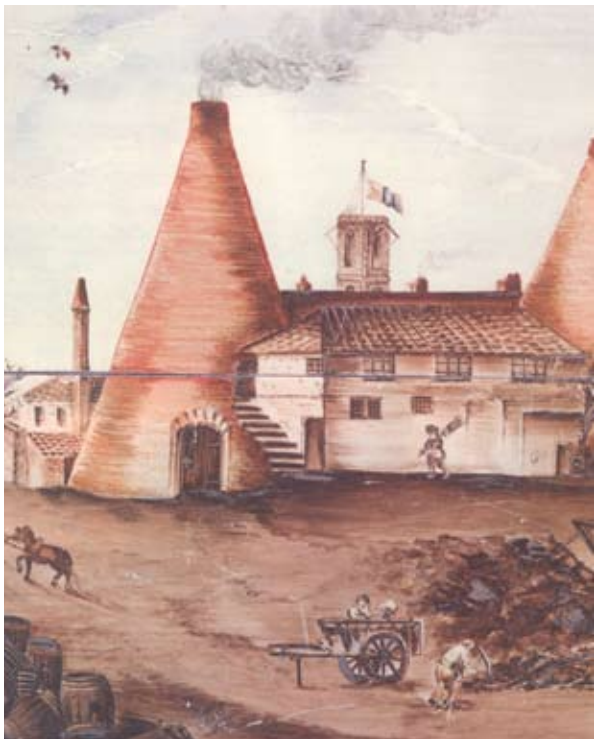
Made in Bristol

Chains, cloth, cigarettes, cables, chocolate, cartoons, cartons, chemicals, copper, colliers, candles, Concorde: these are just a few of the thousands of products that have been made in Bristol. You can read here about a few of the companies, past and present, that have been based in the city-region.

Powell and Ricketts, glassmakers: Although the Bristol glass industry had begun to wane by the nineteenth century, the city skyline was still dominated by the sight of the glasshouses' tall, conical, brick-built kilns. Bristol had been well-placed for the manufacture of glass because it had local access to the necessary raw materials (sand, kelp and clay) and to the coal needed to heat the kilns, mined from coal fields just outside the city. Demand for glass came from the local wine and mineral-water bottling companies as well as for building and domestic use.
The last working glasshouse in Bristol was Powell and Ricketts. Henry Ricketts was a partner in Bristol's Phoenix glasshouse from 1802 until its closure in 1851. This had been Bristol's last glasshouse to make the high-quality flint glass now known as lead crystal. Henry's youngest son Richard joined the firm in 1845 and, after its closure, ran the Soap Boilers' bottlehouse. This was amalgamated with the neighbouring Hoopers' glasshouse in 1853 to form Powell, Ricketts and Filer, later Powell and Ricketts, which went into receivership in 1923. Today the only surviving glass cone in Bristol is in Prewett Street, Redcliffe. Once part of the Cathay Chemical Works, it was reduced from a height of 60 to 25 feet in 1936 after a serious crack developed in the brickwork. It was later converted into a restaurant.

J D Pountney, potter: In the early eighteenth century, Bristol was second only to London in the production of decorative pottery. Delftware had been produced in the Brislington Pottery from the 1650s and its owner, Edward Ward, opened the Bristol Pottery at Temple Back in the 1680s. John Decimus Pountney, a future mayor of Bristol, acquired an interest in the Temple Back business in 1812. He operated in a succession of pottery partnerships – including Pountney and Allies, and Pountney and Goldney – but at the time of his death in 1852 was a lone trader.



Opposite: Glasshouses in St Philip's, *Hugh O'Neill (1821) (Bristol's Museums, Galleries and Archives). The picture shows the Soap Boilers' kilns in Cheese Lane and Hoopers' glasshouse in Avon Street.*

Left and below: Tile painting (details) of Pountney's Temple Back Pottery, William Fifeld (1820) showing the biscuit kilns, throwing room, glazing kilns, printing shop and hardening kiln (Bristol's Museums, Galleries and Archives).

The quality of Pountney's products rivalled that of Derby, Worcester and Staffordshire, who then led the industry. They included blue earthenware featuring Bristol views transfer-printed from popular engravings, the cream-coloured Queen's ware and white Parian ware. Pountney's widow Charlotte carried on the business for 20 years after his death. In the 1880s the firm, now managed by a Mr T B Johnson and retaining the Pountney name as Pountney and Co, moved to St Philip's Marsh. It later transferred to Fishponds where it remained until closure in 1969, marking the end of over 300 years of continuous production.

