Notes on the Douglas family and the Kingswood motor cycle factory

From 'Rough notes compiled by John Penny'



1930 Douglas Motorcycle Brochure

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.

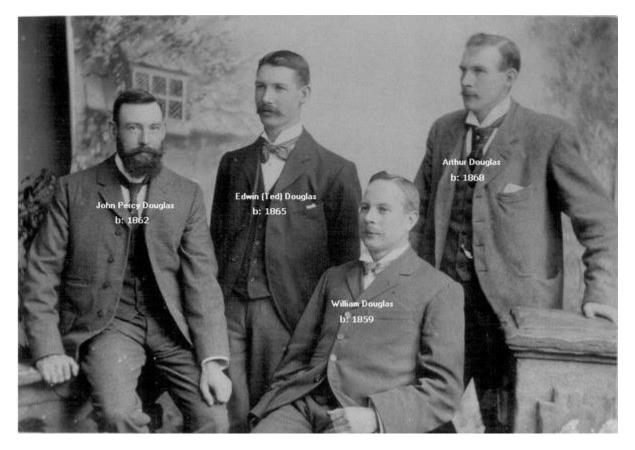
However in March 1851 he was described as a white smith, working at St Nicholas Church Yard, Newcastle upon Tyne. Also in 1841 William Douglas junior was living in Tynemouth, Northumberland, and it was at Newcastle upon Tyne in the summer of 1845 that he married Mary Ann Chambers, while by March 1851, 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.



The Douglas brothers

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



A 1908 advertisement

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 once 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, although 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 flattwin 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 engineer's 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.

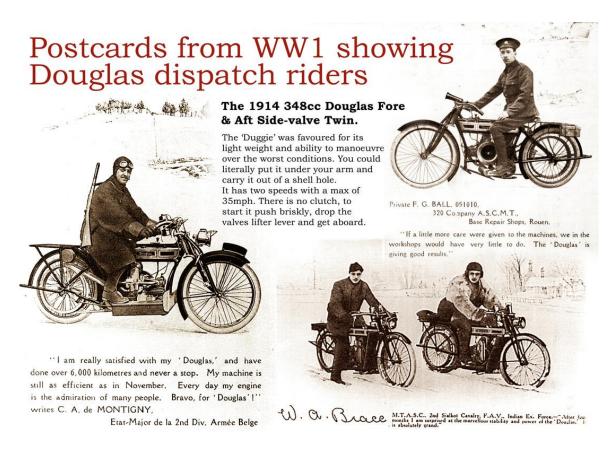
At its peak, production of the 'Fairy' reached ten per week before, on 4 January 1907, Light Motors Ltd was taken over by 'London interests' who transferred its registered office to Grays Inn Road, London W.C. Then, on 25 July 1907, "the engineering factory and building land with frontage to Luckwell 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.

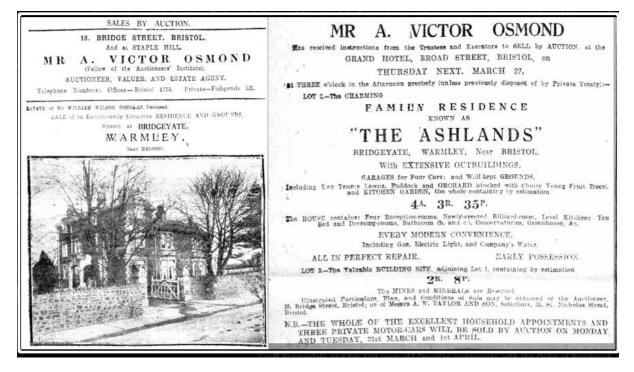
Up to and including 1914, Douglas Brothers had made and sold some twelve thousand machines, and surprisingly, the production of motor cycles for the civilian market did not cease with the outbreak of war, for it was not until 3 November, 1916 that the Ministry of Munitions terminated production for the 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.



Sale of Ashlands, Warmley, Gloucestershire in 1924

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."

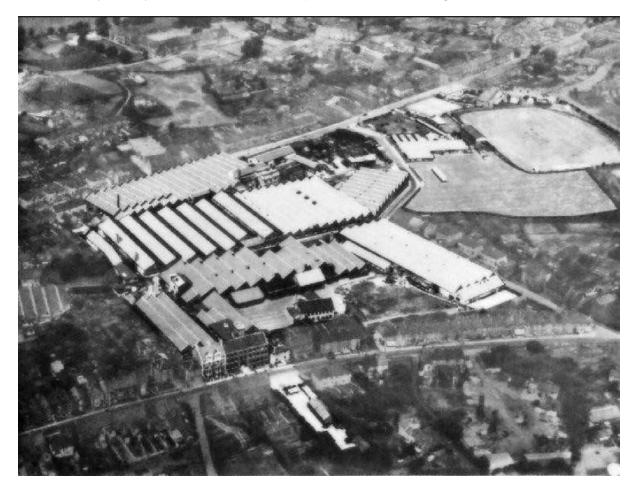
Mr Douglas, who was a director of the firm, then concentrated his attention on the business of the firm on its manufacturing and industrial side. He was, "a generous supporter of all kinds of sport, more particularly in the Kingswood district, and was exceedingly popular."

