Idle was patrolling the line. At 12.30 in the afternoon, when Idle was proceeding down the line, Houghton saw the Bristol to London express train approaching. Idle was on the same side as the train and facing it. Houghton then shouted to him a warning, but instead of stepping aside Idle turned round and walked up the line. He seemed to have lost his head, as he took no notice if Houghton's shouts.

Private True, another sentry, said Idle appeared to be making for safety, but he had new boots on, and these apparently caused him to slip on the sleepers. True also shouted three times to warn him. A verdict of accidental death was recorded, and Idle was subsequently laid to rest in the churchyard of St Mary in Hullavington.

1473 Private Matthew Crook aged 20, killed on 7 October 1914.

At about 5.45 p.m. on the evening of 7 October 1914 a shocking tragedy occurred in the fields near Filton Golf Course, when Private William Crook accidentally shot his brother Private Matthew Crook through the heart and dangerously wounded a young girl friend with the same bullet.

Privates William and Matthew Crook were attached to the 5th Battalion, The loyal North Lancashire Regiment, then stationed locally, and were in the company of two young girl friends that evening in fields not far from Filton Golf Club House, and near the railway line. One of the soldier's rifles was loaded, and when the party were examining the weapon, when the trigger was accidentally pulled. To the horror of William Crook, his

brother Matthew fell dead at his feet, shot through the chest, while one of the girls screamed out that she was shot, as the bullet had actually passed through the bodies of both victims.

Matthew Crook had been shot through the right lung, and, in the case of the girl, the bullet had entered the chest and passed out through her side. It was clear that the girl had been seriously wounded as blood was flowing freely from the bullet wound. William Crook hurried to the Golf Club House, where there was a telephone, and was quickly in touch with the St John Ambulance. Meanwhile, Dr Green of Westbury on Trym, hurried to the scene of the accident, and did all he could for 18 year old Caroline 'Carrie' Britton, of 431 Wells Road, Knowle, Bristol, who was subsequently removed by ambulance to the Bristol Royal Infirmary, where an hour later she was said to be in an extremely critical condition.

A telephone message to the Filton Police Station had brought police officers to the scene and William Crook, who was in a pathetic state of collapse, was arrested and taken to Staple Hill Police Station, while the body of Matthew Crook was removed to the Carpenter's Arms at Charlton prior to the first part of the inquest, which was to be held there in four parts on 8 October; 14 October; 17 October; and 24 October.

Among those attending the inquest was Captain Thomas Entwistle from 'F' Company, 5th Battalion, The Loyal North Lancashire Regiment, along with Captain Colin Knyaston Potter from the same Battalion. Also from that unit were Sergeant George Wakes; Private William Crook; Private Ralph Withington; Private Edward Moorcroft; and Private James Henry Boardman. In addition the inquest heard from Superintendent Cook of the Lawford's Gate Police Division; P.C. Slater from Filton Police Station; Dr Sydney Bulch Green of Westbury on Trym; Florence Gay, of 13 Hanham Road, Kingswood; and Thomas Birchfield of Horfield, who was a commercial traveller.

Captain stated that he was in charge of the men from 'F' Company, who were engaged in guarding the line from Henbury to Charlton, and that Private Matthew Crook had been a member of that Company. His duty, with three others, had been to guard a railway bridge, during which time they had two hours' duty and four hours off, but Matthew Crook had not been on duty at the time of the occurrence. The men lived in huts adjoining the railway, and when off duty there was no objection to the men visiting other posts. They had to load their rifles when going on duty, and to unload when going off duty. In loading they put five cartridges in the magazine.

Captain Potter stated that it was not advisable for friends to visit the men inside the wire fence, or at the various posts on the line, and that it was in fact against the regulations. Just before 7 p.m. on the evening of 7 October three men had run up to him and said that a man had been shot near Charlton. He came from Henbury at once and saw the body of Matthew Crook outside a hut on the line. There were several men there, and the police. Private Boardman was on duty there, and Private Moorcroft, who was acting as N.C.O., and others, including Sergeant Wakes, who picked up the rifle. They reported that the deceased came to visit the post, that there were also two girls at the post, and they were giving then tea. Matthew Crook went to get water to make the tea, and on his

return his cap badge was missing. He said jokingly that unless he got it back he would get confined to barracks. They heard a shot fired, but he had got no clear report of the shooting. He Potter also stated that there was a safety catch, which should be up when the rifle was loaded, but that the catch on the rifle in question was a light one.

Dr Green stated that he arrived at Charlton where the body was, at 6.30 p.m. He was informed that Private Matthew Crook had been shot, and he was found to have a gunshot wound penetrating right through the body which probably entered the chest. On the right of the spine there was a long oval wound. In his opinion, the cause of death was internal hemorrhage from a shot which probably severed an artery. Death must have been almost instantaneous.

Nineteen year old Florence Gay stated that on 7 October she was out at Charlton with Caroline Britton, and had come to visit Private Matthew Crook, and Private Edwin Moorcroft, who they knew were stationed on the line at Charlton. They had been out to visit them there on two or three previous occasions. She knew they had periods of duty when they could not be seen or approached. They visited them at a hut on the line by appointment at 4 p.m., but they were not their sweethearts, just friends. They first knew the soldiers by calling at the bazaar, and afterwards they met them out. On 7 October they arrived on the line at the time agreed, and she had seen four men located at the hut sometimes. They took over for their two friends little presents of notepaper and boot polish. When the girls were talking they saw Matthew Crook coming up the line under the bridge towards them. They had tea, and Matthew Crook went with a soldier named ‘Jimmy, and with herself (Florence) and Caroline Britton, to a farm to get water. They left Edward Moorcroft, ‘Bill’ Crook, and a man named Withington behind.

After they came back with the water William Crook was making preparations for tea in the hut. Florence was standing at the corner of the hut with Moorcroft when she heard something about being confined to barracks. Carrie Britton and Matthew Crook were standing in front of the hut talking when Matthew came back. She then heard him ask for his cap badge, which was missing, and heard someone say that they did not know where his badge was. Matthew Crook then said they would all get confined to barracks unless the cap badge was found. They were all laughing at that, but did not think that Matthew lost his temper.

She saw a rifle outside the hut with a fixed bayonet, heard a shot fired, and saw Matthew Crook stagger. William rushed out of the hut and said, ‘I have shot my brother.” Florence did not know that Caroline Britton had also been shot. William Crook then ran to Caroline, as did Florence. She heard William also say, I have shot two of them with one shot.” During the afternoon Caroline had picked up a rifle and said that she was going on guard. She shouldered the rifle as if she was on guard. She did not hear anyone say, “You had better put it down, it’s loaded.” She asked Carrie what was the matter, and she said she had been shot. Florence asked how it had happened, and Carrie replied, ‘It’s an accident”, ‘Bill’ picked up the rifle and pointed at me and it went off.” Florence also stated that the same rifles were there all the time, but did not know if each of the Crook brothers had a rifle. She went on to say that when the shot was fired

and Matthew fell, ‘Will’ was in the doorway of the hut. She thought the rifle was picked up inside the hut, but did not know who put the rifle against it.

Sergeant George Wakes, stationed at Filton Halt, stated that there were four Privates at the bridge post at Charlton, and that these were Moorcroft, who was acting N.C.O., William Crook, Withington, and Boardman. Each man had 90 rounds of ammunition, and what was in the rifle had to be cleared when they were off duty. Five distinct movements had to be made before it could be fired. On hearing of the occurrence, Wakes came to the post at Charlton about 6.45 p.m. and found Matthew Crook dead, and lying on the bank, with his head towards the hut.

He had been shot through the chest. Wakes then took possession of two rifles and examined them. One was empty in the breach, while the other had an empty cartridge in the breach and four in the magazine, closed over with the ‘cut off’. The ‘cut off’ being closed led Wakes to suppose that what had happened had been an accident, as it was possible in loading, for four cartridges to be put into the magazine, and one into the breach. He had examined the rifles in the presence of P.C. Slater. No man at a post was supposed to show or point his weapon at visitors. When Wakes arrived Caroline Britton was being taken away after being shot.

Private Ralph Withington stated that he was stationed at the lines at Charlton, and was on post duty there with three others. He recalled the girls coming out to Charlton on the day of the incident, as he was on the bridge when they arrived. He placed his rifle by the right hand corner of the hut, and was in the hut when the gun was fired. William Crook was also there, making preparations for tea. Matthew Crook left his badge in the hut while he went with the girls to get some water for the tea, and when he came back he said, “Where’s my cap badge?” One of the girls looked up at Withington’s badge, Withington said, “That’s mine, but I know where his is.”

Matthew Crook was outside the hut, and the badge had been hidden as a joke. One of the girls asked him two or three times where the badge was but he did not tell her. Private Boardman had the badge, which Withington took out for a joke just before Matthew Crook went with the girls for the water for the tea. Boardman did not see Matthew Crook take hold of a gun, but did state that Caroline Britton had come to him with a loaded rifle, to which a bayonet was attached, and asked him where the badge was. The gun belonged to Private Boardman.

Withington then went into the hut, and left the girl with the rifle, but did not hear anyone tell her to put it down. He then heard a shot, and William Crook was at the hut door with a rifle in his hand, and was in the act of throwing it down as Withington turned round. The incident occurred at 5.55 p.m., and he thought that the rifle Carrie Britton picked up was Boardman’s rifle.

Private Withington was present when the shooting took place, and said that he came off duty at 10 a.m., and that Private Boardman relieved him. Withington then went into a hut on line, where he unloaded his rifle. At about 6 p.m. Private Boardman asked for his post on the line to be watched whilst he went to get some water. Later, Private

Withington loaded his rifle in the hut. He put in five cartridges, and also the ‘cut off’ which covered them. When he drew the ‘cut off’ it released one cartridge, which came into the breach, and he then pushed it home. He claimed that he might accidentally have released a cartridge from the ‘cut off’, but did not remember Caroline Britton saying when she picked up the rifle, “I’m going on guard”.

He said Caroline Britton came up to the hut where he was and tried to persuade him to tell her where Matthew Crook’s missing cap badge was. He did not tell, and just after she came up to him with a rifle with pointed bayonet, faced it at him, and told him to say where the cap badge was. He still declined to say where the badge was. He still declined to tell her. Matthew Crook was standing near the girl. He thought the shot went through the girl first and then into the deceased. William Crook came to the hut door and said, “Shall I shoot some body.” He was laughing when he said it. Private Withington then heard a shot and saw Matthew Crook fall, adding that it was three or four minutes after loading his gun that the shot was fired. William Crook came and stood beside him at the door of the hut, and then must have reached and got his (witness’s) rifle, which William Crook fired from his right side.

Private Moorcroft said that he was stationed at a post at Charlton with Privates Crook, Withington, and Boardmam, and that he was the N.C.O. in charge. Two girls, Caroline Britton and Florence Gay arrived about 4 o’clock that day, and he met them coming to their post at Charlton. Matthew Crook came up the line at about 4.15 p.m. Boardman placed his loaded gun by the side of the hut and went to a farm to get some milk for their tea. While William Crook was preparing tea in the hut, the other three and the two girls were outside the hut.

When Matthew Crook found his cap badge missing he said unless he got it back they would all get confined to barracks in the morning. The badge had been removed for a joke. After Matthew had asked for some time for his badge, and Withington had told him he knew where it was and shouldn’t tell, Britton picked up the loaded gun with bayonet pointed. If Boardman had been at his post he would have had this gun. Moorcroft then went away, but when he heard a shot fired he returned and found Matthew Crook falling, and caught him as he fell. Carrie Britton staggered and said she had been shot.

Private Boardman stated that he was on post with Moorcroft, William Crook, and Withington, at Charlton on the date of the incident. Two girls arrived at 4 p.m., at which time he was on the bridge as sentry. He was on duty at 2 p.m., and between them he and others had arranged to take four hours on duty and eight off, which was not in accordance with regulations. There were cartridges in the magazine of his rifle, and the bayonet was fixed. When he went on duty there was no one with him on the bridge. The two girls walked over a field, climbed the rails, and went into the hut by the side of the line. Matthew Crook arrived about a quarter of an hour after the arrival of the girls. About 5 p.m. William Crook asked him to fetch some water, and Boardman enquired whether his guard would be alright if he left. William Crook said they would make it all right between them.

He then went to the hut, placed his rifle and bayonet against it on the right hand side going in. He got a couple of water bottles and went with Matthew Crook and the two girls to a farm to fetch some water. When Matthew arrived he had his badge in his cap, and on going for the water he left his cap behind. Boardman afterwards went for some milk, having been given a shilling to fetch it. He put Matthew Crook's cap badge in his pocket, and handed it over to Withington just before he went out for water. They took the cap badge because they intended to have some fun with it. Later, when Matthew Crook asked for his cap badge, he did not tell where it was. Boardman also stated that the girls did not handle his rifle when he was on the bridge.

P.C. Slater, who was stationed at Filton Police Station, stated that at 6.20 p.m. on the evening in question he was informed that a young man and a girl had been shot, and consequently went up the line and found the Matthew Crook lying on top of the railway bank with bullet wound in his chest and back. Caroline Britton aged 18, of 431 Wells Road, Bristol, was on the bank near the deceased with a bullet wound in her chest. She was being attended and was later sent to the Bristol Royal Infirmary. Slater ascertained that the shot had been fired by William Crook. The bullet went through Matthew Crook, came out through his back, and then went into the girl. The shot knocked his tunic into rags at the back. William Crook was at the bottom of the embankment crying and distressed. Slater took him up to the hut, and on his way there he asked if the man was dead. He next said "I want to tell you all about it. My brother lost his cap badge", and if it was not found he would get sent to headquarters at Chipping Sodbury in the morning and confined to barracks. Crook than stated, "My brother picked up a loaded rifle with fixed bayonet, and pointed it at me. I also picked up a rifle inside the hut. I pressed the trigger, and it went off." Crook then fainted, and when he came to he added, "I ran to the Golf House to phone for a doctor."

On the way to Staple Hill Police Station Crook said, "I didn't mean to do it; I did not know it was loaded, and I hope they forgive me." He was then charged with wilful murder at the station, when he made a written statement, which in effect was much the same as what he had previously said. He added that there was one rifle inside the hut when he arrived, and it was unloaded, while the rifle that had been used had been brought back with another rifle from Charlton Halt at about 7.30 p.m. From rifle No.559, th eone used, four live cartridges were drawn.

Thomas Birchfield, of Horfield, a commercial traveller, stated that he was on the golf links, near Charlton, about 7 p.m., when William Crook approached him very much distressed. He went to the Golf Club House and phoned for the doctor, and while there Crook fainted. He said that they had been larking when his brother picked up a rifle, and he did the same. He did not know it was loaded. He pulled the trigger, and shot his brother. He would rather have cut his right arm off than he should have done it.

Private William Crook stated that he was in the hut on the line cutting bread and butter when his brother came in and said, "My cap badge is missing." The two girls, Britton and Gay, came into the hut and looked at their cap badges. Britton looked at William Crook's and said it was not the missing one. He went into the hut and made up the fire and, turning round, he saw the girl Britton with his rifle in her hand outside with the bayonet

fixed. He heard his brother, who was outside the hut say, “I want my cap badge, or it’s confined to barracks for the lot of you in the morning.” Matthew Crook took the rifle from the girl, and said, “Now then, you are all in for it.” William Crook picked up a rifle beside the hut, put it on his right side and pressed the trigger with his finger. He did not know it was loaded.

The next he heard was the shot. He did not know then it was Private Withington’s rifle that he had picked up in the hut. When his brother took the rifle from the girl, he was not pointing it at him in particular, but at several of them outside the hut. When the shot was fired from the rifle William Crook had picked up he was thunderstruck. He then threw down the rifle and ran to his brother, but as he did so one of the men said, “Go to the girl.” He then caught her and laid her down on the grass. She said “I am shot”. Blood was oozing from her blouse and so he put his field bandage in water and bathed the wound in her chest. One of the men then caught William Crook as he was falling. William Crook also stated that he did not load the rifle he picked up, but that the catch of the rifle might have moved as he put it across to his side. A verdict of “Death from internal hemorrhage, caused by the accidental discharge of a rifle”, was returned.

Meanwhile, on 8 October 1915, at Lawford’s Gate Petty Session, Private William Crook, who appeared much distressed and was accommodated with a chair in the dock, had answered a charge of shooting Private Matthew Crook. It was said that as an injured girl was also lying in the Bristol Royal Infirmary in a critical condition, there would be a further charge against William Crook as regards the woman, and so the prisoner was remanded in custody until 15 October. Captain Entwhistle of the 5th Battalion, The Loyal North Lancashire Regiment, to which the prisoner belonged, was also present in court.

On 15 October William Crook was remanded until 22 October, and again until 30 October, at which hearing he was charged with attempting to kill or slay his brother, Matthew Crook, and also feloniously, unlawfully, and maliciously wounding Caroline Britton, with intent to main her, or do her some serious bodily harm. The Bench, after retiring for ten minutes, decided to commit William Crook to the Gloucestershire Assizes on a charge of manslaughter in respect of the death of his brother, while in respect to the wounding of Caroline Britton he was committed on a charge of unlawfully wounding without intent. Nevertheless, an application for bail was granted in two sureties of £25 each.

Finally, at the Gloucestershire Assizes held on 26 January 1916, at which William Crook appeared attired in khaki, he was found not guilty of feloniously killing his brother. With regard the charge of unlawfully and maliciously wounding Caroline Britton, that charge had to be dismissed as it was decided that her depositions were inadmissible as law in connection with their taking had not been complied with, and Dr William Hayte of Bristol Royal Infirmary had stated that she would have been unable to attend the hearing as she was suffering from abscess in her chest.

In discharging William Crook, the judge said that he was sorry to say that the evidence had exposed a most lamentable lack of discipline amongst the prisoner and his companions. Every breach of discipline that could have been committed by them had

been committed. He hoped this would be a warning to the prisoner not to pull the trigger of a rifle which was pointed at anybody but an enemy of his country.

Meanwhile, on Saturday 10 October 1914 Private Matthew Crook, who was the son of Mrs E. Crook, of 7 Irma Street, Astley Bridge, Bolton, and had previously worked as a miner, had been buried in the churchyard extension at St Mary in Henbury, Bristol, the grave being located at the west end, near the north wall.

12th Battalion, The Gloucestershire Regiment

Another infantry formation, the 12th (Service) Battalion, The Gloucestershire Regiment, popularly known as 'Bristol's Own', and which the Bristol Citizens Recruiting Committee had started raising on 30 August 1914, also undertook training in the Chipping Sodbury area before leaving Bristol on 23 June 1915. The new Battalion was commanded by Lieutenant-Colonel William Edward Parry Burges, who had already conducted a successful recruiting meeting at Chipping Sodbury on 19 December 1914, and it was through his influential contacts in the area that parts the Duke of Beaufort's land on nearby Hawkesbury Common were secured for battalion field work. After details had been finalized the Battalion's four main Companies were ordered to carry out training at Sodbury one at a time.

