WARWICKSHIRE WIAS
Industrial Archaeology Society

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NEWSLETTER

FROM THE CHAIRMAN

Spreading messages; stretching limits; second sittings

Over many years, I have taken on board prime responsibility for giving talks on Warwickshire's industrial heritage when approached by other groups for potential speakers on the subject. I have learnt that this ranges from the need for a broad sweep of the county, liberally illustrated, involving little prior knowledge, to more detailed explorations of particular topics. As an illustration of this, over the past twelve months I have spoken to Wellesbourne Local History Society on 'An introduction to the Industrial Heritage of Warwickshire', to Lapworth Local History Society on 'Glovers of Warwick: Wheelwrights, Ironfounders and a great deal more'; and Stratford Parkinson's Support Group on 'NCJoseph Ltd., Aluminium Works, Stratford upon Avon'.

Needless to say, wherever one goes, there is always someone in the audience with more knowledge than you – and keen to let you know - or someone ever eager to point out a mistake you have made! Even so, there are often connections made that build the story in a very positive way. At Wellesbourne, for example, connections were made between the work of Chedham's Yard and wheelwrights W.Glover & Sons of Warwick, whilst a former student came up to me afterwards and asked if I knew of 'the heated billiard table made by Plucknett of Warwick at the National Trust property of Tyntesfield', home of the Gibbs family (whose fortune had been based on the guano trade). This prompted a visit and the table was indeed heated from below by hot water pipes to enable the balls to run more smoothly, although it was the surrounding exquisite wood carving that was the main Plucknett contribution.

What is certain is that we can build support for the Society via closer links with the non-IA world in Warwickshire – local history groups, U3A, Probus, whilst reaching out to IA societies in other counties.

The most rewarding aspect of doing this is to spread the word of the importance of industrial heritage and to demonstrate the pleasure of exploring it. This has taken on a new dimension in June when I will be speaking to a local Womens' Institute meeting with a talk entitled 'The Joys of Exploring Warwickshire's Industrial Heritage'. This is my first entry into the world of the WI, and preparing for this has really focussed the mind on what precisely is the attraction of the subject and to choose sites that perfectly demonstrate this. I will await the approval ratings – or otherwise – with some trepidation!

One thing I have learnt is that use of the word 'industrial heritage' has far greater appeal than 'industrial archaeology'. The latter is, of course, a focus on the physical remains of industrial activity but can imply a rather dry interest in unearthing foundations of industrial premises. WIAS has always tried to take a broader view, attracting a range of speakers with a variety of topics, and a website welcoming input from a variety of sources, backed by a database that records those physical items. The boundaries have really been stretched over the past twelve months with a programme of speakers that only included three Warwickshire topics. It will be interesting to see if this is commented upon in the responses to our Survey which concludes at the end of May 2026.

Seeking fresh topics and new speakers seems to be increasingly difficult and it was the talk on Northcot Brick in April (see later) that prompted a consideration of a 'second sitting' for topics that we had explored in the past but would be fresh to many. My decision to invite Michael Brown of Northcot Brick had been based on the 2025 celebration of the centenary of the works and the fact that a photograph of a WIAS visit in the early days revealed that none of the participants on that trip were still with WIAS, many having sadly passed away. Time perhaps to look through past meetings and to see if there might be topics due for revival and renewal!

Visiting Northcot Brick in the early days of WIAS. Including former Treasurer Mark Abbott, former Chairman Toby Cave and stalwarts John Selby and (partially hidden) John Gaskins and Peter Chater.

PROGRAMME

4 June (live/hybrid): Gary Wragg
The Making of Milestones. Hampshire's Living History Museum, from Conception to Completion

Meeting Reports

February 2026 (zoom): Guy Bartlett
Concorde: the First Time Machine.

Guy began his talk with a striking picture of Concorde flying over the Clifton Suspension Bridge and said that he would be giving a brief history and a description of what made her unique.