Christopher Thomas, soapmaker: Bristol had been a pioneering soapmaking centre in medieval times and the industry flourished until the late Victorian period. For centuries it was a small-scale cottage industry, but bigger companies gradually came to the fore, setting up their businesses close to the harbour so they could get ready access to imports of the raw materials needed: olive, whale, palm and rapeseed oil and tallow. One of the longest established local firms was Thomas and Bros which remained a family business until 1912 when it was taken over by Lever Bros. The factory closed in 1953. In 1824 Thomas Thomas Snr, a Unitarian wholesale grocer, butter merchant and haberdasher from Llangadog, Wales, formed a soapboiling partnership based in Redcliff Street. Thomas Thomas' son Christopher moved to Bristol in 1829 to supervise operations. When the original partnership was dissolved in 1831, the company of T Thomas and C J Thomas was formed, renamed Christr Thomas and Bros in 1855. The business prospered for many years, particularly following the merger with rival soapmakers Fripp and Company in 1841 and the abolition of various restrictive regulations in 1853. However, by the late nineteenth century it was suffering from its lack of markets beyond the South West, increasing competition from the North and the high transport costs of obtaining the raw materials, which, with the decline of Bristol as a commercial port, now mainly came via Liverpool. The Thomas soapworks at Broad Plain was later occupied by the Gardiner Homecentre.

Joseph Fry, chocolate manufacturer: At his apothecary shop in Small Street, Quaker Joseph Fry extolled the virtues of a good diet to his customers. He was a firm believer in the health benefits of cocoa, which was imported into Bristol from the Caribbean, and began making his own chocolate on a commercial basis in the late 1750s. In 1761 he acquired the business and patented chocolate recipes of the late Walter Churchman, another Bristol dispensing chemist. Fry moved his operations to the Pithay on Union Street in 1777 and the factory would soon come to dominate the area, taking over surrounding premises. After Fry's death in 1787, the company was managed by his wife Anna and then by his son Joseph Storrs Fry. Between 1819 and 1908 Fry's workforce rose from 11 to about 4,600 and, by the start of World War One, it was one of the biggest employers in Bristol. J S Fry and Company amalgamated with Cadbury Brothers in 1919. Chocolate was initially an expensive luxury item because of the heavy import duties on cocoa beans and the small scale of production. It was originally consumed as a drink and, in 1847, Fry's produced what is thought to be Britain's first eating chocolate. In 1853 the company also produced the first-ever chocolate confectionary, Cream Sticks which later became Cream Bars. Edward Packer, a former Fry's employee, founded Bristol's second largest manufacturer of chocolates in the 1880s, based in Greenbank. The company later became Elizabeth Shaw Ltd.

The Wills family, cigarette manufacturers: The founder of the Wills firm of tobacco traders, H O Wills, came to Bristol from Salisbury in the late eighteenth century. In partnership with a man named Samuel Watkins, he opened a shop in Castle Street in which to sell tobacco shipped in from what was then referred to as the 'New World'. His sons William Day and Henry Overton Wills took over the business on their father's death in 1826. In the coming years nearly 30 family members worked for the company. The Wills were among the earliest tobacco traders to manufacture cigarettes, setting up their first factory in 1865. Unusually for the time, Wills' works included staff dining rooms and kitchen facilities. Other employee benefits offered by the company included paid holidays, sports facilities and free medical care, and the family were notable supporters of educational and charitable projects in the city. In the 1880s productivity was transformed with the introduction of the revolutionary Bonsack rolling machine, capable of producing 120,000 cigarettes a day. By the 1900s the company had factories in Belfast, Newcastle, London and Glasgow, as well as its extensive Bristol facilities in Bedminster and Ashton (new works on a 57-acre site in Hartcliffe opened in 1973). In 1901 the firm merged with other tobacco companies to form Imperial Tobacco, of which Sir William Henry Wills was the first chair. As a point of interest, Florence Brown, Bristol's first female Lord Mayor, elected in 1963, was a former Wills' tobacco stripper and shop steward. As another point of interest, neither William Day nor Henry Overton Wills smoked.