Each marched the 18 miles from their Bristol headquarters at the 'White City' in Bower Ashton with full equipment, after which one week's hard work was undertaken. This involved setting up camp, the building of fortifications, section competitions, and trench digging, while the method of erecting barbed wire, and of removing the enemy's, was also an important art to learn.

The men also practiced night operations, as by then much of the fighting, and preparation for it, took place at night. It was therefore essential for the men to be taught to move together in absolute darkness, and often in absolute silence, when commands could sometimes only be made by mute signs from man to man, or by signals passed in whispers down the line from the commanding officers.

'B' Company was the first to take advantage of the Sodbury facilities and they went out in the last week of March 1915. It was followed by 'A' Company, etc, while 'B' Company became the only one to make the trip twice, its final visit being during the last week of April. Fortunately, the men all found the local population of Chipping Sodbury and Yate extremely supportive in offering their homes as billets.

No.494 (Motor Transport) Company, Army Service Corps

During World War One each Division of the Army had a certain amount of motorised transport allocated to it, although not directly under its own command. The Divisional Supply Column Companies were responsible for the supply of goods, equipment and ammunition from the Divisional railhead to the Divisional Refilling Point and, if conditions allowed, to the dumps and stores of the forward units. Used, of course, where loads were heavy, a Motor Transport Company initially comprised five officers and 337 other

ranks of the Army Service Corps, looking after forty-five 3-ton lorries, sixteen 30-cwt lorries, seven motor cycles, two cars and four assorted trucks for the workshop and stores of the Supply Column itself.

One of these was No.494 (MT) Company ASC, which was formed on 11 August 1915 as the 39th Division Supply Column (MT), but first saw service in France with the 41st Division. It initially served at Home, and in August 1915 was photographed at the camp the unit had set up off Wickwar Road in Chipping Sodbury. No.494 (MT) Company ASC was still there on 24 February 1916, and although exactly when it left Sodbury is unclear, according to the service record of M2/134565 Private George Parsons, a driver who served with the unit for a time, it eventually embarked at Southampton for overseas service on 18 June 1916. No.494 (MT) Company ASC landed at Rouen in France before joining the XIV Corps to act as the 41st Division Supply Column (MT). While in Chipping Sodbury the men and their machines were photographed on a number occasions, and on one of these three of their belt driven 499 cc Triumph Model H motor cycles were featured.

LINEAGE OF THE ROYAL GLOUCESTERSHIRE HUSSARS 1830 - 1915

The lineage of the Royal Gloucestershire Hussars can be traced back to 1830 when there was much discontent in England, particularly amongst the working classes, due to the heavy burden of taxation and a high level of unemployment. This had led to serious outbreaks of violence in agricultural districts where it was widely considered that the recent introduction of machinery into farms would lead to the ruin of the agricultural labourer. Then, after severe rioting had taken place in neighbouring Wiltshire, which had been quelled effectively by the use of troops of Yeomanry, Christopher William Codrington of Dodington Park, was granted permission to raise the first troop Yeomanry in Gloucestershire.

Initially recruited from the amongst the tenants on the Dodington estate, Codrington was soon receiving considerable assistance from the Duke of Beaufort, William Blathwayt of Dyrham, Fiennes Trotman of Siston Court, and the Horlocks of the Rocks, near Marshfield, all of whom urged their tenants to join the new Marshfield & Dodington Troop of Yeomanry, to which Codrington was gazetted Captain on 1 January 1831.

The example shown by Codrington in the neighbourhood of Chipping Sodbury was speedily followed by the resident gentry in other parts of Gloucestershire, who considered that further expansion of the Yeomanry Cavalry force might be a useful means of maintaining peace and protecting lives and property in the event of further rioting. Consequently, by the end of the year six more troops had been established within the County. These were:-

The Fairford & Cirencester Troop of Yeomanry, which was recruited from within the districts of Fairford, Cirencester, Ampney, and Bibury, and to which John Raymond Barker was gazetted Captain on 11 February 1831.

The Tetbury Troop of Yeomanry, which was recruited from the districts of Tetbury, Badminton, and Avening, and to which Thomas Grimston Bucknall Estcourt, of Estcourt House, Tetbury, was gazetted Captain on 19 February 1831.

The Stroudwater Troop of Yeomanry, which was recruited from within the districts of Stroud, Minchinhampton, Painswick, and Stonehouse, and to which Robert Snow Paul of Hill House, Minchinhampton, was gazetted Captain on 25 March 1831.

The Gloucester Troop of Yeomanry, which was recruited from the districts of Gloucester, Newent, and the area between Gloucester and Cheltenham, and to which James Woodbridge Walters, of Barnwood Court, was gazetted Captain on 16 July 1831.

The Winterbourne & Stapleton Troop, which was recruited from Winterbourne and the suburbs of Bristol on the Gloucestershire side of the City, and to which Valentine Jones Graeme of Oldbury Court, Fishponds, was gazetted on 10 December 1831.

The Alveston Troop of Yeomanry, which was recruited from the districts of Alveston, Thornbury, and Berkeley Vale, and to which William Chester Masters, of Knole Park, Almondsbury, was gazetted Captain on 30 December 1831.

Soon after, the officers of each of these independent troop began discussing the possibility of forming them into a single regiment, and at a meeting held at Petty France on 30 March 1834 it was unanimously agreed that the command of the new formation be offered to Henry Somerset, Marquis of Worcester, the eldest son of the 6th Duke of Beaufort, an officer who had previously served in the regular cavalry. Consequently, on 21 April 1834 he was gazetted Lieutenant-Colonel Commandant of the new Gloucestershire Yeomanry Cavalry, the establishment of which was fixed at seven troops, consisting of 26 officers and 382 non-commissioned officers and privates.

The following year the Order of Battle of Gloucestershire Yeomanry Cavalry was listed as:-

‘A’ or Marshfield & Dodington Troop under Captain Christopher William Codrington.
‘B’ or Cirencester Troop under John Raymond Barker.
‘C’ or Stroudwater Troop under Captain Robert Snow Paul.
‘D’ or Tetbury Troop under Captain Thomas Grimston Bucknall Estcourt.
‘E’ or Gloucester Troop under Captain James Woodbridge Walters.
‘F’ or Winterbourne & Stapleton Troop under Captain George Worrall (gazetted 11 September 1835, vice Elton who had resigned).
‘G’ or Alveston Troop under William Chester Masters.

On 23 November 1835, Henry Charles Somerset, the 6th Duke of Beaufort, died at Badminton House and was succeeded by his son the Marquis of Worcester, who became the 7th Duke of Beaufort, but remained the Lieutenant-Colonel Commandant of the Gloucestershire Yeomanry Cavalry.

During 1840 the regiment was increased to eight troops by the addition of a Berkeley Troop, as for some time Lord Seagrave had contemplated recruiting from among his tenants for the benefit of the Yeomanry. As a result his younger brother the Honourable George Charles Grantley Fitzhardinge Berkeley was gazetted Captain on 15 September. Around the same time the Stroudwater Troop was renamed the Badminton Troop, while in February 1841 the title Royal was granted, the regiment henceforth being known as the Royal Gloucestershire Regiment of Yeomanry Cavalry which, in 1848, was re-designated the Gloucestershire Yeomanry (Royal Gloucestershire Hussars).

In 1852 the Cirencester Troop, which had sunk to a very low ebb, was disbanded and a new one at Cheltenham raised in its place, while on 17 November 1853 the 7th Duke of Beaufort died and was succeeded by Henry Charles FitzRoy Somerset, the 8th Duke of Beaufort who on, 5 May 1854, was appointed Lieutenant-Colonel Commandant of the Royal Gloucestershire Hussars, replacing his late father.

Then, on 20 October 1854 it was announced that henceforth the Alveston Troop would be designated the Forest Troop, and consequently by 1860 the regiment consisted of the Badminton, Berkeley, Cheltenham, Dodington, Forest, Gloucester, Stapleton, and Tetbury Troops.

In 1869 the Tetbury and Badminton Troops were merged into one unit to be termed the Badminton Squadron, and placed under the command of Lord Worcester. The Royal Gloucestershire Hussars, then comprised:-

1st Squadron, the Dodington Squadron.
2nd Squadron, the Gloucester and Cheltenham Troops.
3rd Squadron, the Berkeley Squadron.
4th Squadron, the Stapleton and Forest Troops.
5th Squadron, the Badminton Squadron.

On 29 April 1874, the 8th Duke of Beaufort relinquished command of the Royal Gloucestershire Hussars to become the Honorary Colonel of the Regiment, a position he held until he resigned that commission on 2 July 1887. He was replaced as officer commanding the Royal Gloucestershire Hussars by Lieutenant-Colonel C.W. Miles of Burton Hill, Malmesbury.

In 1875 the Cheltenham and Gloucester Troops were amalgamated to form the Stroud Squadron although, along with the Badminton, Dodington, and Berkeley Squadrons, it was later reduced to a Troop. Then, in 1879, by order of the Secretary of State, the Stapleton and Dodington Troops were formed into one unit to be known as the Dodington Squadron, while in 1880 the Forest Troop was re-designated the Monmouth Troop. Consequently, by 1883 the Royal Gloucestershire Hussars comprised:-

1st Squadron, Badminton and Monmouth Troop.
2nd Squadron, Berkeley.
3rd Squadron, Dodington.
4th Squadron Stroud.

In 1883 it was arranged that the Dodington Squadron should be divided into two troops, with one remaining at Dodington, and the other stationed in Bristol and termed the Bristol Troop, which was to be commanded by Captain Percy Chaplin.

In 1884 Lieutenant-Colonel C.W. Miles vacated command of the Royal Gloucestershire Hussars, to be succeeded by Lieutenant-Colonel Lord FitzHardinge of Berkeley Castle. However, in 1887 he was compelled to retire, having reached the age of sixty, and consequently handed over command to the Marquis of Worcester. The headquarters of the Regiment was also moved from Badminton to Gloucester, while the name of the Stroud Troop was changed to that of the Gloucester Troop. Then, on 1 January 1888 the Tewkesbury Troop was formed and placed under the temporary command of Lieutenant Beresford Heywood. In May 1889 the Royal Gloucestershire Hussars adopted a formation for training, which continued to be used for several years:-

1st Squadron - Berkeley Troop and Gloucester Troop - Squadron leader, Major Gist.

2nd Squadron - Tewkesbury Troop and Cheltenham Troop - Squadron leader, Major Palairet .

3rd Squadron - Monmouth Troop and Bristol Troop - Squadron leader, Major Herbert.

4th Squadron - Dodington Troop and Badminton Troop - Squadron leader Captain Edward Lord Somerset.

On 26 July 1890 it was reported that the Bristol Troop had just received official notice to return their kit, the troop having been disbanded on the recommendation of Sir Drury Lowe, the Inspecting Officer at the Regimental training at Cheltenham in the previous May. The extinction of the troop was owing to its small muster at the last training. However, the Marquis of Worcester gave the men the opportunity of joining the Chepstow Troop which was about to be raised, but this although this was initially declined, a number of former members did eventually join the new formation. The Chepstow Troop, which was placed under the command of Captain J.W. Rolt, was initially attached to the Berkeley Squadron under Major Gist.

In May 1891 at the Annual Inspection of the Royal Gloucestershire Hussars held at Prestbury Park near Cheltenham the following Troops were recorded:-

Dodington Troop - Captain Sir Gerald Codrington Bart. - 55 non-commissioned officers and men.

Cheltenham Troop - Captain Hargreaves - 51 non-commissioned officers and men.

Berkeley Troop - Major Gist - 46 Non-commissioned officers and men.

Badminton Troop - Major Lord Edward Somerset - 56 non-commissioned officers and men.

Gloucester Troop - Captain Calvert - 45 non-commissioned officers and men.

Chepstow Troop - Captain Rolt - 36 non-commissioned officers and men.

Monmouth Troop - Major Herbert - 53 non-commissioned officers and men.

Tewkesbury Troop - Major Palairet - 41 non-commissioned officers and men.

By an Army Order dated 22 January 1893 the Yeomanry Regiments were to be officially organized into Squadrons into which hitherto existing troops were merged:-

‘A’ Squadron - Gloucester Troop and Berkeley Troop.
‘B’ Squadron - Cheltenham Troop and Tewkesbury Troop.

‘C’ Squadron - Monmouth Troop and Chepstow Troop.
‘D’ Squadron - Badminton Troop and Dodington Troop.

However, within the Royal Gloucestershire Hussars the individual troops were still important, especially for recruiting purposes. By February 1893 Captain Sandeman was commanding the Chepstow Troop, but by May 1895 it was being described as the Bristol & Chepstow Troop, while two years just as the Bristol Troop. In May 1898 the Order of Battle of the Royal Gloucestershire Hussars was:-

‘A’ Squadron - Gloucester Troop and Berkeley Troop. The Ledbury Troop, from the adjoining county of Herefordshire, was about to disband into the Gloucester Troop.

‘B’ Squadron - Cheltenham Troop and the Tewkesbury Troop, which was about to disband into the Cheltenham Troop.

‘C’ Squadron - Monmouth Troop and Bristol Troop.

‘D’ Squadron - Dodington Troop and Badminton Troop.

On 30 April 1899 the Marquis of Worcester, the officer commanding the Royal Gloucestershire Hussars, became the 9th Duke of Beaufort upon the death of his father, while in December a new squadron system was introduced. Then, in April 1901, all Yeomanry Cavalry regiments were incorporated into the Imperial Yeomanry, an organization that was to last only until 1908. By December 1901 the Order of Battle of the Royal Gloucestershire Hussars was:-

‘A’ Squadron - Gloucester Troop and Cheltenham Troop - headquarters at Gloucester. Squadron Commander Major H.H. Calvert.

‘B’ Squadron - Badminton Troop and Berkeley Troop - headquarters at Badminton (removed from Cheltenham). Squadron Commander Major W.H. Playne. The Badminton detachment under Captain C.F. Henry formed the headquarters detachment of ‘B’ Squadron.

‘C’ Squadron - Monmouth Troops - headquarters at Newport. Squadron Commander Major C. Stacey.

‘D’ Squadron - Doddington Troop and Bristol Troop - headquarters at Bristol. Squadron Commander Major R.P. Sandeman. At that time ‘Glenavon’ in Daisy Road at Eastville in Bristol was listed as being the headquarters of the Bristol Troop, while its Accoutrement Depot was at the Carriage Company’s yard in Broadmead.

On 8 February 1902 it was reported that the regimental orders issued by Colonel his Grace the Duke of Beaufort, A.D.C., commanding the Royal Gloucestershire Hussars Imperial Yeomanry, included details of a forthcoming re-arrangement of its squadrons. It was stated that the Bristol Troop was to be formed into a Squadron and numbered ‘D’ Squadron, while the Dodington Troop was to be transferred to ‘B’ Squadron, but those

members of it living in the Bristol district would be transferred, with their own consent, to ‘D’ Squadron. The members of ‘B’ Squadron living in the Cirencester district would be transferred to the Cheltenham Troop of ‘A’ Squadron.

The headquarters of ‘B’ Squadron would also be moved as soon as convenient to Chipping Sodbury. Consequently, in 1903 the ‘B’ Squadron headquarters transferred from Badminton to Chipping Sodbury, while in February 1904 it moved once again, this time to Yate before, on 1 February 1909, transferring to Stroud.

In April 1904 the Duke of Beaufort, who had been in command since 1887, resigned the command of the Royal Gloucestershire Hussars, having been the third of his family to lead the regiment. On 14 May the King then appointed him Honorary Colonel of the Regiment. Meanwhile, on 16 April Colonel H.H. Calvery had been gazetted to command the regiment. At that time Major Eustace Hill was in command of the Bristol Squadron.

On 18 March 1905 it was reported that Captain W.R. Emmott of Horton, who commanded the Dodington Troop, and with which he had been associated for some years, had been seized with paralysis and was in a critical condition. He had also at one time been attached to the Bristol Squadron. The last mention of the Dodington Troop was in August 1906, and on 9 April 1907 Captain Emmott resigned his commission in the Royal Gloucestershire Hussars

The place of the Dodington Troop in the regiment’s Order of Battle had been taken by the Old Down Troop, which had been raised by Charles Edward Turner of Old Down House in Tockington, who had been gazetted Second-Lieutenant in the Royal Gloucestershire Hussars on 29 September 1906. Following its formation the Old Down Troop went on to be attached to ‘D’ Squadron based at Bristol.

Meanwhile in July 1906 it had been reported that Captain H. Cecil Elwes, M.V.O, was making every effort to form a Cotswold Troop of Yeomanry before, on 28 July, it was announced that Mr T.J. Longworth of Moor Wood, had consented to take a Lieutenancy in the troop. The first full dress mounted parade of the Cirencester or Cotswold Troop was held on 25 April 1907 at Cirencester under the command of Captain Elwes, and after inspection it moved off the Earl Bathurst’s Home Park for squadron drill.

In February 1908 Squadron orders for ‘D’ Squadron issued by Major Eustace T. Hill, officer commanding, stated that on the 4th the Old Down Troop was to parade, mounted under its troop officers, at Old Down for troop drill at 3 p.m. On the 8th the Bristol Squadron was to parade, mounted, at the Barracks at Horfield, at 2.25 p.m. and would meet the Old Down Troop at Almondsbury at 3 p.m. for squadron drill.

Then, on 1 April 1908, the Territorial and Reserve Forces Act 1907 came into effect and brought all volunteer forces, including the Yeomanry, together into the new Territorial Force. Between 1908 and 1914 Annual Camps took place at Studeley Castle, Winchcombe (6 to 23 May 1908); Perham Down, Salisbury Plain (19 May to 2 June 1909); Windmill Hill, Salisbury Plain (7 to 21 May 1910); Badminton (6 to 20 May 1911);

Badminton (11 to 25 May 1912); Salisbury Plain (10 to 24 May 1913); Patcham, near Brighton (9 to 23 May 1914).

On 15 April 1909 Lieutenant-Colonel H.H. Calvert, T.D., completed his term of service in command of the Royal Gloucestershire Hussars, and was succeeded by Lieutenant-Colonel R.P. Sandeman, and by May 1909 the single Bristol Troop had been expanded into three separate Troops.

Following the 1909 Annual Camp a number of photographs were taken showing the Old Down Troop arriving back at Thornbury railway station, along with their subsequent dismissal at the Plain in Thornbury by the Troop Leader, Lieutenant Turner.