In November 1956 'The Supersonic Transport Committee' was formed to study the feasibility of building a supersonic passenger jet. Six years later, in November 1962 , the governments of France and Great Britain signed a concord agreement to build a supersonic jet- liner, hence the name of the aircraft that resulted: Concorde.

Unique problems were encountered: for example, a special paint was required to cope with the surface temperatures envisaged and the fact that the aeroplane would stretch at these temperatures. A special alloy 'Hiduminium ' was developed to cope with this.

Once built, Concorde weighed 110 tons and had 17 fuel tanks holding over 31,500 gallons. The distinctive delta wings are critical to achieve lift for supersonic flight at high altitudes. Guy explained how conventional lift was achieved with a higher pressure beneath the wing than above as the air flows faster over the curved upper surface.

Concorde's ogival delta wings produced a vortex lift by forcing the air to form vortices above the wings and thus reducing the pressure compared to the air below the wing and hence provides lift. This can be observed when the pressure is sufficiently reduced to cause the water vapour in the air to condense into a cloud.

In 1967 Concorde was presented to the public for the first time in Toulouse. At the same time, engineers in the US and the Soviet Union were working on supersonic airliners of their own. The Boeing 2707 never made it past the drawing board, while Russia produced the Tupolev TU144. She flew for the first time on 31 December 1968. Visually, she was so similar to Concorde that she was nicknamed Concordski by the West. She flew supersonically in June 1969, four months before Concorde achieved the feat.

The first Concorde prototype made its maiden flight in March 1969, piloted by André Turcat of SUD Aviation and Brian Trubshaw of the British Aircraft Corporation.

Concorde was the first passenger jet to feature a fly-by-wire control system in which the control stick sends the pilot's wishes to a computer which relays the requirements to the motors controlling the elevators etc.

More than a dozen airlines from around the world placed orders for nearly 70 aircraft in all. Concorde however, soon encountered opposition. One of the by-products of supersonic flight is the sonic boom, which can be distressing to those on the ground. As a result, the Concorde was limited to routes over water, with minimal time spent over land.

Environmental and economic concerns stemming from the 1973 oil crisis caused most of the airlines to cancel their orders, leaving only British Airways and Air France. In total 20 Concordes were produced: six were prototype test aircraft; and of the 14 production Concordes, seven were operated by British Airways and seven by Air France.

There was fierce rivalry between the two airlines . On January 1st 1976, two Concordes – one from each airline – took off simultaneously for the first supersonic passenger flight. The Air France plane flew to Rio de Janeiro by way of Senegal while the British Airways Concorde flew to Bahrain in the Persian Gulf. Eighteen months before, on 17 June 1974, Air France had given a dramatic demonstration. At 8.22 am an Air France Concorde took off from Boston and set course for Paris. At exactly the same time an Air France 747 took off from Paris bound for Boston. At the point when they passed the Concorde, flying at twice the altitude of the 747, had travelled 2,400 miles while the 747 had travelled 620 miles. Concorde landed at Paris Orly and spent 68 minutes on the ground before taking off to return to Boston, where they arrived at the same time. Concorde had crossed the Atlantic twice in the time the 747 had crossed once.

For most of its career Concorde had a sparkling safety record, but that all changed on 25 July 2000 when an Air France Concorde burst into flames and crashed shortly after take-off. 113 people died in the crash. The crash had been initiated by a piece of debris on the runway which caused a tyre to burst.

With some modifications the Concorde fleet returned to service in late 2001, however, the business never recovered. In the summer of 2003 both Air France and British Airways announced the permanent retirement of Concorde. For many, clearly including our speaker, this represented a step backward. As he said, we can no longer cross the Atlantic at twice the speed of sound and we may never again. The final commercial flight of a British Airways Concorde took place on 24 October 2003. That day, besides the flight from New York with 100 invited celebrities and frequent fliers, there was a flight from Edinburgh carrying competition winners and a flight from Heathrow which had looped over the Bay of Biscay. On a beautiful afternoon they flew around London before landing one after the other at Heathrow.