Hilhouse, shipbuilders: Hilhouse was one of the most important shipbuilding concerns in Bristol. It was founded by James Martin Hilhouse in 1770 and built more than 560 ships in over 200 years of operations. The company went through various incarnations, its final identity being Charles Hill and Sons (1845-1977). The first Hilhouse yard was built in Merchants' Dock, near Hotwells, and a second yard was opened on the strength of the company's lucrative contracts with the Admiralty. The company's most significant yard and dry dock, Albion Yard, was established in 1820. *George the Fourth* and *Palmerston* which were launched here by Hilhouse in 1822, were among the earliest ocean-going paddle steamers built in Bristol. The company also diversified its business interests by running cargo-carrying sailing and steam ships around the world. After a downturn in activity at the start of the twentieth century, the shipbuilding and repair business picked up with the outbreak of World War One. It continued after the Armistice with the yard building a variety of steam ships, pontoons, barges and tugs for the Admiralty to replace vessels that had been lost in the war. During the Second World War Albion Yard was bombed three times by the Germans but managed to keep working. Charles Hill and Sons became a public company in the 1950s but suffered from the commercial decline of the city docks in the 1960s. It launched its last ship, *Miranda Guinness*, on 9 July 1976 and closed on 4 January 1977.

Top left: Illustration of East Indian workers on a cacao estate in Trinidad from The Food of the Gods *by Brandon Head (1903) (Bristol Libraries). The pod of the cacao tree holds the seeds or beans from which cocoa and chocolate are produced.*

Top right: Tobacco plant from Elegancies of Jamaica *by the Rev John Lindsay (1758-71) (Bristol's Museums, Galleries and Archives).*

Left: Selection of advertising material for Wills' cigarettes (Bristol Record Office).

William Patterson, shipbuilder: Hilhouse was briefly rivalled in the mid-nineteenth century by the firm of William Patterson, a Scotsman who moved to Bristol in the 1820s. He was an assistant to the shipbuilder William Scott at East Wapping and when Scott was declared bankrupt in 1830 took over the yard as William Patterson and Son. Patterson's lasting claim to fame was his involvement in the construction of Isambard Kingdom Brunel's Atlantic steamer the *Great Western* (1837). The success of this ship, built on behalf of the Great Western Steamship Company, brought an increase in business and Patterson was soon busy building warships, brigantines, racing yachts and more steamers. Disaster struck in 1851 when the *Demerara*, Patterson's wooden-hulled paddle steamship, ran aground off Round Point just outside the entrance locks at Cumberland Basin. She was *en route* to Glasgow for the installation of her engines. The ship was written off by the insurers because of the scale of the damage. Patterson salvaged her and she was rebuilt as a sailing ship, renamed *British Empire*. This episode served to demonstrate that Bristol's docks were unsuitable for the new, large vessels now in demand for trade and passenger travel. Patterson recovered from this setback but was forced to sell his assets in 1858 after losing £21,000 on Royal Navy orders during the Crimean War. The company had a brief new lease of life at the old Great Western Steamship Company yard, finally closing down in 1865. Patterson Snr moved to Liverpool and his son remained in Bristol, specialising in salvage work.

The Stothert family, ironworkers and shipbuilders: Another important Bristol shipbuilding concern was that of Stothert, which, under a succession of company names, operated between 1844 and 1933. The Stothert family had established an ironmongery business in Bath in 1785. In 1836 Henry Stothert set up his own ironworks in St Philip's in Bristol with the intention of getting work making locomotive engines for the Great Western Railway. The ironworks – later named the Avonside Engineering Company – moved out to Fishponds in 1905. The company began its ship-building interest in 1844 to provide steamers for the passenger service it had introduced between Newport and Bristol (this business concern became known as the New Steam Packet Company). Stothert took over another yard at Hotwells in 1852, under the management of George Kelston Stothert. After building a number of passenger ships here, including three luxurious vessels for the Mediterranean service of James Moss and Company, Stothert specialised in more workaday colliers, tugs and coastal craft. In 1904 work came to a halt when the company became embroiled in a lengthy court case involving the Merchant Venturers. After the case was lost, work resumed at the Hotwells site in 1909 and continued sporadically until 1933. However, during this period the company was now mainly involved in ship-repairing rather than shipbuilding. On the wharf outside the Industrial Museum (now closed pending development as the Museum of Bristol) you can see some travelling electric cranes built by the Bath company Stothert and Pitt.