With a recruiting district covering an area in and around Gloucestershire and Monmouthshire, by 1910 the Royal Gloucestershire Hussars was made up of four Squadrons, each containing four troops:-

‘A’ Squadron (plus Headquarters) based at the Barracks in Gloucester (Tewkesbury, Ledbury, Cheltenham and Gloucester Troops).

‘B’ Squadron in Stroud (Cirencester, Cotswold, Tetbury, and Berkeley Troops).

‘C’ Squadron in Newport (Cardiff, Abergavenny, Newport, and Chepstow Troops).

‘D’ Squadron in Bristol (Bristol Troops 1, 2, and 3, and the Old Down Troop).

In 1913 Lieutenant-Colonel R.P. Sandeman, T.D., resigned, his place as officer commanding the Royal Gloucestershire Hussars being taken by Lieutenant-Colonel W.H. Playne, while the Regiment was recorded as 417 strong while at the Annual Camp held that year. The order to mobilize for war was received at 7 p.m. on 4 August 1914, and eight days later the Royal Gloucestershire Hussars joined the rest of the 1st South Midland Mounted Brigade at Warwick. Then, on 31 August, the Regiment moved to Newbury on the Berkshire Downs before, in November 1914, transferring to Kings Lynn for Home Defence anti-invasion duties in East Anglia.

The Royal Gloucestershire Hussars then volunteered for overseas service, and on 10 April 1915 most of the Regiment entrained at Hunstanton. Consequently, at Avonmouth the following day ‘A’, ‘B’, and ‘D’ Squadrons boarded the S.S. ’Saturnia’ and S.S. ‘Minneapolis’ en-route for Egypt. There the Royal Gloucestershire Hussars undertook guard duties from 21 April until 11 August, when orders were finally received to proceed to Gallipoli without their horses.

MANUFACTURING MILITARY MOTOR CYCLE AT KINGSWOOD

Back in 1900 the War Office had formed the Mechanical Transport Committee which was to be responsible for exploring every aspect of transportation for the Army's supply train. Then, in 1908, the Royal Engineer Signal Service was established, and although initially it provided mainly a telegraph service, later wireless and dispatch riders played increasingly more important parts.

However, it was not until the Army Manoeuvres of August 1910, when volunteer riders were employed as vehicle escorts, scouts, and dispatch riders that the first opportunity arose to test the feasibility of using motor cycles in the field. As a result the Mechanical Transport Committee recommended that motor cycles be used in all Mechanical Transport Companies to assist in proper communication, but short of funds it was only able to purchase one Triumph 3½ h.p. motor cycle for evaluation.

The Committee then attended the Motor Cycle Show held at Olympia in November 1911, and later the same year purchased a 2¾ h.p. Douglas, after which it drew up a short list of possible machines for Army use. As a result, on 29 January 1912 it invited a number of manufacturers to the Brooklands race circuit in Surrey for officials to review their machines against the following standard:- 40 m.p.h. for motor cycles up to 350cc; 45 m.p.h. for those to 500cc; and the ability to take a twelve stone man up Test Hill from a standing start.

Following the trials a number of machines were ordered for further testing, both at Brooklands and on Salisbury Plain, a group which consisted of one Douglas 2¾ h.p. two-speed clutch model; one Douglas 2¾ h.p. two-speed without clutch; two Rudge 3½ h.p. single gear belt driven; one Premier 3½ hp two-speed gear belt driven; two Phelon & Moore 3½ h.p. two-speed chain driven; one Zenith 3½ h.p. variable gear belt driven; and one Triumph 3½ h.p. single gear belt driven.

Although it might appear odd that the lightweight Douglas was the winner of that round of procurement, at that time the Mechanical Transport Committee was concerned mainly with cost and finding a machine suitable for those supervising convoys at low speed. An additional and significant factor in the firm's favour was that they were already contracted to supply Type RE lightweight 180 watt electrical generating sets, which were designed to power wireless telegraph apparatus in the field, and could be adapted for carriage by horseback. As they were driven by Douglas stationary engines, mechanics could potentially service and maintain Douglas motor cycles as well as generators, at a time when experienced mechanical engineers were at a premium within the Army.

During the Junior T.T. Race held on the Isle of Man on 28 June 1912 five Douglas riders took part, all riding two-speed machine powered by 340cc side-valve 'Boxer' type engines rated at 2¾ h.p., and it was one of the quintet, Harry Bashall, who went on to win. Then, during the post-race inspection and measuring session, he was closely questioned by two Army officers in plain clothes, who showed a keen interest in his machine. They had in fact been sent by the War Office Mechanical Transport Committee to observe the race, as it was anxious to keep abreast of current developments.

Although the Royal Flying Corps had only been formed on 13 April 1912, it quickly realized the need for mechanical, rather than horse transport, and their assessment of motor cycles was also carried out under the auspices of the War Office Mechanical Transport Committee. Consequently, a number of manufacturers were invited to provide three machines each for testing at the Brooklands circuit. However, by the time of the final R.F.C. trial on 28 February 1913 the only manufacturers being considered were Douglas and Phelon & Moore. So it was that Douglas delivered to Brooklands a batch of twelve Model 'O', two-speed, 2¾ h.p. motor cycles, and Phelon & Moore eight of their 3½ h.p. machines.

The final trial consisted of a fifty mile dash around the oval circuit, followed by a run up the Test Hill, but it was Phelon & Moore that won the R.F.C. contract for twenty machines placed in January 1914. That was because the R.F.C. required a higher road speed than the Army Service Corps, which continued to be satisfied with the Douglas machines fitted with their smooth running twin-cylinder horizontally opposed 'Boxer' type engines, and consequently three more were ordered for the 1914/15 programme. By that time the Committee had also chosen their preferred suppliers, Douglas and Triumph for the Army Service Corps and Royal Engineers Signal Service, and Phelon & Moore for the Royal Flying Corps. It was also confident that these firms, which already had a standing presence in the market place, would be in a position to supply motor cycles as required.

At the outbreak of World War One on 4 August 1914 William Douglas was in London meeting with the Inspector of Mechanical Transport in reference to the immediate supply of motor cycles and subsequent weekly delivery. He not only demanded eighty machines that week, but a telegram received at Kingswood from the War Office during the afternoon of 5 August, read, "How many motor bicycles as ordered can you supply immediately. Two hundred thirty wanted. Horse power three and a half. Horse power (sic) and variable speed, gearbox system. Transport War Office."

Although there was not a single Douglas machine in the works at Kingswood at that moment, the eighty were delivered to Avonmouth Docks by the following Sunday, while by 28 August Douglas had turned out some 200 motor cycles for the War Office. Then, on 4 October the firm received another order for a hundred machines, and all had been delivered by noon on the 13th. They also had to resort to day and night shifts for supplying stationary engines for use in portable generator sets, where they drove dynamos to supply electricity for lighting, powering Marconi field wireless transmitters, and even operating lathes in Field Repair Depots.

In addition, many engines were supplied with pumping sets, for use in the trenches and for filling the large envelopes of the 'Blimp' type airships. One 4 h.p. engine was even used to power a 2 kilowatt spark transmitter carried by a seaplane that was used to jam transmissions from German aircraft spotting for the long-range gun 'LUGEN-BOOM' at Dunkirk. In fact such was the effectiveness of the jamming that it prevented the gun from being used in 1918.

Meanwhile, during 1915, and at a time when the firm was turning out about 200 machines a week, came a demand for forty of the 593cc 4h.p. Douglas belt driven sidecar models, examples of which were to be evaluated at the Brooklands circuit. However, there it was found that the new engine did not have enough power for the machine to climb the Test Hill, even in bottom gear. A frantic telephone call was then made to the factory where the problem was identified as a poor gas flow pattern in the cylinder head, which was immediately re-designed. The foundry then worked all night to cast some new cylinders, which were rushed to Brooklands and fitted, with the result that the modified machines went on to climb the Test Hill with ease, even in top gear.

These ‘W.D. Combinations’ were employed by the Army to transport senior personnel from the field to a convenient pick-up point, such as a neighbouring railway station, while some also went on to be used to carry mobile wireless transmitting and receiving apparatus for the Royal Naval Air Service, and saw service principally in France, Egypt, and Mesopotamia.

In fact Douglas machines found their way to all theatres of war, and were used by the Allied armies of Britain, France, Belgium, Italy, Romania, Australia, New Zealand, Canada, South Africa, and the United States of America. In addition to working on the Western Front, hundreds of Douglas motor cycles were also in regular use in Egypt, Palestine, and Salonika, as well as around Murmansk in Northern Russia, while Douglas riders carried heavy loads of kit into the desert regions of Persia, Kurdistan, and Caucasia, and performed remarkable journeys in the wilds of East and West Africa.

Twenty-eight Douglas machines were in fact taken out to West Africa with No.1 Squadron, Royal Naval Car Division, under Lieutenant-Commander W. Whittall. After twelve months’ gruelling work twenty-six were still in use. Ten of these were then sent on to East Africa, and the rest were returned home. Of the ten in East Africa eight were still on the road in good running order twelve months later, having seen over two years’ regular use under appalling conditions of road surfaces and temperature. The Commander reported that during that time he had never sent a dispatch rider out on a mission which was not duly accomplished within the time expected.

Apart from the manufacture of motor cycles during the war years, Douglas Brothers repaired large numbers of their machines that had been damaged beyond the means of the Army's Field Workshops. At one time there was even a huge warehouse at Avonmouth which was completely full of machines awaiting attention, some of which were so battered by shell fire as to be mere unsightly twisted lumps of scrap metal. In addition, during World War One parts of the Kingswood factory not used for the production of motor cycles were concerned with the manufacture of munitions, including the cases for armour piercing shells.

Although the belt driven 348cc Douglas ‘W.D. 2¾ horse-power two-speed model’, along with the three-speed 499cc Triumph 4 h.p. Model H, which was introduced in 1915 and was also belt driven, became the standard British Army dispatch rider's motorcycles during World War One, 475cc Phelon & Moore 3½ h.p. two-speed chain driven motor cycles were widely used by the Royal Flying Corps, and later the Royal Air Force. In

addition, a number of Clyno and Royal Enfield vee-twins, with sidecar-mounted machine guns, were supplied for infantry support purposes.

Unfortunately, it's now impossible to say how many motor cycles were used during World War One due to the double counting of reconditioned machines, lost records and difficulties in cross-referencing those which still exist, but it's thought that Douglas supplied an estimated 25,000 machines during the conflict, and Triumph some 30,000. Nevertheless, it can be confirmed that in November 1918 the Army had on strength 18,315 Douglas motor cycles and 17,998 Triumphs, while those manufactured by the other six approved suppliers amounted to just 7230.

APPENDIX

(Notes on the Douglas family and the Kingswood motor cycle factory)

On 5 October 1816, at Nenthorn in Berwickshire, which is just over three miles from Kelso in Roxboroughshire, the following marriage banns were read, "This day William Douglas and Catherine Yule both in the parish gave up their names in proclamation in order to marriage." Although the exact details of William's birth around 1795 are obscure, it is known that between 1817 and 1836 the couple went on to have eleven children, and of these William (1817 to 1905) and John (1833 to 1874) later settled in Bristol.

In June 1841 William Douglas senior, black smith and hardware dealer, was working in the Horsemarket, North Side, in Kelso. However in March 1851 he was described as a white smith, working at St Nicholas Church Yard, Newcastle upon Tyne. Also in 1841 William Douglas junior was living in Tynemouth, Northumberland, and it was at Newcastle upon Tyne in the summer of 1845 that he married Mary Ann Chambers, while by March 1851, and working as an engineer, he was living with his wife at Newgate Street in Newcastle upon Tyne.

In 1851 William's younger brother John Douglas was still living with his parents in Newcastle upon Tyne, at which time he was working as a white smith. Then, at St John's church in Newcastle in June 1855, he married Mary Wilson, and the couple went on to have six children of which the first two were born in Newcastle. These were Jane, who arrived in early 1857, and William, later of Douglas Motors fame, who was born on 15 May 1859.

Brothers William and John Douglas appear to have moved to Bristol around 1860, as by April 1861, when both working as engine smiths, they were living close to each other in Two Mile Hill, St George. Although William and his wife never had any children, John and his wife went on to have a further four, these being John Percival (1862 to 1930); Edwin (1864 to 1905); Arthur (1868 to 1917); and Catherine (1870 to 1873).

Sadly, Mary Ann Douglas died in early 1880, and by April 1881 her husband was lodging at 11 Victoria Street, off Bishop Street, in St Paul's. Then, in 1901, William Douglas was described as engine and machine maker living on his own means at 'Cleve House', St Mark's Road in Easton, before finally passing away in early 1905, aged 87.

Meanwhile, sometime around the mid-1860s John Douglas had also moved from St George into Bristol, prior to setting up in business in the St Philips area as an engineer, general machinist and boot makers' machine maker at 5 Redcross Street, premises also known as 'Asher House'. To begin with all went well, and on 21 February 1867 he placed his first advertisement in a local newspaper which stated that he was looking for an apprentice.

The business grew steadily, and in 1871 John Douglas was still living at 5 Redcross Street with his wife and children, at which time he described as a master engineer and machine maker employing three men and three boys, one of whom was boarding with the family. However, within a few years things started to go wrong and on 29 June 1874, the 'Western Daily Press' carried the following advertisement, "Boot manufacturers - Premises to Let or Sell, fitted with steam power. Apply at Douglas's, Redcross Street". This probably indicated that John Douglas was by then in poor health, as on 20 December he passed away at 5 Redcross Street, aged just 45.

His widow then temporarily took charge of the business, and in 1875 Mrs John Douglas of 5 Redcross Street was being described as a "manufacturer of shoe machinery". Finally, in early December 1875, the administration of the effects of the late John Douglas of 5 Redcross Street, Bristol, engineer and machine maker, was granted to his widow Mary Douglas, and the re-organization of the business could begin.

The result appears to have been the formation of Douglas & Williams, a firm which by 1878 was being described as machinists and boot and shoe engineers. Unfortunately, the undertaking was relatively short lived as "the stock in trade, machinery, and other effects appertaining to the business of Messrs Douglas & Williams, engineers and machinists" was put up for auction on the premise at Redcross Street on 31 March 1880.

Mary's eldest son William Douglas then enters the story, having recently completed his education and training. This had begun at the Redcross Street School, continued at the Trade & Mining School in Nelson Street, and culminated with an apprenticeship at Messrs Buchanan, engineers of Thomas Street, where he worked on cigar and boot making machines. Finally, on 24 December 1878, at St Philips church in Bristol, William married Eliza Davis, a lady who had been born at Northampton in 1859.

Then, in partnership with 23 year old Egbert Arthur Norton, it seems that William Douglas was able to take over the boot machinery business at 5 Redcross Street, as in April 1881 the premise were recorded as being uninhabited. That was because the previous occupant, William's widowed mother Mary, who went on to live until 1918, was by then residing at 41 Cyprus Buildings, Baptist Mills in Bristol, along with two of her sons, Edwin, a sixteen year old apprentice, and thirteen year old Arthur.

In 1881 William Douglas, described as a master engineer employing five men and two boys, was living with his wife and twelve month old son William Wilson Douglas at nearby at 27c Old Market, while Egbert Norton was boarding in Stokes Croft.

Unfortunately, the business of Douglas & Norton of 5 Redcross Street was not to last, as the partnership was officially dissolved by mutual consent on 8 July 1881. As a result the 'London Gazette' subsequently announced "that in future the business will be carried on under the style of Douglas & Co., who will pay and receive respectively all debts owing from and to the said partnership in the regular course of trade."

Although the firm, still based at 5 Redcross Street and described as machinist and boot and shoe engineers, traded under the name of William Douglas & Co., it did in fact have a silent partner, one Francis Arthur Hill Langdon, but it was not long before he found it necessary to apply to the local County Court to end his partnership with Douglas and liquidate the firm's assets.

Consequently, on 28 February 1882, the 'London Gazette' announced that, "Pursuant to a Decretal Order of the County Court of Gloucestershire, holden at Bristol, made in an action in Equity, No.193, Francis Arthur Hill Langdon against William Douglas, it was declared that the partnership heretofore subsisting between the plaintiff and defendant, as engineers and machinists, under the style or firm of William Douglas and Co., at No. 5, Redcross Street, Bristol aforesaid, do stand dissolved as from the 31st day of January, 1882".

Then, on 18 March 1882, the 'Western Daily Press' carried a further announcement regarding the action which stated that a firm of auctioneers had received instructions from the Gloucestershire County Court, "to sell by auction, on the premises, No.5 Redcross Street, Bristol, on Tuesday next, the 21st day of March, the leasehold dwelling house, shop and warehouse, with stock in trade, goodwill, patent, etc, part of the partnership estate of the firm of William Douglas & Co."

The sale of the Redcross Street premises and its contents effectively marked the end of the involvement of William Douglas in what had been the business established by his late father. However, towards the end of the nineteenth century the militancy of the workforce in central Bristol was causing many of the larger boot manufacturers in the city to begin expanding into the Kingswood area, where they could take advantage of a weak union and lower wage rates. That offered William fresh opportunities, and consequently the next chapter in the Douglas story begins with a move to Kingswood.

Douglas Brothers at Kingswood - 1884 to 1918

Although details of the early years at Kingswood are sparse, a few fragments of information have come to light, particularly in a speech made by William Douglas at an anniversary dinner, the salient points of which were reported in the 'Western Daily Press' on 10 March 1928.

From that it can be deduced that William started by renting a house and workshop at £16 per annum, with rates 3 shillings in the pound. He then borrowed £10 from 39 year old William Henry Phillips, the very Bristol auctioneer who had recently sold off the assets of his last enterprise, William Douglas & Company. In fact Douglas recalled that at the time he took out the loan Phillips had exclaimed, "£10 to start an engineering

business, absurd!" So equipped only with a portable forge, a vice, and a few tools, he began by repairing sewing machines and doing other odd jobs, and although only a receipt had been given he was able to pay back the money within three months.

As plenty of work was coming William's way, by 1884 he had been joined at Kingswood by his younger brother Edwin, who had recently completed his apprenticeship, and together they formed Douglas Brothers, which the 1885 edition of 'Kelly's Directory' described as a firm of boot & shoe machinery manufacturers. The undertaking quickly progressed until it could fit out a boot factory with all the necessary machinery, except for the sewing machines, and consequently within a few years it was not only employing a number of men, but had also built its own foundry in which to cast boot lasts.

Expansion appears to have begun in early 1885 as on 16 February the 'Western Daily Press', carried the first advertisement placed by Douglas Brothers, engineers and machinists of Kingswood Hill, near Bristol, which stated that the firm wanted "an apprentice to fitting and turning" while, on 12 June, another advert revealed that they required, "an improver to the fitting and turning".