Guy put up a slide with some figures: Concorde's take off speed was 250mph, faster than a Formula 1 car; the landing speed was 187mph. At 60,000ft the speed was 1350mph, 165% faster than a rifle bullet! The subsequent slide showed the interior of the cockpit -- impressive.

Our speaker raised the question – what was the most advanced part of Concorde's engineering. Rather than the Ogival wing, the Hiduminium alloy, the 'droop snoot', the reheats, the arrangement to use fuel as a heat sink by transferring fuel from one tank to another, or the fly-by-wire system. He suggested that the most important was the arrangement for the engine air intakes which reconfigured for sub and supersonic flight.

There are ten Concordes available to visit, seven of them in Britain.

Guy's justification for the title of his talk 'The First Time Machine' lay in the British Airways Flight Schedule which showed (because of time zones) the west bound flight landing over an hour before it took off! It was a most enthusiastic talk which gave a full picture of an era in engineering which started and ended in our lifetime.

March 2026 (live/hybrid): David Daniel and Martin Green

Empress Coaches: a Family History and Galvanizing Profits in Birmingham, Spreading Wealth in Warwickshire: Joseph Ash, zinc and the National Trust.

This was a double barreled evening ; two very different family stories. First we had a talk by **David Daniel**, *Empress Coaches: a Family History*.

David began by noting that he had been doing some work on his family history and that he has some photographs which he could show and would be the basis of a talk on the family business, Empress Coaches. The story starts with George Marshall and his wife. George had been a cab driver in Birmingham towards the end of the nineteenth century. Their children included two daughters, Emily and Alice. Emily married Henry Daniel, a wheelwright, while Alice married Reuben Lowe, a haulier. However, both Henry and Alice died and Emily married Reuben. A chart showed the next generation, David's grandfather, Henry Daniel, and four girls Elsie, Edith, Alice and Doris. Elsie married Harold Belcher and Edith married Harold's brother Walter.

The family lived at Andran a hardware shop at 87 Lancaster Street in the Birmingham gun quarter, a tough area with accommodation in closed courts.

By 1913 Lowe and Sons were involved in shopkeeping, general haulage, coal sales and handcart hire. The family comprised the parents, two young and three adult children, and a son-in-law. By 1916 the young menfolk have been conscripted into the army. Harry Daniel is captured and Harold Belcher is in the Balkans so the daughters are running the business which included driving the very basic lorries of the time.

With the end of the War there were great quantities of ex-army vehicles for sale very cheaply and Reuben Lowe bought four lorries, had them converted into charabancs and advertised them as 'Empress Coaches'. They ran evening trips including a suitable stop at a pub and, at the weekend, longer excursions for works outings going as far as Weston super Mare. As solid tyred vehicles they were officially limited to 15mph. Suspension was primitive and there was no heating and little protection from the weather.

Conditions were such in Birmingham that the family decided to move to Teignmouth, the Belchers going first, followed by Edie and Walter Dennis. There, in a holiday growth area, they ran a summer service using coaches only. Some fine pictures showed the vehicles they were running, no longer with solid tyres and looking much more comfortable.

In 1912 William and Gilbert Greenslade had bought a model T Ford which they operated as a taxi in Exeter, more model Ts followed and two charabancs. Their brother Percy joined them to run a garage. They acquired several small businesses and in 1932 they bought Belchers Ltd. In 1933, Greenslades Tours was formed. In most cases they kept the names and liveries and the Belchers continued to operate Empress Coaches until 1939.

In Birmingham Reuben and Emily Lowe are still running a lorry and coach business. The four daughters have left and they rely on employed drivers with just Harry Daniel, the only 'family' driver. However, weekend and evening coach trips are not as profitable as those in Devon. Lancaster Street remains a deprived area and finally the Lowes closed the business and retired.

During the war the business in Devon was suspended but it was revived in 1945, still run by Harold and Elsie. They started taking tours to Europe in 1948. In the 1960s, Greenslades, by then well known, decided to sell their local bus services and concentrate on longer UK and European tours. The company passed through several buyouts and mergers, finally expiring in 2011.