Top left: Hilhouse's New Dockyard *(detail), Thomas L Rowbotham (1826) (Bristol's Museums, Galleries and Archives).*

Top right: Eastern Wapping Dock, *Thomas L Rowbotham (1826) (Bristol's Museums, Galleries and Archives). This site near Prince Street Bridge is now occupied by the Merchant's Landing housing development.*

Left: Cover for the songsheet for 'Farewell Awhile my Native Isle', a song composed and sung on the Great Western*'s maiden voyage to New York from Bristol.*

Stothert and Pitt's electric cranes on the dockside by the Industrial Museum (Destination Bristol, photograph by Graham Flack).

Left: Headed stationery from Acramans in the Braikenridge Collection (Bristol Libraries).

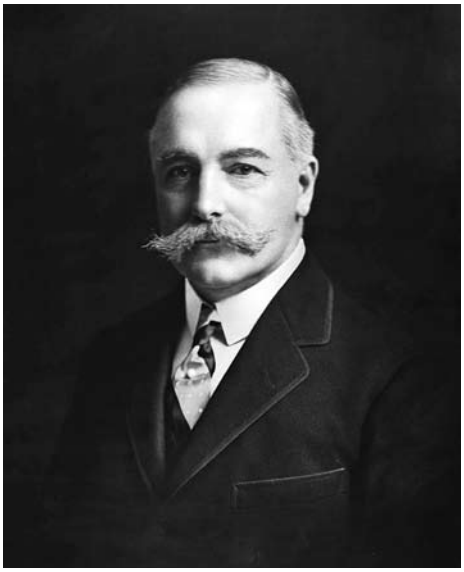
Below left: Bathurst Basin, *Edward Cashin (1825) (Bristol's Museums, Galleries and Archives). The low building with the smoking chimneys on the right is the ironworks.*

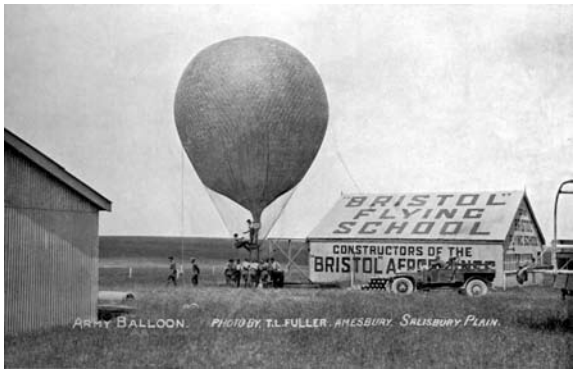
Below right: Portrait of Sir George White, c1905 (Airbus).

William Acramans, iron worker: Founded in the eighteenth century, Acramans was a major Bristol firm until its bankruptcy in 1842, producing anchors, chain cables, cranes, ships' parts, bridges and locomotives. The main ironworks were based on Guinea Street in Bathhurst Basin, now the site of the General Hospital. Acramans' former office and warehouse building, Bush House, on Bristol's Harbourside has provided a home for the Arnolfini arts centre since 1975 and has recently undergone a major refurbishment. It is rumoured that several sledgehammers were 'borrowed' from the Bathhurst works in October 1831 during the Bristol Riot to break down the doors of the prisons.

Sir George White, transport entrepreneur: George White, son of a Bristol painter and decorator, was born in Cotham in 1854 and began his working life at 15 as a solicitor's clerk. His boss, John Stanley, asked him to bring together a syndicate, and obtain the necessary Parliamentary approval, to secure the rights to run a tramway in Bristol. This followed the failure of the City Council's own tram scheme. Thanks to White's efforts, the Bristol Tramways Company was successfully registered on 23 December 1874 with William Butler, a local tar-distilling magnate, as its first chair. At the age of only 20, White was made company secretary – in effect, its managing director. At the same time he set up his own firm of stockbrokers, specialising in transport shares.