On 4 February 1886 they one again advertised for "an apprentice to fitting and turning", while on 13 December 1888 Douglas Brothers, which described themselves as engineers to the boot trade, were attempting to recruit a shoe knife smith, engineers, apprentices to fitting and turning, and an errand boy. With the business up and running, on 24 December 1888 at St George in Bristol Edwin married Marianne Golding, althoufg the couple never had any children.

The firm continued to expand and on 4 July 1889 by an advert inserted in the local papers read, "Wanted, shoe knife finisher, sharp youth as improver to iron turning, chance to learn screw cutting, Douglas Brothers, Engineers, Kingswood Hill, Bristol. Also wanted moulder used to light machine work, Douglas Brother, Iron founders, Kingswood Hill, Bristol."

In April 1891 William Douglas, then described as a boot machinery maker and iron founder, was residing at Hanham Road, Kingswood, along with his wife Eliza, and their children William Wilson (1881 to 1923); John (1882 to 1937); Arthur Percy (1884 to 1933); and Lily (1887 to 1957), and by March 1901 both brothers and their families were living at the 'Engine Factory' in Hanham Road. However, on 10 April 1905, Edwin Douglas passed away aged just 40, and his obituary published in the 'Western Daily Press' two days later mentioned some of his other activities away from the company.

"He was a Freemason, and was exceedingly well known and esteemed in the east end of the city. He was elected chairman of Kingswood Council in April 1903, a position he subsequently resigned owing to ill health. For nearly a year he was attended by Dr. D.S. Gerrish, the cause of his illness and death being kidney disease. On the advice of his doctor he remained several months last autumn at Weston super Mare. His strength improved at the seaside town, and on his return to Kingswood he again took an interest in parochial affairs, being present at a Council meeting as recently as March 23rd. He was also a candidate in the West Ward at the triennial Council elections at Kingswood a

week ago. His illness became acute early last week, and news of his death has been received with general regret at Kingswood." He was buried on 15 April in Avon View Cemetery in St George, leaving an estate valued at £3062.

By the beginning of the 20th century Douglas Brothers had become well known, as the company's iron foundry was not only producing shoe lasts and machine parts, but also iron drain covers, manhole covers and lamp posts carrying the company name which had been cast for various local authorities, and some of these can still be seen in situ locally.

Then, in 1907, the firm began manufacturing motor cycles powered by a 'Boxer' type flat-twin engine, and the Douglas undertaking, in one form or another, continued to manufacture versions of this distinctive style of engine right up until the production of Douglas motor cycles at the Kingswood factory ceased in 1957. Although in Germany in 1897 Karl Benz had developed a horizontally opposed 'Boxer' engine, which was used in certain Benz cars and commercial vehicles between 1899 and 1902, it was the British engineer Joseph John Barter (also known as John Joseph Barter), who first designed a lightweight version small enough to fit on to a bicycle frame.

'Joe' Barter had been born in late 1865 at Bedminster in Bristol, the son of John Barter, a carpenter, and his wife Jane Isabella Barter, previously Parfitt. He was the eldest of two boys and three girls born between 1865 and 1871, and in that year was living with his parents at Ham Green near Bristol. However, by 1881 the family had moved to the 'Three Tuns' public house in Great Anne Street in the St Jude's district of the city, at which time John was described as both a carpenter and a publican, while 'Joe' was learning his trade as an engine fitter's apprentice.

In Bristol in the summer of 1889 Barter, who was then working as an engineers machine fitter, married Alice Golding, and by 1891 they had set up home at Morley Terrace, Newtown, St Philip's. However, in 1901 family was living at Perry Street in Easton, at which time Barter was working as a mechanical engineer with Parnall & Sons Ltd, the long established Bristol scale and weighing machine makers. Nevertheless, in his spare time he designed a single cylinder motor cycle engine which he called 'The Barter', and this was described in the 27 August 1902 issue of 'Motor Cycling'. The engine had attracted interest as an unorthodox connecting rod and flywheel assembly was employed with provision for taking the final drive from the camshaft. This arrangement permitted the use of a pulley of seven inches diameter, a simple but effective way of minimizing the risk of drive belt slip in wet weather.

Barter subsequently entered into a licensing agreement whereby the engine was to be manufactured and marketed by the Bristol engineering company Humpage, Jacques & Pederson Ltd at their Luckwell Works in Luckwell Lane, Ashton Gate, while the frames were built locally by Dan Turner. Few machines were sold and after experiencing how smoothly the horizontally-opposed engine ran in a Lanchester car displayed at a Crystal Palace motor show, Barter turned his attention to designing a flat-twin 'Boxer' type engine. The prototype, which weighed only 13½ lbs, was subsequently fitted on a

French Siderum bicycle, thus producing a very light machine which he christened ‘Fée’, the French for fairy.

The little motor cycle then came to the attention of a group of Bristol businessmen who formed a company to build and sell an improved version to be known as the ‘Fairy’. Consequently, on 13 December 1905 Light Motors Ltd was incorporated, its registered office being in Orchard Street, Bristol. The new undertaking, with a nominal capital of £2000, not only purchased the patents, patents pending, and registered designs in connection with the manufacture of the engine, but also employed Barter, of ‘Braemere’, Luckwell Lane, as works manager.

At its peak, production of the ‘Fairy’ reached ten per week before, on 4 January 1907, Light Motors Ltd was taken over by ‘London interests’ who transferred its registered office to Grays Inn Road, London W.C. Then, on 25 July 1907, “the engineering factory and building land with frontage to Luckwell Lane and Balfour Road” belonging to Humpage, Jacques & Pedersen Ltd were put up for auction on the instruction of the Official Receiver. This was followed on the 29th by the sale of the factory’s engineering plant.

Meanwhile William Wilson Douglas, eldest son of William Douglas, the head of Douglas Brothers Ltd, in whose foundry the crankcases for the ‘Fairy’ engines were cast, had become acquainted with Barter and his work. As a result ‘Willie’ became convinced that the Kingswood factory should diversify into motor cycle production. Nevertheless, his father wrote in the preface to an early Douglas handbook, “It was not without some reluctance that we agreed to add to our Works a department for the manufacture of motor cycles, and we did so only on the condition that Mr Barter himself should undertake its management. To this Mr Barter consented and it is largely due to his initiative, enterprise and assiduity that the success of the Douglas Motor Cycle is due.”

After joining Douglas Brothers at Kingswood, Barter immediately began work on a new and improved motor cycle, the Douglas Model A, which was powered by a 340cc side-valve engine. This, the first motor cycle to be built by the company, was introduced to the public at the 31st Stanley Cycle Show held at the Royal Agricultural Hall, Islington, between 22 and 30 November 1907. However, in 1908 the firm manufactured only fifty machines, and although in 1909 the number had increased to about 350, like most other motor cycles of the period, Douglas machines still utilized a single-speed belt driven transmission.

Nevertheless, in 1910 the turning point in the fortunes of the firm’s motorcycle activities finally arrived, a situation brought about by the introduction of Barter’ newly designed 2-speed gearbox. Consequently, in anticipation of increased orders, an extension to the factory was commissioned and a further two hundred men engaged to concentrate on motor cycle production. Rather than staying faithful to the automatic inlet valve, for the 1912 season the firm also introduced an engine featuring mechanically operated inlet and exhaust valves, enabling the machine to be more easily manoeuvred in traffic, consequently, the production figure for 1912 rose to around 3000 machines.

Up to and including 1914, Douglas Brothers had made and sold some twelve thousand machines, and surprisingly, the production of motor cycles for the civilian market did not cease with the outbreak of war, for it was not until 3 November, 1916 that the Ministry of Munitions terminated production for the duration.

Douglas Motors Ltd - 1918 to 1932

May 1918 saw Douglas Brothers being renamed Douglas Motors Ltd and in 1921, following design work carried out mainly by 'Les' Bailey and Walter Moore, the first of the overhead valve versions of the company's 'Boxer' flat-twins was introduced. Consequently in the early 1920s Douglas engines began being converted for aeronautical use. With their smooth-running inherently balanced character and attractive power to weight ratio they naturally appealed to the designers of ultra-light aircraft where the lack of vibration was particularly important due to their very lightly built airframes.

In 1920 William Wilson Douglas took over as works manager at Kingswood, where by 1922 some 1400 people were being employed. Tragically however, 'Willie', who had been unwell for some time as a result of injuries sustained in an accident in Cornwall, passed away on the morning of 10 June 1923 at his residence, 'Ashlands' at Bridgeyate in Warmley, aged just 43.

The 'Western Daily Press' subsequently published an obituary over two days in which it was said that he was a keen motorist in his earlier days, and had also been associated with the motor cycle trade from its birth, taking an active part in it for the first time in 1907. In addition, he later became a very successful competition rider, participating in the principal motor cycle contests and trials in Europe, winning many cups and medals.

In the 1910 Tourist Trophy races on the Isle of Man, "he finished first of the Douglas competitors, being placed fifth in the final position, and also won the handicap at Magilligan Sands and the French International Hill Climb, riding at both Gaillon and Coullimiers. He was a regular competitor in one day trials in the very early days, and piloted Eli Clark in the Land's End record. He was a good friend of Sir John Alcock, and was present at the dinner given in commemoration of the Atlantic flight. He was a prominent member of all the principal motor cycle bodies, such as the M.C.C., B.M.C.R.C., A.C.U. etc, and was a Freemason."

"His most prominent successes during his period of motor cycle competition were; June 1911 - T.T. Race, Isle of Man, Junior Gold Medal, first Douglas finished. February 1912 - International Hill Climb, France, first. May 1912 - Magilligan Speed Trials, two first (Championship meeting). October 1912 - Gaillon Hill Climb, International, third. Bristol Motor Cycle Club Hill Climb, June 1914, five firsts, two seconds."

Mr Douglas, who was a director of the firm, then concentrated his attention on the business of the firm on its manufacturing and industrial side. He was, "a generous supporter of all kinds of sport, more particularly in the Kingswood district, and was exceedingly popular." William Wilson Douglas was finally laid to rest at Kingswood Parish Church on 14 June 1923, and work ceased at the Douglas factory at 12 noon to

enable several hundred workers to attend. A touching part of the cortege was a small red two-seater car made in the works in which ‘Willie’ took special rides, and which carried a number of floral tributes. William Wilson Douglas left an estate valued £55,603 14s, and his younger brother John succeeded him as works manager at the Kingswood factory

During the early 1920s William Douglas had been having problems with the Inland Revenue, which was claiming that a large amount of Income Tax was overdue from past profits. This resulted in him becoming involved with William Henry Ennor Millman (1883 to 1969) who had was said to have previously worked as a schoolmaster and a political agent. It appears that Millman went on to have some success in sorting out William Douglas’s tax affairs, and consequently in May 1923 he was invited to join the board of Douglas Motors Ltd.

A disastrous fire struck on Friday 25 March 1927 which the ‘Western Daily Press’ reported the following day. “An outbreak of fire at Messrs Douglas's Motor Cycle Works, yesterday afternoon, resulted in an important section of the premises being destroyed, and damage estimated at £150,000 to £200,000 incurred. Several workmen were injured, but none seriously. The section involved occupied a space of some 1000 feet by 500 feet. This building was separated from the offices and other important sections by a wide road, and the latter, no doubt, prevented the extension of the flames, which, as a fact, were confined to the one block. Here is situated the assembly portion of the works, where machines pass through varying stages towards completion. There are also the welding, grinding, polishing, electro plating, enameling, and tank departments, and these have been completely destroyed. The machine shop is in the same block, but the fire spread in the other direction.

The wind at the outset blew with some intensity towards the offices, and there was danger at one time of this block being affected. The heat was intense, and for time the office staff were marooned, as it was risky to face the flying embers whirling across the entrance, while the side door was in the full blast of flying material. Fortunately the wind veered round, and it then soon became evident that about two-thirds of the assembly block would be completely destroyed.

The outbreak occurred about two o'clock, and Messrs John Douglas and W.H.E. Millman were early on the scene to direct operations, while the Kingswood and Mangotsfield Fire Brigades were 'phoned for as well as the Bristol Brigade. The latter’s arrangements preclude attending fires outside the boundary, but in response to special appeals arrived after the Kingswood and Mangotsfield Brigades had been at work some time. The water pressure, however, was apparently inadequate for the task in hand.

Meanwhile amazing scenes were being witnessed at the works. Mr John Douglas and a party of workmen by means of fire appliances fought the flames, and confined them one bay for 35 minutes, while W.H.E. Millman and assistants fought the outbreak at the other end of the building. As a first thought Mr John Douglas organised the collection of all jigs and tools, which are vital the production the Douglas machine, and got them away to safety. Then the machines, finished and partly finished, were rushed out (often at grave

risk), as well as tyres, engines, magnetos, carburetors, etc. These were placed first of all on the patches of spare land adjacent to the works, outside unaffected shops, and were later stored in the buildings which had been left unscathed.

Mr Millman's partly salved most of the 3000 gear boxes and engines, but many hundreds of finished and semi-finished machines were destroyed. The pattern shop, the foundries, the side-car shop, offices, and many other departments were not affected except by heat and falling fragments.

There were exciting scenes while the flames were at their height. The Kingswood firemen under Captain Isgrove swarmed on to the roof to get better control, but the flames burned with intense fierceness and one wall eventually crashed, disclosing a huge area of blazing material. The roofs fell and as the enameling stoves caught fire there were alarming explosions. On the other side the block the Mangotsfield Brigade under Captain Hobbs worked, the fire being thus attacked on two sides, while later the Bristol Brigade rendered what assistance was possible.

Several casualties were reported from bums and falling masonry and the cases were attended by the City and Marine Ambulance and treated at Cossham Hospital. One man, Jack White, of Redfield, was detained at the Institution suffering from burns. J. Barnes, of Belle Vue Terrace, Kingswood, sustained head injuries through falling masonry, but was not detained.

The fire, occurring as it did just as the works were in full swing for the summer, is big blow to the huge Douglas enterprise. It will stop production for some time, but immediate efforts will be made to get the works going again, and meanwhile hundreds of workmen will be out of employment. During the progress of the fire hundreds of sightseers flocked to the works, and the police, under Superintendent Cooke, had a busy time.

The fire, was reported subdued at 8 o'clock last night, but on account of smouldering material the Kingswood and Mangotsfield brigades remained in attendance and the works were picketed by police, due chiefly to danger from falling masonry. Both at Kingswood and in Bristol much sympathy was expressed with William Douglas and his fellow directors at the great misfortune which has befallen them.

At 2.10 p.m. a telephone message was received from St. George's Police Station that a fire had broken out at Messrs Douglas's works at Kingswood. A reply was given that the City Brigade could not attend, as the fire was outside the boundary. At 3.15 p.m., on instructions received from the Chief Constable, the Central Brigade, under Inspector Lear, turned out with motor tender engine and trailer pump attached. The Brigade from St. George also attended. On arrival, it was found that fire had broken out and was progressing at the works. Several buildings had been destroyed, and the fire was still spreading into the machine shops. The Kingswood and Mangotsfield Fire Brigades were at work with two deliveries from each their pumps. A standpipe with four lengths of hose was at once got to work, as well as another standpipe with five lengths of hose by the Brigade.

At four p.m., the fire ceased spreading, and by six p.m. was considerably abated. The cause of the outbreak was stated to be unknown. The damage consisted of the welding, enameling, assembling, grinding, polishing, electro-welding shops, and stores. The buildings were one-storey, covering about two acres, and contained machinery and plant, stores, tools, and other fixtures. A large number motor-cycles in course of construction were also destroyed by fire. The roof and wooden floor of a large machine shop adjoining, with benches and other fixtures and machines were damaged by fire, water, and cutting away. At seven p.m., the motor trailer, which had been pumping continually for four hours with good results, ceased work. The City Brigade left shortly after, and the Kingswood Brigade was left in charge.

The story of the fire was continued in the ‘Western Daily Press’ on 28 March 1927, “Although it is not possible, at present, to form an accurate estimate of the exact damage involved at the works of Messrs Douglas, at Kingswood, the disaster has not proved of the magnitude which at one time appeared probable. Owing to the excellent salvage work which was performed due to the untiring efforts of the employees and staff, a considerable amount of valuable machinery and motor-cycle components were saved from destruction. The report first circulated that 4,000 machines were destroyed is, fortunately, without foundation, and the number of machines lost, it is believed, will only run into a few hundreds.

Altogether about 14 'bays’ of the section the works, comprising the testing sheds, welding, assembling shops, and stores, etc., were affected by the fire, which totally destroyed these portions. On Saturday a large number of the employees and staff were busily engaged in the task of clearing away the mass of masonry which had accumulated the roadway which runs through the works. Everyone showed keenness in lending a helping hand. The directors of the firm were early on the scene, including Mr William Douglas, Mr John Douglas, and Mr W. H. E. Millman, and were soon assisting in the direction of operations.

In accordance with the instructions issued the men of the various departments presented themselves for the payment of wages. Up to the present no definite arrangements have been formulated as to the immediate future. It was pointed out that the whole the works must, of necessity, be temporarily disorganized, but every effort will made carry on production and find employment once again for the employees affected. It is understood that a meeting of the directors will consider the question this morning, and it hoped that a number of machinists and others may be able to commence duty almost immediately.

A walk round the devastated portion the workshops revealed the intense fury with which the fire raged. The roof covering 14 bays had totally collapsed, and portions of the brick walls had also given way in certain places. The interior was a mass of debris, among which twisted and bent girders were prominent. On the floors were also scattered miscellany of motor-cycle components, and it was possible to pick out frames, fly wheels, and other parts rusted and scorched by water and heat.

Members of the Kingswood Fire Brigade were still on duty during Saturday and yesterday, having remained at the works during the whole of the night. Captain Isgrove paid a tribute to the efficient way in which his men had carried out their duties. He explained that the difficulty at the start of the outbreak was the inadequate length of hose which was possessed in order to reach a proper water supply. When the Bristol Brigade arrived with a large quantity of hose no difficulty was experienced in obtaining sufficient water pressure. Although the local brigade made a wonderfully smart turn out, they found upon arrival that the fire had obtained a firm hold. As the flames grew each bay was demolished with uncanny quickness.

Praise was also given to the excellent work the Mangotsfield Brigade, but the size which the conflagration quickly assumed was that the heroic efforts the two voluntary brigades were pitted against overwhelming odds. Much credit is due the Bristol City Brigade, who, upon arrival, by prompt measures effectively set to work avert the spreading of the flames to the unaffected workshops.