The second barrel of the evening was a talk by **Martin Green**, a fascinating company story and family history, *Galvanizing Profits in Birmingham – Spending Wealth in Warwickshire*.

Martin explained that his topic would be Joseph Ash and his involvement in the galvanizing Industry. First, he put Digbeth with its wealth of industrial and commercial enterprises on the map, south east of the city centre. Despite proposals to regenerate the area it remains in Martin's words 'uneven, intermittent, uncertain' and an artistic and creative quarter. While the Custard factory and the Typhoo Tea building have found new uses, the future for the other historic industrial buildings remains unknown.

Thomas Ash and his family moved to Birmingham starting as grocers north of the city centre, then as chemists and in the 1840s as pioneering galvanized iron and zinc workers in New Street. It was only in 1836 that the Frenchman, Sorel, patented the full process of galvanising including pickling the article in dilute sulphuric acid and then fluxing in an alkali before dipping it in molten zinc.

In 1857 Joseph Ash parted from his father's company and set himself up as Joseph Ash 'zinc and galvanized iron manufacturer' at Meriden Street Digbeth. In 1864 Joseph was in partnership with John Lacy who provided capital. Ash and Lacy gained a good reputation for quality and developed a specialism particularly in perforated sheets and tanks.

As they expanded, they kept the firm within the two families. Joseph Ash had two sons, Thomas Henry and Alfred James, while John Lacy had William - in all five partners. Joseph was chairman until 1915, followed by Thomas to 1917 and then Alfred to 1925. His son Graham Baron Ash was chairman up to 1935 and then Graham's brother-in-law, John Mellor, until 1956.

Martin then took us for a little trip around today's Digbeth. He began with Digbeth Cold Storage. The building now houses The King's Trust and is called Cold Store Court. Further along is particularly fine building (listed), part of which is now R.T.P. Crisps. It used to be the umbrella works of Corder & Turley. Most of it is housing, christened The Brolly Works. Next came the Police Station and alongside Morgan's Famous Sausages –'Made Every Hour'. Turning into Meriden Street there is The former Ash and Lacy Works described in the Pevsner Guide as 'a long crisply articulated brick and terracotta range by J G Dunn'. It is now Norton's, an Irish night club. Opposite is a 1.1 acre site due to be redeveloped as part of a £100m mixed use development with the Smithfield Garage's 1923 façade incorporated into the design.

Martin then went on to describe the Ash families' later lives. Joseph moved to Leamington and was active in local and philanthropic affairs. His son, Alfred James had, as Martin described, a couple of weaknesses: he loved horse racing and Rolls Royces. He bought Packwood House now National Trust. His son, Graham Baron Ash, joined the Red Cross at the outbreak of WWI, and then became a pilot but after crashing four planes was transferred to balloons! Later he became High Sherrif of Warwickshire, rebuilt much of Packwood House and collected a plethora of miscellanea before passing it on to the National Trust.

April 2026 (live/hybrid): Michael Brown

Northcot Brick: Past, Present and Future.

The presentation of the evening began with a ten minute film. The film celebrated the Company - 1925-2025 one hundred years of craft, character and clay -- 100 years of brickmaking. To quote from the film "Our journey begins in the depths of the earth. Here buried deep beneath our feet lies the material from which our history begins. Woven beneath the ancient seams of Jurassic clay are the stories, memories and secrets of those who came before us. Centuries ago, a rare alchemy was discovered by our forebears. Instead of turning base metal into gold, they united the elements of earth, fire and water and a wonderous metamorphosis took place; rugged clay was transformed by fire into bricks of great character." The film went on to show the process of making the moulds and pressing the clay into them. It went back to preparing the clay from the quarry before showing the production of machine moulded and wire cut bricks and stacking the kilns. Michael Brown (our speaker) and Managing Director of Northcot bricks described the investment in energy saving and sustainability that the company had made; how they tried to produce the highest number of saleable bricks, rejects, seconds and best, how they recycle heat from the high temperature kilns to the low temperature driers. The film then showed mechanically stacking the kiln and how the flame transforms the clay giving it a warmth and richness of tone. Antony Gormley's installation 'Sleeping Field' showed Northcot Bricks in a very different form. Then as Michael said, " Looking ahead, we're trying to move forward where we can – with increased efficiency but also considering alternative forms of energy."