White's tramway interests grew when he oversaw the expansion of the service in Bristol and took over as secretary of both the Gloucester Tramways and Bath Tramways. He was soon being consulted at home and abroad by towns wanting to set up their own systems. He later became chair of the Imperial Tramways and the London United Tramways. White opened Britain's first electric tramway (1895) which ran from Kingswood to St George in Bristol and in 1901 he introduced London's first commercial electric service. White also developed interests in the railways and was involved in a failed attempt to break the Great Western Railway's monopoly of the Bristol to London rail route by establishing an alternative rail route from Bristol to Waterloo. He was an early enthusiast for the motorcar, acquiring a fleet of vehicles for the use of this family, including a Mercedes bought in 1902, and in 1904 decided to invest in motor buses, successfully using them to extend the Bristol Tramways service out to Berkeley in the north and Newton St Loe near Bath in the east. In 1908 he introduced motor taxis to Bristol.





Top and bottom: Souvenir postcards showing Bristol Boxkite flying over Durdham Downs and the Avon Gorge, 1910 (from the collection of Jackie Sims).

Far left: The Bristol Flying School at Larkhill on Salisbury Plain, c1912 (photograph by T L Fuller © J T Fuller).

Left: Illustration by David Gentleman from John Pudney's Bristol Fashion *(1960), a history of the first 50 years of the company.*

Top: The car on the left of this photograph is the very first Bristol car produced (1946) known as the Type 400 (Tony Crook).

Middle left: Walter Gibb pictured just landed after breaking the world altitude record on 29 August 1955 in an English Electric Canberra, powered by two Bristol Olympus 102 engines (Jackie Sims/BAC).

Middle right: Airbus A380 over Clifton Suspension Bridge (Airbus SAS 2006, photograph exm company, Philippe Masclet).

Bottom: These photographs from 1948 show the BAC typing pool (Rolls-Royce) and print room (Betty and Peter Beardmore/BAC).

This photograph, taken on 10 December 1958 at the Bristol Engine Division offices, shows a woman working at a large data processing machine, an early form of IBM equipment (Rolls-Royce).

In 1904, the year White was knighted, he read an article in the *Bristol Daily Mercury* about the Wright brothers' recent flight at Kitty Hawk, North Carolina. He kept tabs on the developments in heavier-than-air flight and, in 1909, had the opportunity of seeing Wilbur Wright flying in the South of France. In February 1910 he announced to a meeting of the Bristol Tramways shareholders that he proposed, at his own financial risk, to invest in aviation. On that same day the companies of the Bristol Aeroplane Company, the Bristol Aviation Company, the British and Colonial Aeroplane Company, and the British and Colonial Aviation Company were registered by him. White started trading as the British and Colonial Aeroplane Company but the aircraft were soon universally known as 'Bristols' and the firm officially adopted the Bristol Aeroplane Company name in 1920, becoming just 'the BAC' for generations of local people.

Sir George was canny enough to realise that sales of his aeroplanes were dependent on people being able to fly them and he opened the company's first flying school at Larkhill on Salisbury Plain in June 1910, speculating that aviation would be of particular value to the military. BAC's Brooklands school opened in September that year. The first pupil to gain Royal Aero Club certification at Larkhill was 17-year old Herbert Thomas, who completed his training in August 1910, becoming the youngest certificated pilot in the world. Larkhill and Brooklands were taken over by the military in 1914 having trained over 300 pilots between them. BAC's Filton Flying School opened in 1923 and the company also operated flying schools abroad, including ones in Spain and Germany which opened in 1912.

Out of the BAC grew Bristol Cars Ltd, Bristol Aero Engines Ltd, British Aircraft Corporation, British Aerospace (Filton) and BAE Systems, among many other business ventures. Today, its direct descendants, Airbus UK and Rolls-Royce, remain world leaders of great local importance. Famous aircraft from the West of England's long production line have included the Bristol Boxkite, which had its maiden flight at Larkhill in July 1910, the Bristol Fighter, the two-bay biplane that saw action in World War One, the Blenheim, adopted by the RAF as its standard light bomber in 1937 and winner of more VCs than any other plane, the Brabazon, a commercial white elephant that nevertheless provided invaluable lessons for the development of large airliners, the cargo-carrying Freighter, the long-haul passenger carrier the Britannia, helicopters such as the Sycamore and Belvedere, and the supersonic Concorde, the world's fastest passenger carrier and the last complete aeroplane to be built at Filton. The wings of the Airbus A380, the world's largest passenger carrier, were designed and partly built at Filton. BAC and its affiliates also built pre-fabricated buildings, hydroplanes, cars, coaches and guided missile systems, as well as aero-engines and gas turbines such as the Jupiter, Mercury, Pegasus and Olympus.