There was a constant throng of sightseers around the works during the week-end, and the fire and its effects were the sole topic of conversation. The local members of the police force were on duty in charge of Inspector Dale and Sergeant Davies. It is a remarkable and fortunate fact that no serious personal injuries were sustained during the course the fire. Nearly 2,000 persons were on and around the premises the time, the majority of whom were engaged in salvage work of some description, yet despite the fierceness of the flames and the constant crashing of masonry, which was thrown a considerable distance, no one was seriously hurt.

In addition to the busy spring trade which the firm was anticipating, arrangements were also well in hand for the approaching T.T. races. Douglas machines have always performed well in these famous tests, and this year, with the latest models, it was hoped to achieve some outstanding successes. Every effort, it is understood, will still be made to carry on with the original programme, and to have the special machines for the Isle of Man races ready to time. It is rumoured that the firm also have in hand an entirely new model in view which will mark another step forward in motor-cycle production."

On 30 March an announcement appeared in the 'Western Daily Press', which read, "Important Notice! Douglas carries on! The directors of Douglas Motors, Ltd., beg to express their gratitude and thanks to the enormous number of fellow manufacturers, riders and friends, who have sent letters of condolence after the disastrous fire at the Kingswood factory. Although disorganized by the loss of an important section of the factory, they are pleased to say that the rumour that thousands of machines were destroyed is unfounded. The stock room, where most of the completed machines and unassembled parts were stored, was untouched. The machines destroyed were those assembled during the week and those in course of erection.

Unbelievably another fire broke out soon after as the 'Western Daily Press' of 13 January 1928 reported, "The Kingswood district was aroused in the early hours of this morning by the discovery of an alarming outbreak of fire at the motor-cycle works of Messrs Douglas and Co. Flames were first seen 1 o'clock in the grinding bay of the

works, premises consisting of two wooden buildings with sloping glass roofs, in Counterpool Road. Mr G. F. Harris, night worker the factory, seeing the blaze at once raised the alarm among his mates, and the Kingswood Fire Brigade was called out. The sheds involved, said to be full of practically new machinery, used in grinding, polishing and electro-plating, were soon in the grip of the flames, which, going through the roof illuminated the sky. A south-westerly wind was blowing and this sent showers of sparks over dwellings in Counterpool Road.

A resident in the vicinity named Bright, who, roused by the crackling of the fire, had given early alarm, aroused the inhabitants of Counterpool Road, to the danger which the wind-swept fire threatened, and the cottage-dwellers with their children vacated their homes. In the task of raising the alarm Mr Bright was assisted by a Mr Sharpley, who was returning from work when he learned of the outbreak.

The flames continued to burn fiercely, and the local firemen, hampered considerably by the wind, called upon the Bristol Central Brigade for assistance. Superintendent Cade and his men were soon the spot, and joined forces with Captain W. Charles Isgrove, the local fire chief, and his brigade.

In a department adjacent the burning sheds were about 100 unfinished motor-cycles, and relays men immediately set about wheeling these machines to safety from the advancing flames. It was feared that the entire stock would not be saved, but the concentrated efforts the brigades gradually took control of the blaze and checked its progress until soon after three o'clock it was confined two electro-plating bays and part of the japanning department.

By this time the glare had died down and the local brigade was directing its attentions from the Blackhorse Road entrance to the works, the Bristol engine having been manoeuvred to a fresh point of attack. About 25 yards away great vats of enamel were stored, but the fire did not succeed reaching them. By a coincidence the fire broke out near the spot at which last March's extensive outbreak occurred. Since the former fire a new concrete floor had been laid. At about 3.30 it was found that the fire had made its way to the cellar stores beneath the floor, and smoke issued from cracks in the concrete, but this development was soon dealt with.

At the time Mr W.H.E. Millman, the Managing Director of Douglas Motors Ltd., said "The night watchman saw nothing of how it happened. So far as I can say all the new machinery upon which we spent such lot of money has been destroyed. The damage does not seem to be very much but it will hit our production as there seems to be destroyed just that which is essential to the finishing of our machines." Millman expressed anxiety more particularly for the contents of the plating department, which fittings had cost thousands of pounds. Mr William Douglas and Mrs Douglas visited the works while the fire was in progress but did not stay.

Douglas Motors (1932) Ltd - 1932 to 1933

Sadly, on the morning of 25 February 1929 at her home, ‘The Woodlands’ in Kingswood,

William Douglas's wife 'Lizzie' had passed away unexpectedly after only a few days illness. Soon after the trade depression began considerably affecting the firm's output, and following disagreements within the family and the difficulty in obtaining general agreement on matters of policy, William Douglas finally decided to sell up and delegated Managing Director and Company Secretary William Millman to approach possible purchasers or their intermediaries. Consequently, in June 1931 he began negotiations with London investment brokers John Freston & Company Ltd, which subsequently joined with the Central & Western Development Company to approach the insurance brokers Russell, Newton & Co. Ltd.

As a result of that somewhat convoluted process Russell, Newton & Co. Ltd, working on behalf of a group of London financiers headed by B. J. Ringrose, formed a new company named D Motors (1932) Ltd (successors to Douglas Motors Ltd). It was registered on 2 March 1932, and on the 18th entered into an agreement to purchase for £200,000 the freehold manufacturing premises at Kingswood belonging to Douglas Motors Ltd, along with the goodwill, stock, plant and equipment, as a going concern.

At the same time, and in order to preserve the goodwill of the Douglas brand, the name of Douglas Motors Ltd was changed to D Estates Ltd, the chairman of which remained William Douglas. The purchase, for £10,000 in cash and a debenture of £190,000, was completed in April, and on 6 May 1932 it was announced that arrangements had been concluded with the Board of Trade in order that D Motors (1932) Ltd could in future be known as Douglas Motors (1932) Ltd.

The board of Douglas Motors (1932) Ltd consisted of Mr F. Heron Rogers, the chairman; Mr E. Beck; Mr W. H. E. Millman; Mr C. H .C. Munroe; Mr Matt Payne; and Mr E. R. R. Starr. Mr A. W. Mattocks was Company Secretary and Cyril George Pullin engineer-designer. In addition Mr H. D. Glover was the production manager and Mr B. J. Ringrose the commercial manager. Millman, by then a Fellow of the Costs and Works Accountants and Fellow of the Incorporated Secretaries Association, was the only member of the late board of directors who was associated with the new firm.

Unfortunately Douglas Motors (1932) Ltd was soon in financial difficulty and on 26 July 1932 an Official Receiver and Manager was appointed for the company, his representative at the works being a Mr Miller. In an endeavour to raise capital and save the firm arrangements were made to dispose of many of the machine tools to an Italian car manufacturer in Kensington, but this caused so much bitterness within the works that fights broke out when the equipment was being moved outside for loading on to lorries.

The situation deteriorated further on 12 October 1932 when D Estates Ltd (formerly Douglas Motors Ltd), of 'The Woodlands', Kingswood, which owned £190,000 out of the £200,000 debentures in Douglas Motors Ltd, went into voluntary liquidation and instituted action against Douglas Motors (1932) Ltd for non-payment of interest on their debentures. However it was not until July 1942 that the company was officially dissolved.

Things then went from bad to worse and as a result on 23 March 1933 Mr F. E. Bendall, the Official Receiver and Manager, advertised the Kingswood works of Douglas Motors (1932) Ltd for sale as a going concern, while in late April Cyril Pullin resigned his position as the firm's Chief Designer and Engineer to join the aircraft department of G & J Weir Ltd in Glasgow, to act as chief designer in the development of their autogyros.

Finally, on 9 July 1934 a Winding-Up Order made in the matter of Douglas Motors (1932) Ltd following a petition presented by Herbert Terry & Sons Ltd, of the Novelty Works, Redditch in Worcestershire.

William Douglas (Bristol) Ltd - 1933 to 1935

By the end of March 1933 it looked as if the Kingswood undertaking was doomed, but it was saved for extinction by William Douglas himself, who purchased it through his company William Douglas (Bristol) Ltd. So it was that in September the new firm gained full possession of the works, with William, his son John, and trusted confidant William Millman, back at the helm.

For the 1934 motor cycle season William Douglas (Bristol) Ltd published a brochure entitled 'Douglas 500cc & 600cc O.H.V.' in which it was stated that the firm were "contactors to the War Office, Admiralty, Air Ministry, India Office, the leading railways, Crown Agents for the Colonies, Foreign Governments etc."

On 14 June 1935 General Aircraft Ltd based at the London Air Park at Feltham in Middlesex, announced the acquisition of the sole licence for the manufacture and sale throughout the British Empire of the French Hispano Suiza aero engines, both fluid and air cooled, for a period of ten years. The price to be paid was £43,000, made up of £3,000 in cash and £40,000 in deferred shares. The engine that had been selected for initial production was the 12Y, a 900 hp water-cooled V-12 with the two cast aluminium cylinder banks set at 60 degrees to each other. This it was hoped would find favour among aircraft firms engaged in the production of military types. Freed from the burden of development expenditure, the engines were to be manufactured by a new company, Aero Engines Ltd, in the Douglas motor cycle and aircraft engine factory at Kingswood in Bristol, which the week before had come into the hands of the British Pacific Trust, the investment group that had owned the London Air Park since August 1934.

As a result, on 17 June 1935 William Douglas (Bristol) Ltd went into voluntary liquidation, and although the Douglas family was no longer involved with the Kingswood works, William and his son John had been under considerable pressure for a number of years as a result of the various company reorganizations and their associated financial crises. Consequently their health suffered, with the result that John Douglas, of 'Woodstock', Kingswood, died on 11 January 1937 at the age of just 54. The 'Western Daily Press' subsequently reported that, "He was associated with the motor cycle business from its earliest days and was a director up to the time the works were taken over by Aero Engines Ltd. He had been works manager of the Douglas form for many years, succeeding to that position on the death of his brother, William W. Douglas, and he always took special interest in the designing side.

John’s father, William Douglas, who took the news badly, passed away on 22 April 1937 in his 78th year, and was subsequently buried at Kingswood Parish Church on 27 April 1937, leaving an estate valued at £190,457 4s 10d.

Aero Engines Ltd 1935 to 1946

Incorporated on 7 June 1935 Aero Engines Ltd took over the old Douglas works at Kingswood on the 17th, the day on which William Douglas (Bristol) Ltd went into voluntary liquidation, the purchase price of the company’s works and plant having been £143,000, made up of £83,000 in cash and £60,000 in Deferred shares.

On the same day General Aircraft Ltd assigned to Aero Engines Ltd the rights and designs for their ‘Monarch’ aero-engines intended for installation in light aircraft. Two versions were under development, and the closest to achieving production status was the 90 hp V4 engine which had already successfully undergone extensive testing. However, as the 150 hp inverted V6 version, which was originally intended to power the General Aircraft Ltd Monospar ST12, was still being developed, it was even considered transferring the whole of the engine design staff to Kingswood.

The property there was freehold, and extended to more than 20 acres. The buildings were modern and well constructed, and had a floor space of 288,600 square feet, of which 153,000 was under one roof. The works comprised machine shops, tool and pattern shops, plating, spraying and enamelling shops, assembly, test and inspection departments, metal foundry, drawing and general offices, the whole being supplied with power and light by the company’s own power plant. The machinery was in excellent condition, while the property, fixed and loose plant, fixtures, fittings and furniture, stock, spares, tools, jigs and dies, patents, rights, and designs acquired were given a total value of £433,800.

The subscription list for the 700,000 Ordinary shares of 5 shillings each of Aero Engines Ltd offered at par opened and closed on 20 June 1935. Including the 1,000,000 of Deferred shares of two shillings each issued to vendor interests, the company started with a capital of £275,000, and after meeting the cash consideration and issue expenses, it was estimated that there would be available some £65,000 as working capital.

The directors of Aero Engines were Sir Maurice Bonham-Carter (Chairman of General Aircraft Ltd), who was appointed Chairman; Squadron Leader Tom Harry England retired, who became the Managing Director; William Henry Ennor Millman, the late Manager of William Douglas (Bristol) Ltd.), who was also the Company Secretary; John Maclagan Ferguson (Director of British Pacific Trust Ltd); and Helmut John Stieger (Joint Managing Director of General Aircraft Ltd). Although it was initially stated that motor cycle production would cease at Kingswood, it was intended to continue manufacturing the existing Douglas range of light air-cooled engines which were being marketed for use in light aeroplanes and motor assisted gliders.

However, at an Extraordinary General Meeting of Aero Engines Ltd held on 14 February 1936 to approve a capital increase for the company, it was also announced that although it had originally been the intention to end the manufacture of motor cycles at Kingswood, that decision had been rescinded as enquiries concerning the machines had been received from all over the world. Consequently, Aero Engines Ltd had appointed Pride & Clarke Ltd of Hammersmith as the sole agent for Aero Douglas motor cycles.

Since Aero Engines Ltd had taken over the Kingswood facility the workforce had risen from 250 to about 700. During that period orders had also been received for Douglas light aero-engines and petrol driven industrial trucks, which were being sold both at home and abroad. In addition, a portion of the works consisting of some 36,000 square feet, and not hitherto used, had been set aside for the manufacture of aeroplane wings and components for which a substantial order had been received.

The first Annual General Meeting of Aero Engines Ltd was held on 1 December 1936, at which it was disclosed that the result of the first year's working was a loss of £11,851, although much of that resulted from re-organization and re-equipping costs. Although the number of employees had risen to over 900, the company still had difficulty in recruiting a sufficient number of trained staff and labour to execute the volume of business on hand.

In June 1936 the Spitfire fighter had been ordered into production, but the tiny Supermarine company could initially build only the aircraft's fuselage, sub-contracting the wings to General Aircraft and Pobjoy, wing ribs to Westland, leading edges to The Pressed Steel Company, ailerons and elevators to Aero Engines Ltd, tails to Folland, wing tips to General Electric and fuselage frames to J. Samuel White & Company Ltd.

Unfortunately, production of the Hispano-Suiza engine had been delayed pending further developments and until the official type test had been completed by the French company. To make matters worse, soon after the declared policy of the British Government in the field of aircraft production became one of restricting orders to certain types and manufacturers, and as a result Aero Engines Ltd, was never to manufacture any Hispano-Suiza engines as the Rolls-Royce 'Merlin', which had recently gone into production, had become the preferred option for installation in RAF fighters and bombers.

Consequently, at the second Annual General Meeting of Aero Engines Ltd held on 21 December 1937, it was stated that the termination by mutual consent of the agreement with the Hispano-Suiza Company, which carried with it the repayment of the moneys originally paid over on account of the license, was a solution in the best interests of the company. In order to fill the factory and keep the staff employed a variety of work had been taken on for which the premises were adapted. This included the manufacture of motor cycles, components for armament, and foundry and general engineering work. It was also reported that Aero Engines Ltd was engaged on a considerable amount of aircraft work of an urgent character, and by faithful adherence to promises of delivery a satisfactory relationship with the Air Ministry was established. However, in the financial

report it was stated that the trading for the period from 1 July 1936 to 31 July 1937 had resulted in a loss of £57,477, which was carried forward.

So in an effort to improve the situation, in July 1937 Eric Cecil Gordon England (1881 to 1976), the managing director of General Aircraft Ltd since 1935, had been invited to assist in the reorganization of the Kingswood works, and subsequently joined the board of Aero Engines Ltd with the position of deputy chairman. The company then made a rapid recovery as steps taken to correct past mistakes proved effective, including the decision to market the motor cycles once again through recognized channels, and to revert to the old and familiar name of 'Douglas'. Although the company had yet to make a profit its losses were much reduced, and at the third Annual General Meeting it was announced that during the accounting period ending on 31 July 1938 this amounted to £9616. At this period Mr B.J. Ringrose was the commercial manager of Aero Engines Ltd (makers of Douglas motor cycles).

Finally, at the fourth Annual General Meeting held at Kingswood on 12 December 1939, company chairman Sir Maurice Bonham-Carter was able to announce that the trading for the period up until the end of July had resulted in a profit of £36,684. He said that the company's order book had shown a progressive increase and that it was then larger than ever before, as was the number of people employed, while the management had also rearranged the factory in order to increase its capacity.

By then war had broken out, and during the conflict Aero Engines Ltd received contracts to manufacture wings and other units for Supermarine Spitfires, Fairey Fireflys, Boulton-Paul Defiants, and Blackburn Bothas, and various other types of aircraft, as well as large quantities of Douglas industrial trucks, generating sets, and several types of Douglas engines which have been employed for radar equipment, communications, and sundry other purposes in all theatres of war.

By constantly improving manufacturing facilities and techniques the company was able to increase production several times, and at the same time being able to undertake technical research and development in various applications of internal combustion engines in the furtherance of the war effort. In that field Aero Engines Ltd were entrusted with development contracts by the Ministry of Aircraft Production and the Ministry of Supply in collaboration with Rolls-Royce, the Bristol Aeroplane Company, and Armstrong Siddeley.

Aero Engines at Kingswood was given the target number GB 73 30 by the Luftwaffe, and although never specifically attacked, early in the war some bombs fell on the premises during large scale attacks on Bristol. The first incident occurred in the evening of 24 November 1940 when Aero Engines Ltd received direct hits from incendiary and high explosive bombs, and the fire which resulted started a major fire which destroyed a portion of the works, causing three casualties, including a fireman who fell from a ladder. The other occasion was during the night of 16/17 March 1941 when Kingswood suffered a rather heavy incendiary bomb attack which caused two small fires at Aero Engines. However, these were quickly extinguished with no stoppage to production. In 1941

H.R.H. Queen Mary, who at the time was living at nearby Badminton House, paid a morale boosting visit to the Kingswood factory.

At the Annual General Meeting held on 29 December 1942 it was stated that the accounts for the previous three years showed that profits, after taxation, to 3 August 1940, of £18,989; to 2 August 1941, of £3,714, and to 31 July 1942, of £21,660, making a total of £44,303, from which was deducted a debit balance at August 1939, of £42,261, leaving £2,041 to be carried forward. More than half the output was represented by Douglas products as conducted by Douglas (Kingswood) Ltd, a name which started appearing in advertising material issued in 1941, and an undertaking which was actually incorporated into Aero Engines Ltd. In addition, as the business in Douglas industrial trucks continued to expand, the board were already considering the advisability of changing the name of the company from Aero Engines Ltd, to one incorporating Douglas.

Company chairman Sir Maurice Bonham Carter said that the although the profit earned over the three year period was not large, having regard to the effect of Excess Profits Taxes it was the most solid result that the company could hope to achieve, and consequently that the financial position of the company as a whole was considerably strengthened, and represented a fair foundation on which to build its future.

However, at the eighth Annual General Meeting of Aero Engine Ltd, which was held on 31 December 1943, it was revealed that the net profit for the year ending 31 July had been £7,480, compared with the £21,660 made the previous year, although stock on hand and work in progress amounted to £990,511, up from £450,785.