The film had been created by Hamid Alehamoudi, a film maker who made social documentaries, as well as commercial films, in Iran. The authorities there took a dislike to his work so just over six years ago he was forced to leave and came to England.

After the film Michael continued. His first slide showed Battersea Power Station, designed by Sir Gilbert Scott and said to be the largest brick building ever. It has recently been redeveloped as apartments with a shopping mall using Northcot bricks to match the original.

The business, originally Northwick, was established by Captain Spencer-Churchill, a cousin of Winston Churchill, who was concerned about the unemployment in the local villages and on his estate near Blockley. He set up the brickworks to make use of the Jurassic clay from his Wellacre Quarry. This gave employment to around 300 people including up to 100 women who were principally hand making tiles. Shortage of coal caused the works to cease production during WWII. In 1952, the brickworks were taken over by the current owners, EH Smith Ltd, and renamed Northcot Brick. Captain Spencer Churchill was not willing to sell the brickworks and it was leased until his death in 1964 when the purchase was secured for just under £30,000.

The Jurassic clay is well known for containing fossils. In 2000 a new species of plesiosaur was uncovered on the site. A slide showed three men who were present, one is quoted, " I thought it was a coconut shell and I put a pick through its head."

Several of the slides showed the equipment, much of it going back to the start of the business. There is a 14 chamber Hoffman type kiln. The company make both machine-made and handmade bricks. The machine-made bricks need a stiff hard clay while the hand made require a softer wetter material. This is prepared using the older machines. An invoice showed the supply of a 9-ft Pan Mill in 1926. Michael described the maintenance of this machine; the flat belt is at least 25 years old and they believe there is no similar machine left in Europe, but here it is happily still used several times a week. It prepared the clay for the original Battersea Power Station and was used again for the clay for the refurbishment. A slide showed the architect's panel with six different shades of brick which the company had to supply in the same proportions in each pack to match the original.

Other buildings which have used Northcot bricks include Damien Hirst's Newport Street Gallery in London, which won the Stirling Prize and for which 'Newport Street lights and darks' were specially commissioned and the refurbishment of the Shrewsbury Flax Mill, the oldest iron framed building in the world. The mill was originally built at the beginning of the 19th century after the government had imposed a tax on bricks. To reduce the tax the building was constructed using larger bricks than standard. Northcot made special 93 mm bricks in place of the normal 73mm for the refurbishment.

Northcot weathered the recessions that hit the UK from the 1970s through to the early 1990s but changes were needed as Northcot were only able to make a limited range of four bricks which competitors were easily able to replicate.

Michael went on to describe how he got involved. He was originally trained as a civil engineer but when he finished his degree, he joined the family business which included the brick works. He noticed that the rejects were selling for more money than the best. Reducing the price did not stimulate demand, that was controlled by the amount of building going on. They realised that the rejects had more character and a greater range of colour. They decided to capitilise on this and created the 'Henley Old blend.'

He emphasised how every clay deposit is different and by exploiting this it is possible to create bricks of character which customers will buy. The big brickmakers with their standard product drive down the price but this is a race to the bottom that the smaller firms cannot win.

Northcot Bricks have now opened a new quarry, Loaders Barn Quarry, for which they have 25 years planning permission (it took five years of negotiations to obtain it). The clay is slightly different, still from the Lower Lias but it does not contain fossils, which is a bonus, and it should produce the raw material for another 30 years production of bespoke bricks.

Their latest commission is from Anthony Gormley who wants some giant bricks, these are causing a lot of difficulty in drying, so far taking three months and they shrink prodigiously in doing so.

Michael had given us a splendid picture of a small innovative business which had kept us fascinated and particularly the brick collectors in the audience including our chairman.