Thousands of local people have worked in aviation in the West of England since 1910, many of them moving to the area specifically to take up jobs in the industry. These have included designers, test pilots, engineers, carpenters, painters, clerical staff, typists, accountants, data processors, cooks and nurses. BAC also provided social benefits to the local community.

Today, approximately half of Rolls-Royce's 3,500 Bristol employees work for the company's Defence Aerospace division, responsible for the design, development, manufacture and support of some of the most sophisticated military engine products in the world. The company is currently in the middle of a £75 million investment programme to create new facilities for the manufacture of engine components and the assembly of new engines. The Marine division of Rolls-Royce also has a Bristol base. Current programmes include the Type 45 Destroyer for the Royal Navy and the multi mission destroyer DD(X) for the US Navy.

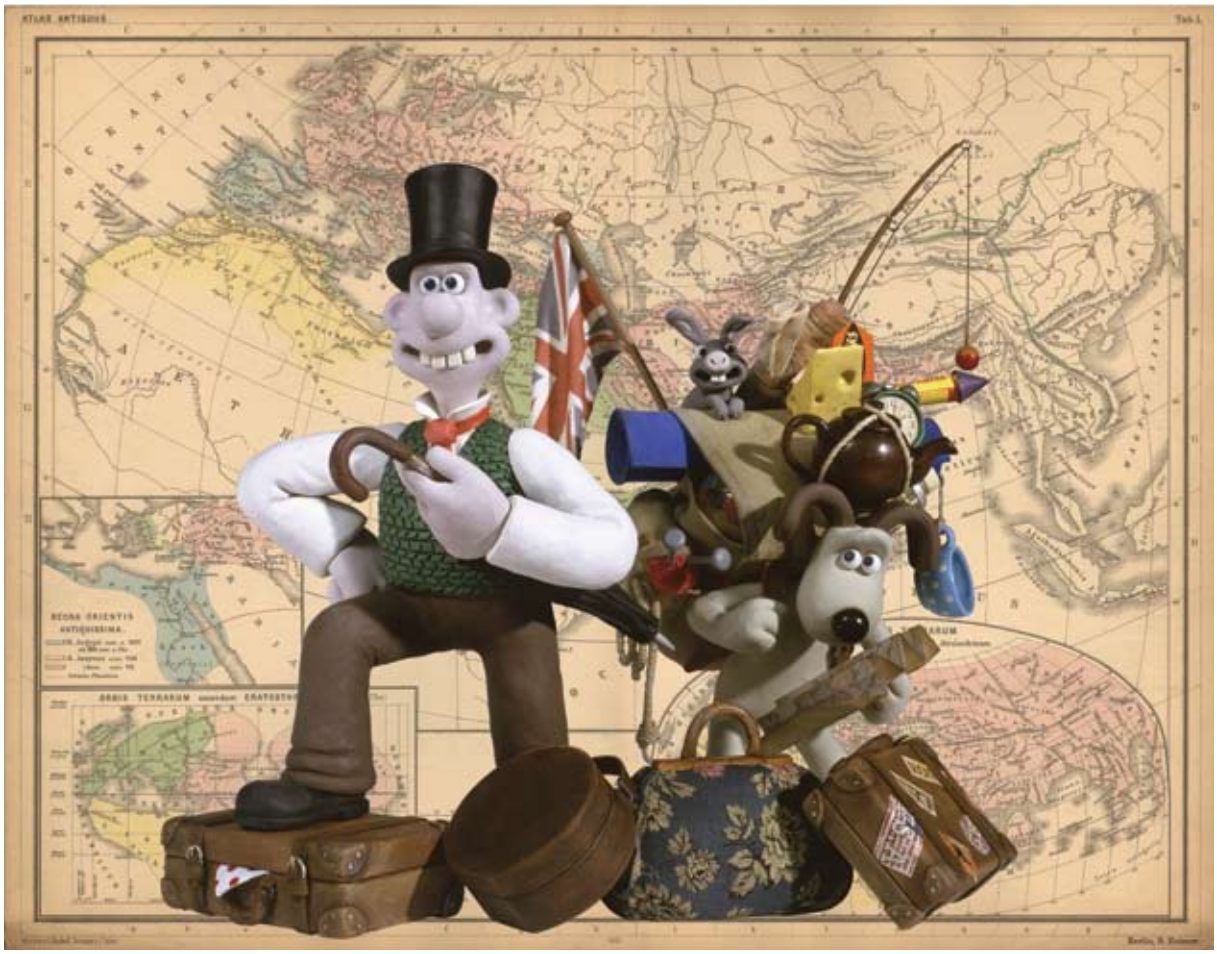
Airbus at Filton is a centre of excellence for the design of wings, design integration of the landing gear and the manufacture and sub-assembly of wing components. Around 6,000 people work in the design offices, manufacturing areas and in other departments like customer support, finance and procurement. Since the mid 1990s over £700 million has been invested in new machinery, equipment and facilities at the Filton site, including most recently in a new operation for the assembly and equipping of the composite-metallic hybrid wings for the new A400M military transporter.