Then, in early February 1944, shareholders in Aero Engines Ltd were informed that after consultation between the boards concerned, arrangements had been made for General Aircraft Limited's holding of 431,000 shares in Aero Engines Ltd, which then had a nominal value £43,100, were to be disposed of to the Philco Radio & Television Corporation of Great Britain. This was part of the Philco Group, an association of British Companies engaged in manufacture, research and development covering telecommunications and electro-mechanical production.

The directors of Aero Engines Ltd considered that there was a wide field of development and production in which co-operation between the two companies would be of mutual advantage, in particular in the post-war period. Consequently, Eric Cecil Gordon England, Mr J.M. Ferguson, and Mr W.S. Stephenson retired from the board of Aero Engines Ltd, while Mr L.D. Bennett, chairman of the Philco Radio & Television Corporation of Great Britain, Mr E.C. Baillie, and Mr S.J. Gordon were elected in their place. However, Sir Maurice Bonham-Carter continued to act as chairman, Mr John Robert Phillipson as managing director, and Mr G.H. Baillie as director.

The Ninth Annual General Meeting of Aero Engines Limited was held at Kingswood on 29 December 1944 at which the chairman Sir Maurice Bonham Carter, K.C.B., K.C.V.O., was able to announce that the company had made a net profit for the year amounting to £17,478 and that the sale of Douglas industrial trucks has proved a record both at home

and for export, while the reliability of the Douglas engines has been firmly established in applications to various types of units.

He went on to say that the company's association with the Philco Radio & Television Corporation of Great Britain Limited had opened up the prospect, not only of the full employment of the present plant and space, but also of the probable necessity for very considerable expansion. In collaboration with the company's associates, plans had already been prepared and approved by the Board of Trade whereby the transition to post-was production could be accomplished with the minimum dislocation, although in the circumstances then existing it was deemed wise to postpone the changing of the name of the company.

On 17 November 1945 it was announced that Aero Engines Limited, incorporating Douglas (Kingswood) Limited, had acquired from Messrs A.C. Morrison (Engineers) Limited, a sole manufacturing and selling licence for the A.C.M. Electric Vehicles, and that the chairman, Sir Maurice Bonham-Carter, and the managing director, Mr John Robert Phillipson M.I.Mech.E., had been nominated to join the board of A.C. Morrison (Engineers) Limited.

Mr A.C. Morrison M.I.Mech.E., M.S.A.E., was to continue as managing director of A.C. Morrison (Engineers) Limited, but his services would be at the disposal of Aero Engines Limited for all matters connected with the A.C.M. Electric Vehicles. Production of the A.C.M. vehicles for which orders had already been received, was to begin immediately in the large precision works at Kingswood belonging to Aero Engines Limited.

The tenth Annual General Meeting of Aero Engines Limited was held on 19 December 1945 at Bristol, company chairman Sir Maurice Bonham-Carter K.C.B., K.C.V.O., particularly thanked the company's managing director, Mr Phillipson, the secretary, Mr Walmsley, and Mr Halliday, the chief engineer and designer.

Sir Maurice was able to announce that the net profit for the period ending 3 August had been £23,082, and that the company had been able to prepare designs of engines suitable for marine, agricultural, and general utility purposes, which will be going into production. Although a considerable portion of the company's manufacturing capacity was still engaged upon Government contracts, in anticipation of curtailment or cancellation, appropriate steps had been taken to introduce new projects as and when the necessary tooling had been completed and the capacity became available. The resources of the company for post-war production had also been considerably increased by the acquisition of modern machine tools of the quality and type requisite to efficient and economical output of the programme envisaged.

With regard to the recently acquired A.C.M. Electric Vehicles, the chairman stated that as their designs complied with the latest Ministry of Transport regulations, and incorporated features which showed a marked advance on existing types in economy and efficiency, it thus rendered them especially suitable for short deliveries of milk and household goods. Owing to a patented system of construction they were attractive to the export markets by reason of quick assembly overseas. The demand for Douglas

industrial trucks, both for home and export markets, still continued and it was felt that a yet larger demand for them would be created as industry became re-established and moves made towards greater production efficiency.

In order to take advantage of the accumulated experience and goodwill acquired before and during the war, the directors had also decided to resume the manufacture of motor cycles, for which the name Douglas had earned world-wide renown. Consequently, in January 1946 it was announced that Aero Engines had received orders amounting to £200,000 for Douglas motor cycles from many different parts of the world, and that concentrating first on the 350cc model, it was hoped to start production in a month or so.

As the board considered that the time was opportune to change the name of Aero Engines Limited to Douglas (Kingswood) Limited, it was also necessary to hold an Extraordinary General Meeting to voluntarily wind up the existing Douglas (Kingswood) Limited and to appoint a suitable liquidator. This meeting was also held on 19 December 1945, the same day as the tenth A.G.M., and once the liquidation process had been completed the firm was able to carry out the name change on 26 February 1946.

Douglas (Kingswood) Ltd 1946 to 1970

On 17 August 1946 it was announced that as the Charterhouse Finance Corporation Ltd had acquired from the Radio & Television Trust Ltd, their substantial interest in the share capital of Douglas (Kingswood) Ltd, Messrs L.D. Bennett and E.C. Baillie had resigned from the board. They were replaced as directors by Mr H.N. Hume (chairman of the Charterhouse Finance Corporation Ltd) and Mr R.S. Dyball (director of Charterhouse Industrial Development Company Ltd). At the same time Harold Whitehead, the deputy chairman of Jenson and Nicholson Ltd, joined the board as chairman, replacing Sir Maurice Bonham-Carter who had retired after eleven years of service to the company.

Then, on 4 September 1946 came the news that Douglas (Kingswood) Ltd were just commencing a huge export programme and had booked orders for motor cycles to the value of £750,000. Export was expected to start at the end of the year, and Mr S. Vincent, the export manager was then making a sales tour to France, Switzerland, Spain, and Portugal.

In view of matters outstanding in connection with the settlement of Government contracts, in 1946 the company’s current financial period was extended to 31 December, instead of ending as normal on 3 August. At that time Douglas (Kingswood) Ltd was said to have had a heavy order book for motor cycles, electric trucks, internal combustion engines etc. and, as it was aiming at an annual turnover of £3,000,000, it was hoped that at the next Annual General Meeting the shareholders would agree to increasing the company’s working capital by the creation of additional shares.

At the Annual General Meeting of Douglas (Kingswood) Limited, which was held at Kingswood on 30 December 1946 Harold Whitehead, the new chairman, presided. He stated that the company was then in an advanced state of transition from war contracts

to peace production, and the aim of the directors was to develop, as a first stage, the company's four main products, motor-cycles, internal combustion engines, industrial trucks and electric delivery vans. He went on to say that during the war the turnover, totalling in excess of £7,000,000 was financed largely by progress payments and ‘free issue’ materials, but that had ceased. Consequently, it was essential that the company’s capital should be brought more into line with its production potential, and it was in order to give effect to that the directors had established the relationship with the Charterhouse Finance Corporation Limited. At the meeting the important resolution authorising the increase of the capital of the company to £850,000 by the issue of 1,800,000 additional Ordinary shares of 5s each was also agreed unanimously.

Finally it was announced that John Phillipson, the managing director for the previous five years, and who had been responsible in no small measure for the growth of business, was to continue as the executive head in order to insure a continuity of management during the transition from war to full-scale peace production.

On 15 March 1947 it was announced that the directors of Douglas (Kingswood) Ltd had decided to issue 1,025,000 new Ordinary shares, and that the Charterhouse Finance Corporation were to guarantee the issue. They also revealed that the net loss for the 17 months to 31 December 1946 had amounted to £8,783, against a profit of £23,082 made during the previous year.

Unfortunately, due to continuing problems at Kingswood, on 8 December 1947 it was revealed that dismissal notices had been served on 300 employees at the Douglas works. John Phillipson, the managing director, stated that some overseas countries were completely closed to exports from Britain at present, and that although the company had some 1100 motor cycles ordered by Denmark, they were unable to deliver them, while the end of the basic petrol ration had meant that they could not be sold at home. He pointed out that although the company’s stock of machines was then as much as they could carry, they were re-organizing production and transferring workers wherever possible, and that most of those displaced so far had been found other work.

On 31 May 1948 it was revealed that during the previous year Douglas (Kingswood) Limited had made a trading loss of £179,824, to which had been added depreciation of unsatisfactory and redundant stock and development expenses totalling £297,831. In addition £34,849 had been written off the book value of intangible capital items. The above, with the credit on profit and loss account at January 1 1947 of £41,471, left a debit on the profit and loss account of £471,033 to be carried forward.

Then, on 23 August 1948 the directors of the company issued a statement in which they said that, "the improvements in the organisation of Douglas (Kingswood) Ltd., have proceeded in stages according to plan. What is hoped will be the final stage is now being effected. "Production routines are being simplified and lower production costs are anticipated. The present redundancies do not materially affect productive workers but reductions in indirect personnel are being made. "Mr W. R. L. Warnock has been appointed secretary in place the former secretary whose resignation has been accepted."

Nevertheless, things went from bad to worse and in a circular sent by the board of directors to all shareholders on 16 October it was announced that a Receiver and Manager had been appointed to take control of the affairs of Douglas (Kingswood) Limited. At a Press conference held in London the day before, Mr H. N. Hume, a director of Douglas and chairman of the Charterhouse Investment Trust, Ltd., underwriters of the issue of ordinary shares to Douglas' shareholders in March, 1947, said that the point had been reached at which the company, as constituted by its board of directors, could not honourably carry on without further resources. The only direction in which they might become available was the Westminster Bank, from whom £100,000 were unsuccessfully sought.

The circular dispatched to the shareholders while expressing the opinion of directors that Douglas was moving into the phase of moderate profit-earning, stated that getting to that stage had strained financial resources beyond danger-point. Without the prospect of further funds, the board could not properly allow the company to incur further liabilities to creditors by continuing to trade. It went on to state that approaches made to the largest shareholders and to other possible outside sources of capital did not meet with success, and the Westminster Bank was therefore requested to increase the company's overdraft limit from £680,000 (to which it had been reduced by the bank from £700,000 on August 10) to £780,000 for six months. Coupled with that request, the directors offered to the Westminster Bank such financial control as it might desire, and to place their resignations in its hands.

In the alternative the bank was asked to appoint a receiver and manager who would carry on the business until such time as scheme of reconstruction could be evolved. The bank had elected to follow the latter course, and consequently Mr William Walker, of Lathan & Company was appointed receiver and manager. It was a matter of deep regret to the board that that step should have become necessary at the moment when they believed that their efforts to pull the company round were meeting with success. The management were prepared to remain at their posts and help the receiver as much as possible, and if suppliers and customers would stand by the company there was every reason to hope that it could steadily work towards a time when satisfactory scheme of financial reconstruction could be effected and the receiver discharged.

At that date the amount due, excluding outstandings and accruals, to approximately 750 trade creditors was about £95,000, and other creditors about £40,000. During the current year, sales had been at the rate of £750,000 per annum and orders and contracts in hand indicated that that figure should have been able to be increased. The value of orders and contracts in hand was about £160,000 equivalent to about three months' output.

At that date stock-in-trade and work-in-progress was estimated of a value of some £450,000, and debtors were approximately £65,000. Apart, therefore, from the amount due to the bank, there was, on the basis of going concern, a substantial surplus of assets. It was further estimated that the large amount tied up stock and work-in-progress

could gradually be brought down to about half that amount, thus freeing, say, £225,000 cash for reduction of overdraft.

Reviewing the position, Mr Hume said they became aware of the fact that the company was running seriously behind schedule in the autumn of 1947. Then, just when production difficulties had been overcome there came the death blow of a cessation of basic petrol, but he had no reason to believe that the motor cycle was not then giving satisfaction, he said that it was a good machine and that the company's productive capacity was about 50 a day. It had averaged about 20 a day during the previous two or three months as the firm had not had the money to back up the machines with a substantial advertising campaign. In addition, they were also producing industrial trucks, electric vans and small industrial engines, and had a substantial sub-contracting business. It was the latter that produced certain components for the Brabazon airliner the, prototype of which was then being built by the Bristol Aeroplane Company at Filton.

Towards the end of 1948 came a glimmer of hope for the troubled company, as on 1 December it was reported that following new contracts secured by Douglas (Kingswood) Ltd., there would be vacancies for about 125 additional skilled men in the machine shop between then and Christmas, and that arrangements had been in progress to ensure adequate supplies of special spares required to service Douglas vehicles already in use and to be delivered in the future. It was said that the design and development departments were continuing their work on future products although Mr William Walker, the Receiver and Manager, had directed that no basic change of design on production models was to take place within the following twelve months.

Mr Walker, in a statement of policy, disclosed that the separate distribution company Douglas (Sales and Service) Ltd., was then in operation and would trade normally, and not under the direction of a Receiver. At the same time it was stated that Douglas (Kingswood) Ltd was still carrying out contract engineering and foundry work, in addition to manufacturing the Douglas range of products. This contained not only motor cycles, but also power trucks which had been supplied with success to a large number of trades for cheap and quick transfer of goods and stores within industrial premises and yards.

The Douglas range also included industrial engines and light delivery vehicles, and production of a new series of the latter type, the Handyvan, was planned to begin with the 'Milk Boy'. Delivery of these was expected to start within three months, after which it was planned to introduce similar electric vehicles for local delivery by producing versions suitable for other trades, in particular bread and laundry. It was also revealed that members of Douglas (Kingswood) Ltd. group pension and insurance scheme had been informed that the Receiver and Manager had no intention of discontinuing the scheme so long as he carried on the business of the company.

The 11 February 1949 issue of 'Commercial Motor' reported that the receiver and manager of Douglas (Kingswood), Ltd., had announced that he is continuing to manufacture for Douglas (Sales and Service), Ltd. industrial trucks and stillages. However, the trucks would, as before, be distributed in England through the sole concessionaire, George Cohen, Sons and Company, Ltd., Wood Lane, London, W.12.

On 26 August 1949 Douglas (Kingswood) Limited posted a circular letter to the company's shareholders. It informed them that owing to the delays resulting from the re-organisation in progress before and since the appointment of the Receiver and Manager, it had proved impossible to prepare final accounts for the year to 31 December 1948, in time for their submission to an annual general meeting held by or on 7 September. It also revealed that the Board of Trade had been informed of the situation and had consented to the presentation of the accounts for the year in question at an Annual General Meeting to be held on 25 November 1949.

At that meeting Harold Whitehead, chairman of the directors of Douglas (Kingswood) Ltd., blamed executive and technical errors made in 1946 for the company's recent problems. He stated that in planning the company's switch from war to peace-time products, the then directors failed to coordinate design, supply of material and labour, production and eventual sale. In mid-1947 an immediate and costly policy of modification and rectification had been initiated. The long delays meant that the company had missed the sellers' market, substantial export orders were never delivered because import or currency licences were no longer available, and the abolition of basic petrol had crippled the home market.

However, he was able to report that the directors were satisfied that considerable progress has been made in the previous few months which would gradually rehabilitate the company as and when sales become normal. Mr William Walker, the Receiver and Manager, in a statement called attention to the improvement made in the company's products. Certain of the larger creditors and suppliers, he said, had cancelled outstanding commitments and destroyed parts not suitable to the modified programme, without claiming compensation. Nevertheless, for year to 31 December 1948 the company had made a trading loss of £97,729, although this was an improvement on the previous year.

Designed in 1945 by Corraino d'Ascanio, an aircraft designer and helicopter expert, only 2500 of his 125cc Vespa (Wasp) scooters were sold in 1946, However, by 1949 the production lines of Piaggio & C.s.p.a. at Genoa in Italy were working flat out manufacturing them, along with the Ape, a three-wheeled goods vehicle version. So in order to obtain additional large scale manufacturing facilities with the capacity to supply the UK and British Commonwealth markets, the Italian company made approaches to several companies.

Nevertheless, they finally granted a manufacturing license to Douglas (Kingswood) Limited, much to the credit of Claude McCormack, its flamboyant new managing director. To reveal the machine to the public in a suitable manner an Italian built Vespa was shipped over and, suitably adorned with a Douglas motif and priced at £128 including purchase tax, was put on display on the Douglas stand at the 25th Cycle & Motor Cycle Show which ran at Earls Court in London from 21 to 28 October 1949.

Consequently, stockholders at the 14th Annual General Meeting of Douglas (Kingswood), Limited, held on 25 November 1949, were told by chairman Harold

Whitehead that the firm did indeed intend to manufacture the Italian designed Vespa and the Ape, and all those involved hoped that prosperity would result for the company. He said that the estimated amount of money required for the development of both machines had been assured, and that applications for the necessary licences and permits were before the appropriate Government departments.

Mr Whitehead also commented that the receivership under Mr William Walker, the receiver and manager, was friendly one, and the directors were hopeful that once the mistakes of the past had been cleared up, the prospects for a successful business would be encouraging. The friendly receivership had proved to be most co-operative and everyone concerned owed a debt of thanks for what had been accomplished by Mr Walker with the assistance of Claude McCormack and the staff.

The accounts showed that the loss on trading, which included expenditure in the year on re-organisation and on rectification of work in progress as it was built into finished goods, was £141,963. With the addition of special losses and provisions, £168,196, the net loss and provisions made for the year were shown at £310,159. After crediting prior provisions not now required, £6,668, a total debit of £303,491 was to be added to profit and loss account for trading losses and provisions.

Directors Harold Whitehead, the chairman, and Claude McCormack, the managing director, retiring by rotation, were re-elected. Mr H. N. Hume, another director, said that McCormack's election to the directorate and his willingness to join the company at time when it was in low water was something for which the shareholders ought to be very grateful. He also believed that the company then stood a real chance of slowly climbing back to solvency, and possibly prosperity. Finally, Claude McCormack said that with the help and guidance of his principal, Mr William Walker, he would do his best to continue to bring the company to its ultimate goal of prosperity.

On 16 January 1950 the ’Times’ was able to report that, “The directors of Douglas (Kingswood) Limited, manufacturers of aircraft and general and foundry products, have recently concluded an agreement with Messrs Piaggio & Cia. of Genoa, Italy, whereby the Douglas company has secured an exclusive licence to manufacture and sell the Vespa motor scooter throughout the British Commonwealth, Burma, and Eire. Messrs Piaggio also undertake to grant the Douglas company, if requested to do so before 6 December 1950, a license to manufacture and sell the Ape light delivery vehicle in the same territories with the exception of India, Pakistan, Ceylon, and Burma.

Development and special tooling expenditure in connection with these vehicles is estimated at not more than £52,000, which the directors to propose to raise by an issue at par of £60,000 six per cent Convertible Debenture stock. It is intended to offer to Ordinary and Deferred stockholders in the proportion of £1 Debenture stock for every £10 of stock held.” Meetings to consider the proposals were scheduled for 6 February.