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.



The Kingswood factory in 1922

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, enamelling, 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, carburettors, 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 enamelling 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, enamelling, 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 windswept 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 electroplating 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



Bristol showroom in the 1930s

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.

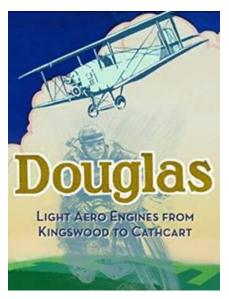
Consequently their health suffered, with the result that John Douglas, of 'Woodstock', Kingswood, died on 11 January 1937 at the age of just 54. The 'Western Daily Press' subsequently reported that, "He was associated with the motor cycle business from its earliest days and was a director up to the time 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.

KINGSWOOD FUNERAL OF MR WILLIAM DOUGLAS	(daughter: Mrs Weiker (sider), Mess. D. deferter, withiam Douglas, Tea Douglas, Jan Douglas, Jim Douglas, Bruce Dougles, Jan Richard Jeffertes (arantisone) and Mr A. S. (grand-nephew): Mr H. Bar Stewast Buston Bond (bother) Bard methews; Mr B. Cox,	from the following:-Roland Torrance, Frank Shearer, and Margaret. Mrs Percy Douglas, Dick and Tom Bridges; Sis and Jack Jenks: Mr and Mrs Millman; Ethel Green; Ivy and femily: Mona Hurn: Mr H. R. Watling, of the
Representative Attendance of Mourners April 1937 The functal took place at Kingswood Vesterday of Mr William Douglas, of Wood- lands, Kingswood. founder of the well-known motor-cycle firm of Douglas Motors Ltd., Kingswood. Mr Douglas died on Thursday last in his Tath year. The Rev. J. H. Homer Green, vicar of St. Anne's Church. Oldland. conducted the service at Holy Trinity Church, Kingswood, assisted by the Rev. A. E. Cousins (vicar of Kingswood). The interment was in Kings- wood Church graveyard.	Mr W. R. Bridges, Mr F. Shearer, Mr G. Shahnbar, Mr W. R. Giles, Mr F. A. Puhler, Mr R. Peinter, Mr W. H. Millmen, Mr Irving Gass, Mr J. R. Bright, Mr W. D. Strange, M. Mazum, Mr e. Bright, Mr Barter, Mr Tarlor, Mr Bull, Dr. Healy, Nurse Boyd, Nurse Hulbert and Miss Cavill. Others, present included Lady Willing, Others, present included Lady Willing, Wrs W. R. Giles, Minswood Infant Welfare Centrel: Mr Thomas Burnham (chairman), Mr S. R. Willmott and Mr S. G. Davis, represent- ing Kingswood Urbaa District Council: Messive A. Passmore, G. E. Nuttail, H. Blockalge Mr J. Brady (Western Dally Press and Brisol Mr F. A. Simpson, representing Aero Engine, Lid, Kingswood: Mrs W. D. Strange, Mr J. Carl Selley, Mr H. C. Francis (E. J. Bees, Lid), Mr Harry J. White Kingswood Horse Showt, Mr J. Barter, Mr A. O. Packer, Mr J. W. Buchanan, Mr A. B. Atkinson, There were many former employee of Douglas Motors, Lid, present, Showt, G. Barynt, H. Gold- Shihard, R. Claphan, R. G. Brynt, H. Gold- anith, T. Woodward, G. Gren, S. Webley, G.	British Cycle and Motor-cycle Manufacturers' Acsociation: 'The Motor-Cycle' (in remem- brance of a great pioneer); Mr E. Taylor, Mrs Douglas: Minnie: Mr and Mrs Ted Douglas; Mr and Mrs Joe Barter: Mr and Mrs Grigg: the Editor and Staff of 'Motor-Cycling.' The Editor and Staff of 'Motor-Cycle Co.; Susle, Harry and Olive; Stewart and Lizzle! Chip and Arthur Bond: two wreaths, the late employes, Douglas Motors; Mr and Mrs Painter and Roddy; Annie: Sister Rose Phipps; Phyne and Jim Brown; Jennie Walker and Douglas Mille, Nurse Hulbert: Rose Douglas; Rosis and

List of mourners at William Douglas funeral, April 1937

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, BoultonPaul 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.



Douglas built Milk Float the "Milk Boy"

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 $\pounds7,000,000$ 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 reorganisation 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 (\pounds 6,159), nor was there any refund of income tax (\pounds 18,125). After deducting a profit of \pounds 1999 (nil) on the sale of an investment in an associated company the adverse balance for the year was \pounds 23,828 (\pounds 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 $\pounds1,000,000$, the last year's trading added a net of $\pounds39,567$, an increase on the previous year of $\pounds13,000$. 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.