In World War Two, BAC made a major contribution to the British war effort, manufacturing more than 14,000 aircraft and over 100,000 engines. Filton was the largest aviation complex in the world and was therefore an obvious target for the German Luftwaffe who carried out a daylight raid on the factory and surrounding area on 25 September 1940. In less than 60 seconds, around 350 high explosive bombs were dropped, killing more than 100 people. In February 1941 over 60 employees of another of the West of England's aviation companies, Parnall's of Yate, were killed in a German raid. Such attacks hastened BAC plans to disperse its operations and by 1942, with more than 52,000 people on the payroll, over 100 sites were in use including an underground factory at Corsham.

See www.bac2010.co.uk for details of plans to mark the centenary of the founding of BAC in 2010.

Below: Wallace and Gromit image specially created by Aardman for the 2006 Great Reading Adventure (© Aardman Animations Ltd).

Opposite: Still from Life in the Undergrowth, *Wildscreen 2006 Golden Panda Award Winner (BBC Natural History).*



Aardman Animations Ltd, animators: Oscar-winning Aardman Animations Ltd – creators of Wallace and Gromit, *Shaun the Sheep* and *Chicken Run* – was launched in Bristol in 1976 by David Sproxton and Peter Lord. Sproxton and Lord were friends from school and they began making short films for BBC's *Vision On* programme while in the sixth form. After graduation, they moved to Bristol, where *Vision On* was made, and set up their own studio above the Antiques Market in Clifton. The following year they created the character of Morph for the *Take Hart* programme. In 1983 Channel 4 showed five short Aardman films in which real recorded conversations were 'spoken' by animated characters. When these were broadcast, the distinctive animation technique caught the attention of advertising executives and for the next three years, the company worked almost exclusively on commercials. Nick Park joined the company in 1985 and in 1989 he completed his Oscar-nominated film *A Grand Day Out* starring Wallace and Gromit, who would go on to be international stars. That same year, Aardman made some more short films for Channel 4 including Park's Oscar-winning *Creature Comforts* in which the recorded voices were lip-synched to animated zoo animals. In 1991 the company moved to offices in Gas Ferry Road in Bristol near the ss *Great Britain* and later acquired additional studio space at Aztec West. Aardman is now the UK's largest animation company. The tool of its trade – Plasticine – is a South West invention, patented by a Bathampton art teacher, William Harbutt, in 1899.

BBC Natural History Unit, filmmakers: It is estimated that 25 per cent of natural history films shown around the world originate in Bristol. There are a number of important independent companies based in the city but the most significant producer of wildlife films is the BBC's prestigious Natural History Unit based on Whiteladies Road. The unit was founded in 1957 and is now responsible for producing around 100 hours of television and 50 hours of radio each year. Among its successes have been David Attenborough's landmark series of natural history programmes that began in 1979 with the 13-part series *Life on Earth*, viewed by an estimated 500 million people worldwide. It was followed by *The Living Planet* (1984) *The Trials of Life* (1990), *The Private Life of Plants* (1995), *The Life of Birds* (1998), *The Life of Mammals* (2002) and *Life in the Undergrowth* (2005). Bristol is also home to Wildscreen, the biennial wildlife and environmental filmmaking festival, the largest and most celebrated festival of its type in the world. Wildscreen attracts international delegates to the city and reinforces Bristol's reputation as being at the pinnacle of natural history filmmaking.

Further examples of Bristol companies can be found on the Great Reading Adventure website at www.bristolreads.com. We welcome your own stories of working for Bristol companies or using Bristol-made products. Contributions can be sent via the website or by post to BCDP (see acknowledgements page for address).