It was announced on 29 September 1950 that the trading loss sustained by Douglas (Kingswood) Limited for the year 1949, after charging depreciation of £14,766, bank interest of £26,621, executive directors’ remuneration, £2500, auditors’ remuneration of

£525, and after crediting £34,640 prior provisions no longer required, was £32,872. The comparable figure for 1948 was £141,963. Special losses and provisions absorbed £6,159 (£168,196 in 1948), and there was a credit of £18,125 in respect of a prior year's income tax that had been refunded (£6,668), leaving a net debit of £26,906. By contrast the net debit for 1948 was £303,491.

The report covering 1949 operations was the first issued in the rehabilitation period of at least two years which he Receiver and Manager of the company regarded as necessary. The anticipated 'modest loss' was incurred but the total profit and loss debit of £795,430 made it obvious that although the company might be restored to profit earning within the two year period, there was a very considerable leeway to be made good before the financial position could be restored as bank overdrafts totalled £705,612.

A feature of the current year's trading, however, had been a considerable increase in the sales of the Douglas motor cycle, which had coincided with its successful re-entry into the racing and competitive field. There had also been a slight increase in the sale of the company's other products comprising mainly electric vans, industrial trucks and engines, and in sub-contract engineering. The chairman stated that it was reasonable to expect that overall sales in 1950 would exceed those in 1949. Reorganization of the factory and modification of products continued, and much preparatory work had been done towards the manufacture of the Douglas Vespa, which was expected to be available for sale early in 1951. While it was impossible to forecast results substantially different from those of 1949, the receiver and directors were satisfied that solid progress was being made.

In a letter to the Douglas concern dated 6 December 1950, Enrico Piaggio noted with pleasure that their line was going to start shortly, and that the first Vespa is expected to be assembled before the end of the year. He was to be disappointed, as in spite of sending technicians to Italy and the factory re-tooled to produce 200 machines a week, production did not actually begin until early 1951.

In fact 15 March, the day on which the first deliveries were made to dealers, marked the official launch of the Vespa at Hanham Road where Claude McCormack, the managing director of Douglas (Kingswood) Ltd, said "It is a new mode of transport for the population with a job of work to do." The early machines were almost entirely built in Britain, as the Douglas foundry manufactured items such as engine bearers, clutch covers and cylinder heads, and the machinery shop the gear clusters, brake drums etc., while most of the pressings were produced by Pressed Steel in Birmingham.

At the Annual General Meeting of Douglas (Kingswood) Limited held on 28 September 1951, it was announced that a preliminary statement of the results for 1950 showed profit on trading, after crediting prior provisions no longer required of £63,040 (£34, 640 for 1949), at £17,517 (£11,500). After deducting depreciation £13, 692 (£14,766), bank interest £26,627 (£26,621), and other items, there was a net loss for the year of £25,827 (£32,872). No special expenditure arose in the year (£6,159), nor was there any refund of income tax (£18,125). After deducting a profit of £1999 (nil) on the sale of an

investment in an associated company the adverse balance for the year was £23,828 (£20,906).

On 24 June 1952 Claude McCormack, managing director of Douglas (Kingswood) Limited, announced a £22 cut in the price of Vespa scooters with immediate effect. Consequently, the Vespa would then cost £127 instead of £149, the new price including purchase tax. Mr McCormack said that he hoped that the reduction would go some way towards stimulating trade. Then, on 13 November 1953, came another announcement stating that Douglas (Kingswood) Limited had reduced the price of their 350cc Mark V motor cycles by £37 10s to sell at £180, while the price of the 350cc 90 plus machine had been cut £37 15s to £216.

In 1953 Douglas (Kingswood) Limited was being described as proprietors of Douglas (Sales and Service) Limited, and manufacturers of motor cycles, air-cooled engines, and trucks. Its directors were Harold Whitehead, B.B.A., F.I.I.A., the chairman; H. N. Hume, C.B.E.; M.C. R. S. Dyball, M.S.M.A.; Claude McCormack, while the Secretary was W. R. L. Warnock, C.A.

It was reported on 11 September 1954 that the hopes expressed by the chairman of Douglas (Kingswood) Limited a year before that the results for 1953 would show some improvement were dashed by the disclosure of a larger net loss. To accumulated losses standing at more then £1,000,000, the last year's trading added a net of £39,567, an increase on the previous year of £13,000. The reconstruction 'at some future date' of which the chairman spoke the year before appeared to have been brought no nearer.

However, there were some encouraging signs for the future. The year before a large proportion of the company's capacity was being devoted to sub-contract work for the aircraft industry. The industry's expansion encourages the hope that the order book had increased. Moreover, what the chairman referred to "as the greatest single factor restricting the sales of motor cycles and scooters, the restriction on hire purchase sales terms, had been removed". The exclusive license to make and sell Vespas in Britain was one of the company's chief assets.

It should also be noted that in the first half of 1954 a small profit had been earned after providing for all interest charges, and that Vespa sales were 50% higher than in the first half of 1953. A new 350cc Douglas motor cycle had passed its tests successfully, while it was hoped that components for the Bristol Britannia airliner which only started to be manufactured at the end of 1953, would prove a growing source of income. On that evidence, and in view of the fact that no more stock losses had to be written off in the previous year, the rehabilitation and reconstruction of the company seemed to be a little nearer than the preliminary statement of results might have suggested.

On 27 May 1955 it was reported that at last Douglas (Kingswood) Limited seemed to be back on a profit earning basis, although once again the ordinary dividend was passed. Before deducting interest on bank overdrafts and on the debenture stock and secured loan, the profit for 1954 was £61,021, compared with only £9,736 in 1953. Moreover,

even after deducting interest, a loss of £39, 567 had been converted into a net profit of £16,228, the first since 1945.

The Vespa had sold well, and the firm's contracts for supplying components for the Britannia airliner seemed to have contributed to the 1954 results. The company, therefore, seemed to have found its feet. However, there was a long way to go before it could reconstruct its capital or pay ordinary dividends. The year before there had been a debit of more than £1,000,000 in the profit and loss account, and overdrafts dating from before and after the appointment of the Receiver had amounted to more than £900,000.

Then, on 18 August 1955, it was revealed that the Westinghouse Brake & Signal Company was making a bid for Douglas (Kingswood) Limited, and that a formal offer was shortly to be made. That would include cash to be applied by Douglas in paying off the bank overdraft and debts incurred before the appointment of the Receiver by the bank in October 1948. The formal offer would be subject to 'certain conditions' and, in particular, to Capital Issues Committee consent to the borrowing by Westinghouse to complete the acquisition. The Westinghouse offer was 15s for each £1 unit of Debenture stock beneficially owned by the Charterhouse Finance Corporation, 30s for each other £1 Debenture units, 2s 6d for each Ordinary 5s unit, and 9d for each Deferred 2s unit.

Then, on 22 August the stockholders of Westinghouse Brake & Signal approved an increase in the group's borrowing powers. Captain A.R.S. Nutting, chairman, said that increased productive capacity was needed to cope with the rapidly increasing order book, and that the cash offer for Douglas (Kingswood) Limited was an essential step in the expansion programme. A large part of the finance needed for the acquisition would be provided temporarily by the company's bankers, subject to the approval of the Capital Issues Committee, while a large part of the bank accommodation would be funded shortly by a long-term loan under arrangements made with the Prudential Assurance.

It was reported on 9 September that the directors of Douglas (Kingswood) Limited were accepting, in respect of their own holdings, the offer made by Westinghouse Brake & Signal and strongly recommended stockholders to do likewise. If the offer became unconditional, the bank had agreed to accept a 'substantially' reduced payment in satisfaction of its pre-Receivership secured overdraft; and Charterhouse had agreed to accept a price for its majority holding of Debenture stock lower than is offered for the balance because it believes that price is greater than would accrue if the Receiver sold the assets and Douglas wound up.

The directors of Douglas pointed out that fresh finance would be needed to increase motor cycle sales and introduce fresh products, and they had been advised that there was no likelihood that they could, in the near future, obtain further permanent capital on terms likely to prove more beneficial to stockholders than those represented by the Westinghouse offer.

Then, on 21 September it was announced that Westinghouse Brake & Signal had obtained Treasury consent to borrow from its bankers in connexion with the acquisition of Douglas (Kingswood) Limited, along with its subsidiary Douglas (Sales & Service)

Limited. This was followed on 14 October by the announcement that the Westinghouse Brake & Signal offer for the 6 per Cent. Convertible Debenture stock and Ordinary and Deferred stock of Douglas (Kingswood) had been accepted in respect of the following proportions of the total amounts in issue: Debenture stock, 98.8 per cent; Ordinary stock 91.6 pr cent; Deferred stock 90.0 per cent, and that Westinghouse had agreed that the offers should become unconditional.

Consequently, at the 75th Annual General Meeting of the Westinghouse Brake & Signal Company Limited held on 30 January 1956 it was stated that on 26 October 1955 Douglas (Kingswood) Limited had become a subsidiary company of the Westinghouse Brake & Signal Company Limited, the purchase of the business having been financed by Lloyds Bank Ltd. As a result, the large potential capacity of the Kingswood factory had become available to Westinghouse, but although decisions had been made for the transfer of the manufacture of some Westinghouse products to Kingswood, it would take some time before large scale production would be possible. Nevertheless, it was foreseen that the Kingswood factory would soon be making a substantial contribution to the company's output.

The following advertisement appeared in the 'Times' on 22 January 1957 which read:- "Capital and the Vespa. Unashamedly important houses are taking advantage of the official 'temporary' reduction of hire purchase deposits. These companies, determined to keep the sales force full mobile, and alive to the advantages of the World's Finest Scooter, are finding as little as £28.18. 0 per vehicle and making the Vespa earn its cost - a mere £1.5.0 a week. The Board does not even have to consider any substantial expenditure of capital. We, the manufacturers, can put you in touch with a well established dealer in your locality, who, with our backing will make you happy over you do after petrol rationing (if, as we very much doubt, Vespa has not become one of the family by that time). Vespa British built with British labour by Douglas of Bristol. Douglas (Kingswood) Ltd, Kingswood, Bristol. Division of Westinghouse Brake & Signal Co. Ltd.

The 76th Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 11 February 1957 at which it was reported that the loss made by Douglas (Kingswood) Limited since its acquisition, and any pre-acquisition losses of that company, had been dealt with, and as a result of the use by Westinghouse of the productive capacity of its factory, the fortunes of Douglas (Kingswood) Limited should improve materially during the current year. It was, however, necessary to point out that the factory was also the home of the famous Vespa, the British built machine which was seen throughout the country. The rationing of petrol had created an unprecedented demand for that economical and efficient means of transport.

On the Continent of Europe there were well over one million Vespas in daily use; their own British built machines derives all the benefits from the experience gained by that tremendous use of the Continental built Vespas. It was also announced that the Brake Division had transferred to the Kingswood factory of Douglas (Kingswood) Limited the design, engineering, manufacture and sale of the automotive brake for commercial road vehicles, and the pneumatic control equipment for marine and industrial applications,

and that plans were in hand for the transfer of the manufacture of further Westinghouse products to Kingswood.

Unfortunately, the Westinghouse take over failed to produce the hoped for infusion of capital for new Douglas projects, and the 14 February 1957 issue of 'Motor Cycling' carried an advertisement for the existing 350cc Douglas Dragonfly motor cycle, which Douglas (Sales and Service) Limited were offering at a discount, the original price of £225 1s 2d, including purchase tax, having been reduced to £195, while the £112 10s 7d deposit previously required, had been slashed to just £39.

What was not mentioned was that the manufacture of motor cycles was to cease at Kingswood during the following month, after which the machines remaining in stock were to be sold to Pride & Clarke Limited of Stockwell Road, London, S.W.9., a firm that subsequently disposed of them at much reduced prices.

The 77th Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 10 February 1958, at which it was revealed that great progress had been made during the year by Douglas (Kingswood) Limited which had turned the substantial loss made previously into a small trading profit. It was also announced that the sales of Vespa scooters had increased enormously during the previous twelve months and, as there was no doubt that the Vespa had come to stay, the potential demand was great.

In addition, the Kingswood factory was then manufacturing automotive brakes for commercial vehicles, pneumatic control equipments for industrial and marine uses, and was carrying out important sub-contract work for aircraft. However, although the build-up of the necessary plant and equipment to cope with demands would call for heavy capital expenditure, the parent company's need of increased production from Kingswood justified such expenditure, particularly as the buildings, services, and manpower were available.

The 78th Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 16 February 1959 at which it was revealed that the loss sustained by Douglas (Kingswood) Limited during 1957-8 arose chiefly in connexion with the sale and distribution of Vespa motor scooters. The inclement weather during the summer selling season of 1958, combined with the hire purchase restrictions, seriously reduced sales of motor cycles generally. Owing, however, to the relaxation of hire purchase restrictions and a reduction in the price of one model, sales of Vespas were in the last weeks of the year under review, running at a very satisfactory level, and steps had been taken to deal with the scooter side of the business with a view to improving future results.

The Kingswood factory was also producing in large quantities such Westinghouse products as automotive brakes for commercial vehicles and pneumatic control equipments for industrial and marine purposes. It also manufactured Westinghouse compressors and exhausters and certain types of railway signalling apparatus.

For some years the company had also carried out sub-contract work for the Britannia aircraft of the Bristol Aeroplane Company Limited. The progress made during 1956-57 increased during 1957-58, so far as Westinghouse products were concerned, and it was planned to accelerate that progress during the current year, which would improve the financial results of that side of the business.

The 79th Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 23 February 1960 at which it was stated that the previous year's loss sustained by Douglas (Kingswood) Limited, mainly in connexion with the sale of Vespa scooters, had adversely affected Westinghouse's consolidated trading profit. However, in the current year the subsidiary, helped by considerably improved sales of its Vespas, had appreciably contributed to the trading profit of the Group.

Douglas (Kingswood) Limited, as was forecast last year, had expanded its output of Westinghouse products to a very appreciable extent with considerably improved results. Despite the falling off of falling off of aircraft sub-contract work, the arrangements made to deal with the Vespa business had proved effective and the whole of the Douglas company's activities were then on a much firmer basis.

The 80th Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 20 February 1961 at which it was stated that Douglas (Kingswood) Limited ad continued to expand its production of Westinghouse products, particularly the road brake, and the policy of introducing new plant and improved production methods had been vigorously pursued.

Unfortunately, very good sales of the Vespa scooter in the first part of the year had been followed by a severe falling off after the introduction of credit restrictions. This had necessitated drastic cuts in production which created many difficulties. Every effort was being made to solve the problems thus created, but in the absence of some easing of the credit restrictions it was difficult to see how a loss could be avoided during the current year.

The 1961 'Guide to Key British Enterprises: Motor, Motor-Cycle and Commercial Vehicle Manufacturers.' listed Douglas (Kingswood) Limited as a subsidiary of the Westinghouse Brake and Signal Company Limited, and described the Douglas undertaking as light engineers and metal founders, specializing in the manufacture of Vespa motor scooters, road brakes, and signal and colliery equipment. Also in 1961 Douglas (Kingswood) Limited was awarded the 'By Appointment' charter, presented by H.R.H. the Duke of Edinburgh, who was known to have been a scooter rider.

The 81st Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 30 January 1962, at which a report concerning Douglas (Kingswood) Limited was delivered covering the period 2 October 1960 to 30 September 1961. It stated that the restrictions on credit resulted in a fall-off in orders, particularly for Vespa scooters, the sales of which, despite the slight easement by the extension of the period allowed for hire purchase repayments early in 1961, had also been badly hit by the more onerous conditions imposed by those engaged in financing hire purchase

contracts. This led to a large accumulation of stocks which had to be financed out of bank overdrafts at very high rates of interest. In order to meet the situation two drastic measures were taken. First, production was severely cut back with a consequent heavy under-recovery of overheads, and secondly excessive stocks were liquidated by substantial price reductions. Thus Douglas (Kingswood) Limited made a considerable loss.

Nevertheless, the Kingswood factory had substantially increased its output of Westinghouse products during the previous year and the re-planning and re-equipping policy had been continued. Consequently, it was expected that during the current year the plan to reduce the Vespa at a lower rate, the continued expansion in the output of Westinghouse automotive and industrial products, together with suitable sub-contract work, would enable a profit to be achieved.

The 82nd Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 5 February 1963 at which it was announced that the directors had written off against reserves the sum of £465,735, being the premium paid on the acquisition of the share capital of Douglas (Kingswood) Limited, while Mr C. McCormack, its managing director, had been elected to the Westinghouse board of directors.

During the year Douglas (Kingswood) Limited showed a profit, Vespa production and sales had been maintained, and stocks had been kept to a minimum. The company had opened up a market for the Vespa in New Zealand and considerable quantities of manufactured parts had been exported for assembly there.

A record level of production of automotive and industrial products for Westinghouse had been achieved. Foundry work for outside customers had continued at a constant level and the foundry had rendered a valuable and economic service to the company's activities. The firm had also had some success in obtaining new projects, the initial results of which would be seen in the coming year.

An advertisement carried in the 'Times' on 7 May 1963 read, "Douglas (Kingswood) Ltd, division of the Westinghouse Brake & Signal Co. Ltd., announce Chevron Angle Iron Ltd, Hanham Road, Kingswood, the new big name in slotted angle."

At the 84th Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 2 March 1965 it was announced that Douglas (Kingswood) Limited was increasing its profitability.

Then, at the 85th Annual General Meeting of the Westinghouse Brake & Signal Company Limited, which was held on 28 February 1966, shareholders were told that although the financial year 1964-65 had been a hard one for Westinghouse, it should reap the benefits of the measures taken during the previous and current years. It was also announced that Douglas (Kingswood) Limited had ceased the manufacture of Vespa scooters. That was because the introduction by the Licensors of new models did not justify the expense of re-tooling. Accordingly, arrangements had been made with the

Italian Licensors to import the latest models, after which the company had operated profitably as the UK concessionaires in the sale of Vespas. Since then most of the manufacturing facility at Douglas (Kingswood) Limited had been devoted to the production of brakes for commercial road vehicles, enabling them to keep pace with that fast expanding market.

In fact the assembly of Vespas had finally ended in early 1965, the final model produced being the Sportique Grand Tourer in metallic maroon, which had only been on sale from late 1964. During the period 1951 to 1965 a total of 126,230 scooters had been manufactured at Kingswood.

At the 87th Annual General Meeting of the Westinghouse Brake & Signal Company Limited was held on 27 February 1968 it was announced that during the year under review, owing to ill health, Mr Claude McCormack ceased to be a director of Westinghouse and chairman of Douglas (Kingswood) Limited, and that the firm, the second largest manufacturing unit in the Group, should, on account of its reorganization, make contributions commensurate with the capital employed.

On 25 March 1968 it was announced that Mr W.A. Kirk, director and general manager of Westinghouse C.V.B. had joined the board of Douglas (Kingswood), a manufacturing subsidiary of Westinghouse Brake & Signal Company.

Finally, on 13 May 1970, the ‘Times’ reported that subject to official consent Westinghouse Brake & Signal was to sell 50 per cent of its wholly owned subsidiary Douglas (Kingswood) Limited to Bendix of America for a total of £1,150,000. Douglas would continue to make and sell road brakes and garage lifting equipment, but under the joint direction of Westinghouse and Bendix. The board of Westinghouse believed that the pairing-up with Bendix would lead to a big increase in Douglas’s rate of growth. Both companies would be equally represented on the board of the joint concern, which was to be renamed Bendix Westinghouse Ltd. Mr I.E. Thompson remained as chairman with Dr Blumentari, Bendix president, acting as his deputy. The reorganization was completed in October 1970.

MAKING ARMY BOOTS IN THE KINGSWOOD AREA

Even though the since the late nineteenth century the Kingswood area had been responsible for most of the heavy boot manufacturing carried out in the Bristol district, no more than one or two local firms had been involved in making Army boots, and even then the quantities had been small. That was because prior to World War One they were mostly made in villages in Northamptonshire, where the plant and special kind of leather was to be found on the spot.

Unfortunately, the outbreak of war on 4 August 1914 immediately interrupted the supply leather and other raw materials and consequently, on 13 August, a meeting of Bristol and Kingswood boot manufacturers was held at the Council Room in Kingswood, in order to discuss how the local boot trade was being affected by the conflict. It was finally resolved that although the supply of bottom leather coming from the Continent, and much used in the district, had been wholly discontinued, employers would do everything possible to keep their workpeople employed. However, that would be contingent on the arrival of new supplies of leather and other materials from Britain and America. Hitherto most of the box calf leather used in Britain had come from Germany, but it was hoped that soon English box calf firms would be able to supply sufficient quantity to maintain production.

Then, on 16 September 1914 it was announced that during the week orders running into many thousands of pairs of Blucher type boots for the French Army had been placed with nine of the principal boot manufacturers in Kingswood, Staple Hill, and St George, just at a time when business was getting quiet in the heavy boot trade. That was just the beginning, and as the Government had ensured the supply of raw materials, before long enquiries were being received from the War Office and orders placed.

Finally, on 30 October it was reported that the Bristol correspondent of the ‘Shoe & Leather Record’ had written that the pressure of work at the Kingswood and neighbouring factories, arising out of the British and foreign Army demands, continued unabated, and that not a few firms were considerably worried how to execute the Army orders to which they were committed, and also oblige their ordinary customers by accepting new demands.

However, obtaining sufficient labour had become a problem, not helped by the fact that immediately war had been declared the Kingswood workforce had begun being depleted, as on 5 August 1914 a number of local boot makers had left for London in order to comply with a War Office requirement for men to assist in the making and repairing of Army boots. As a result of the shortage all the local factories were soon working overtime, and most Saturday afternoons as well. It was also realised that existing machinery and plant were unequal to the demands, and to keep pace with pressing orders, not only were many new machines required, but in several instances re-organization of the whole factory would be necessary, along with the training of many new hands.

In the case of one of the largest, Britton & Sons of Lodge Road, Kingswood (ST 643 742), in order to keep up with demand a factory extension had been built in late 1914, by which time output was running at about 5750 pairs of boots a week. Then, as the demand continued to rise, it was not unusual for employees to work from 6 a.m. through until 7 or 8 p.m., with only a half-hour break being allowed for breakfast, an hour for lunch, and half an hour in the afternoon.

As the Army drew heavily upon the best men for front line service, or work in the Army Boot Shops, their places in the factories had to be filled by ever increasing numbers of women who needed to be specially trained, but fortunately proved very apt at learning. The Government also ensured that the necessary extra machinery was made available, while a National Committee for Production, consisting of five members, was formed, one of which represented the West Country. All questions of wages were then satisfactorily settled, there being almost weekly meetings of the Arbitration Board until 1918, when national prices for labour on Army boots were fixed.

Not only did the district manufacture boots for the British and French armies, but it supplied nearly all the Allies, including Serbia, Italy, Russia, and America, with large quantities. The whole British boot trade made 52 million pairs, and the Bristol district's contribution was more than three million, many of which were produced in the Kingswood area. The boots were made to suit the conditions of the countries to which they were sent, some being adapted to mountain climbing, with 'counters' at the heels to enable the soldiers to force a foothold in the snow while striking backwards. The Serbian boot was of this kind, and higher in the leg than the British.

The Russian high-leg cavalry boot was of very large size, while in addition to Army boots, and sandals for the Bedouins, an enormous number of canvas shoes were made for the men in military hospitals. All the time the needs of the War Office were being met those of the civilian population received due attention, and in order to control prices a Wartime Boot Scheme was brought into operation in January 1918. This called for a boot to a standard specification at a minimum profit to the maker and retailer, and during the fifteen months it remained in force nearly two million pairs of civilian boots and shoes were manufactured locally.

APPENDIX

(Notes on the history of G.B. Britton & Sons Ltd, Lodge Road, Kingswood)

From Medieval times most places of any reasonable size could boast a resident cordwainer to make the everyday footwear people needed, and this reliance upon individual craftsmen working from their homes continued until the mid-seventeenth century when army boots began to be produced on a larger scale in Northampton. Other towns eventually followed their lead, with wholesale shoe manufacturing finally being established in Bristol in 1845, when the Derham brothers set up a small factory in Nelson Street.

In the Kingswood area local demand had encouraged a number of former miners to set up their own undertakings specialising in the heavy duty part of the trade, and the first

firms to set up there were J. Flook & Sons in 1847, followed by A. Fussell & Sons in 1855. Although modern machinery began to be installed in some Kingswood factories during the 1870s, for many years hand work remained important, and many undertakings relied heavily upon outworkers who toiled away in cottage workshops all over the area.

Towards the end of the nineteenth century the militancy of the workforce in central Bristol also caused many of the large boot manufacturers in the City to expand in the Kingswood area, as there they were able to take advantage of a weak union and lower wages rates. Consequently, by 1893 nearly all had set up branch factories in the locality. Up until that time the local Kingswood undertakings had tended to be smaller than those in central Bristol, but this situation soon changed, the firm of G.B. Britton & Sons, which later attained national prominence, being probably the best example.

The company can trace its origins back to 1880 when George Bryant Britton and George Jefferies set up in partnership and opened a factory in Waters Road, Kingswood, which was soon employing about fifty people. In 1899, Jefferies retired and Britton built himself a new factory at Lodge Road, Kingswood. Then, the onset of industrial peace helped to make the early twentieth century a prosperous time for many of the Kingswood footwear manufacturers, and in 1904 G.B. Britton entered into partnership with his two sons, George Ewart Britton and Samuel Wesley Britton. To keep up with demand which, at the time, was almost exclusively for nailed men's boots, factory extensions were built by Britton & Sons in 1908, although for the employees pay in the trade was generally low and the working day long.

Although during World War One demand from the military ensured that Britton & Sons net profits had tripled, the 1920s were difficult times. With no military contracts, chronic high unemployment in mining and agriculture, and the loss of important traditional markets following the creation of the new Irish Free State, the full effect of economic recession was soon being felt by the local heavy footwear producers. This caused the industry to go into decline, and by 1931 there were only 71 footwear manufacturers left in the Bristol area.

Meanwhile, in 1927, G.B. Britton's youngest son Jack had become a partner in the firm, only to take control of it in 1929 when his father died, and to become its managing director when G.B. Britton & Sons Ltd was formed upon the retirement of his uncle George Ewart Britton in 1934. He guided the firm through the Second World War when again government contracts ensured the company's survival, while its insistence that Brittons find room for the machinery of F. Wiltshire & Co., one of its local competitors, led to the latter becoming fully owned subsidiary of G.B. Britton & Sons Ltd in 1941.

Meanwhile, several improvements had been made to the factory just prior to the outbreak of World War Two, and in early 1939 the company secured its first contract for a substantial quantity of army boots. However, in 1941 the Lodge Road factory was requisitioned by the Ministry of Aircraft Production, and the whole manufacturing space of some 20,000 square feet was cleared in a few days.

Towards the end of 1945, after prolonged negotiations with the various Ministries involved, the Lodge Road factory was finally 'de-requisitioned', and it was decided to use its screwed and riveted production and to set up an extended welting plant at Church Road. The link-up of the two factories enabled G. B. Britton & Sons Ltd to produce their heavy boots at Lodge Road on a large scale and under ideal conditions, while the smaller unit at Church Road was perfectly adapted to re-build the lighter side of the men's trade.

During the early 1950's Somerset manufacturer C. & J. Clark Ltd, had developed reliable machines to carry out direct moulding, which involved a pair of rubber soles and heels being moulded, vulcanised and bonded to leather uppers in one process. However, as their expertise was limited to women's and children's shoes, in 1955 they agreed to supply machines to Brittons, who subsequently adapted them for boot manufacture. The new lines soon made them the dominant force in the local footwear industry, the country's market leader in men's boots and shoes, and its largest supplier of army and industrial safety footwear. The "Everyday" shoe launched in 1959, was soon the biggest selling single line in the history of the industry, and such was Brittons growth, that the total number of employees rose from 450 in 1951 to just over 3,000 in 1968, making it one of the top six footwear producers in Britain.

Not surprisingly, supply was outstripping demand, in order to increase production capacity Brittons began taking over rival firms, Hoare & Douglas Ltd and Thomas Miles & Co. Ltd, both in Kingswood, being absorbed in 1956 and 1959 respectively, while further acquisitions were made in 1959 in South Wales and Northern Ireland. This was followed in 1961 by the completion of a large extension at the Lodge Road factory, and a successful take-over bid for Wyles Brothers, a Midland multiple and wholesale concern. By this time production was running at between 10,000 to 50,000 pairs a week, mainly "Tuf" boots and Gluv" shoes. David Wilcox replaced Jack Britton as managing director in 1963, and during the following years major overseas expansion also took place, with the establishment of manufacturing subsidiaries and distribution companies in a number of countries.

In 1968 Derham Bros. Ltd, who had been producing medium priced woman's shoes, went into liquidation, and by the end of the decade only three firms were still in operation in the Bristol area, two small manufacturers in the city itself, and the mighty G.B. Britton in Kingswood. However, that year saw Britton's profits fall sharply, increasing competition from rival British firms and cheap foreign imports, plus complacency, which prevented the firm from introducing replacement products, all having conspired against Britton's.

As a consequence, the workforce was cut and David Wilcox replaced as managing director, but this could not prevent the firm's take over by the Northampton based Ward White Group, G.B. Britton & Sons Ltd became a wholly-owned subsidiary of Ward White on 20 July 1973. Only the Kingswood and South Wales operations were retained, and by 1985 the workforce at Kingswood had fallen from 1000 to 750, ensuring that the "Tuf" brand prospered, while the company retained its position as a major producer of safety footwear and army boots. Production continued at Kingswood until 1999 when the

factory closed and the marketing operation moved out to Yate, where it was to operate as a Division of the UK Safety Group Ltd.

MAKING ARMY UNIFORMS IN STAPLE HILL

During World War One the Royal Army Clothing Department was faced with the huge task of providing uniforms for the millions of men taken from civilian life. Although production in centres such as London and Bradford exceeded that of the Bristol district, following the start of German air raids on the capital the output of the London area was threatened seriously, and so West Country manufacturers became more important.

Consequently, two representatives of the Army Contracts Department, the Honourable Arthur Davey and Mr G.H. Kingston, called firms in the West of England together, to explain the department's requirements, invite their co-operation, and form a local advisory committee. This was immediately constituted with George Edward Broderick of E. Broderick & Company Ltd, wholesale clothing manufacturers of Bristol, as chairman. Within a short period seventy per cent of the output of each manufacturer was guaranteed, although the Bristol district still remained closely associated with the production and distribution of Standard Clothing for civilians.

The Surveyor-General of Supply, having appointed a Committee of Manufacturers to review patterns and specifications of Army clothing, also extended an invitation to George Broderick to become a member, which he accepted. The Committee went on to hold thirty meetings, and many recommendations were, resulting in a number of savings being made, as the Army Council had approved a large proportion of their suggestions.

One of the larger local firms engaged in the manufacture of uniforms for the military during World War One was Wathen Gardiner & Company, which in 1899 had moved their headquarters and much of their production from their original home in Bristol to a new factory built on a two acre green-field site in Staple Hill, which at that time was a semi-rural district. Nevertheless, the firm still maintained a City Branch in Bristol.

The single storey building at Staple Hill, constructed on the North Light system with glass roofing, had its interior divided into numerous workrooms and partitions of wood and glass, and had a frontage facing Broad Street, with the western side opposite Victoria Street (ST 469 760). By 1912 the company, which then specialized in men and boys' clothing, had 54 employees but, due to Government contracts for Army uniforms, by the end of 1916 the number had risen to between 400 and 500.

However, disaster struck during the evening of 15 January 1917 when a huge fire destroyed the factory along with a large amount of the stock. All appeared normal when the works closed at 6.20 p.m., but at 8 p.m. the alarm was raised by a local resident. Although the Staple Hill Fire Brigade, led by Captain Bowsher and ex-Captain Dare, were on the scene by 8.40 p.m., due the limited capability of their appliances it was impossible to do much and so not only the Kingswood Brigade, but also the Bristol City Brigade under Chief Superintendent Gotts, were called upon to assist. At 10 p.m. the fire was still raging, but by midnight the blaze had begun to slacken, although by then the factory had been almost completely destroyed, with practically all the stock and machinery lost.

Although the offices and some of the cloakrooms were damaged, the books were preserved, but the owners still had to find temporary accommodation until their factory could be rebuilt, and so immediately began advertising for suitable premises in the Bristol area. However, it didn't take long for the company to begin recovering, as in June 1917 they were advertising for coat pressers, under-pressers, and machinists, on Government work, who were to apply to Wathen Gardiner & Company at Little John Street, Bristol, and Staple Hill.

APPENDIX

(Notes on the history of Wathen Gardiner & Company, Wathen Street, Staple Hill)

Wathen Gardiner & Company, outfitters, was set up in 1801 in Union Street, Bristol, by John Gardiner, a small retail clothier and one-time Postmaster and High Sheriff of Bristol, at a time when the City had a thriving clothing industry based around the woolen mills of Gloucestershire. In the early 1830s the company began exporting ready-made clothing to the West Indies, while in the early 1850s, John Gardiner's son, Henry Gardiner, took the helm, supported by his two brothers, James and Charles. He not only saw the huge benefits of colonial trade but also substantial new opportunities in Australasia, and the company began exporting there in 1854.
During the middle of the 19th century the expanding business moved first to premises in Maryleport Churchyard, and then to 38 Broad Street next to Bristol Guildhall. Sir Charles Wathen partnered with Henry Gardiner in 1862 and the company became Wathen Gardiner & Company. Sir Charles then effectively took control and steered the growth of the company for the next 25 years until his death in 1887. He vigorously pursued export markets across the vast British Empire, and prided himself on providing consistently high quality clothing from his Bristol factory. Knighted by Queen Victoria for services to the public, Sir Charles was also mayor of Bristol on six separate occasions. After the death of Sir Charles Wathen in 1887, William J. Hill took over Wathen Gardiner & Company.

In 1899 the company moved their headquarters out of the city to Staple Hill, and during the early 20th century the business went from strength to strength, while William J. Hill partnered with H. R. Smith in 1910. By 1921 a considerable volume of business was being done in South America and South Africa, in particular sales of overcoats. This however incurred substantial bad debts and saw the beginnings of a difficult financial period for the company.

In the early 1930s the business was being run by Smith and Hill but by 1935, with the recession looming, the business was starting to struggle. Pat Hill, W. J. Hill's son, who at the time was learning his trade in Selfridges, was brought into the company to learn purchasing and sales. Smith, who had been unsuccessfully heading up the sales of civilian clothing in the pre-war years was bought out, and by the mid-1930s the company had diversified into the design and sale of civilian uniforms to both public and private sectors. Customers during this period included the Board of Trade, water companies, bus operators and mental hospitals, as well as Customs & Excise for whom they began supplying uniforms in 1932.

In 1937 tunics for the Royal Air Force were made for the first time, and the company continued to make them throughout the war. Pat Hill was called up in August 1939 and spent six years on active service abroad, mainly in the Middle East, returning to Britain in late 1945 to re-join the business.

At the end of the war the company gradually reverted back to its pre-war civilian clothing activities whilst maintaining some links with the military. Employee clothing once again became the mainstay of the company's business and during the next ten years there was a large expansion in the design and supply of today's equivalent of corporate wear. Increased competition came from a number of large businesses making serge uniforms for both the public and private sector.

From the outbreak of war in 1939 until the mid-1950s the company continued to sell its products across the world through a network of agents, while Pat Hill became the senior partner in 1954, at which time the company was employing around 200 people. The mid 1960s was a period of major change for the company. William Hill retired in 1964 and Wathen Gardiner & Company became a limited company. Due the company's close links with the military, the firm was asked to develop suitable protective clothing for permanent firefighters who had been recruited to handle emergencies at RAF airfields.

On 15 November 1961 Bristol Uniforms (Bristol) was incorporated, having been set up as a subsidiary of Wathen Gardiner & Company Ltd to focus on that side of the business. It was under the stewardship of William John Hill's son Patrick Seager Hill, who in 1965 became the sole proprietor & managing director. Meanwhile, Wathen Gardiner & Company Ltd concentrated on the civilian side of the business, and a new factory was opened in Calne in Wiltshire in order to meet the growing demand for casual trousers then being sold by major retailers who purchased in bulk direct.

By the 1970s the company employed almost 400 staff at its two factories, but as the civilian market became saturated, highly competitive and subject to increasing overseas competition, the Calne factory was closed in 1985. However, back at Staple Hill things were on the up as new specialist materials had started to come onto the market during the late 1960s and early 1970s, enabling the development and introduction of much improved fire clothing to replace the woolen fire tunics.

Pat Hill's son Ian, who had been running Wathen Gardiner & Company Ltd since 1981, took over as Managing Director in 1989 when his father, then aged 74, took a more part-time involvement in the business. Bristol Uniforms and Wathen Gardiner & Company continued to trade alongside one another until the early 1990s when, in 1998, Pat Hill briefly took back control and merged them under the name of Bristol Uniforms, prior to overseeing its sale. Bristol Uniforms then became part of the international BTQ Group, whose major shareholder was Alan Dorrell, while 2009 saw the opening of the company's new international distribution centre at Yate.