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WM news

this issue

UK productivity continues to dip

Figures from the Office for National Statistics (ONS) published in January for the last quarter of 2018, show that the UK's workforce of 32.5 million is the largest ever with the lowest unemployment level since 1975. But productivity continues to dip, as the output per hour worked fell to the lowest level in 2 years.

Productivity growth is a key indicator of a nation's prospects and future living standards, and is calculated by taking the nation's Gross Domestic Product (GDP) and dividing it by the total hours worked and comparing it with previous performance. Low productivity means that future living standards will stagnate as companies struggle to produce more with the same resources and lose their competitive edge to overseas rivals.

Looking ahead - Spring Programme 2019

The West Midlands Region Board cordially invites you to the following Spring Events:

On Saturday 13th April a tour of the Wythall Transport Museum, Chapel Lane, Wythall, Worcs B47 6JA. The museum has three halls, presenting a significant collection of preserved buses and coaches, as well as other vehicles.

The entry fee is £7 per person with the Region making a contribution of £3.50 per member.

The museum was formed in 1977 and the museum site was acquired in February 1978.

The Museum is also home to the Elmdon Model Engineering Society (EMES) who operate the minature steam railway within the grounds of the transport museum, giving rides to the public.

For further information click on www.wythall.org.uk

On Saturday 18th May a 90 minutes tour of the Hook Norton Brewery, Oxfordshire OX15 5NY with an opportinuity to visit the free museum. The Brewery is out in the beautiful Cotswold countryside , between Banbury and Moreton in the Marsh. The admission cost is £14.50 per person but the Region will make a contribution of £8 per member

Hook Norton Brewery dates back to 1849 and is one of only 32 family owned independent breweries and produces award winning handcraft beers.

In addition to the brewery. there is a shop, the Malthouse Kitchen Cafe, and a free museum. The brewery has 36 pubs which are at the heart of many of their local communities
.
For further information on the Hook Norton Brewery click on the link below www.hooky.co.uk

If you wish to attend any of the above events, please see page 5 to register

Whittle W2 Jet engine

Report of the visit to the Midlands Aircraft Museum, Coventry

Sir Frank Whittle…..Britain's Jet Pioneer

On Saturday 22nd October West Midland Region members visited the **Midlands Aircraft Museum** at Baginton adjacent to Coventry Airport. The Museum consists of a covered exhibition area as well as aircraft displayed outdoors.

A feature of the Museum is the **Sir Frank Whittle Centre** which records Sir Frank's pioneering work on the British development of the jet engine.

Sir Fank Whittle

Frank Whittle was born in 1907 in a modest terraced house at Earlsdon, Coventry and joined the Royal Air Force in the late 1920s. While he was Cadet studying at the RAF College Cranwell Whittle developed his concept for a jet engine for aircraft propulsion and took out his first patent in 1930. But it proved difficult for Whittle to fund the development of his ideas into a practical engine.

At this time the World's fastest record setting aircraft had piston engines driving propellers and were pushing towards 400 mph and bi-planes were still operated by the World's air forces. Whittle's abilities however were recognised by the RAF, and as a RAF officer he attended Peterhouse College Cambridge and graduated in the mid 1930s with a first class degree.

At about the time of his graduation Whittle with relatively modest funds from his financial backers, formed Power Jets to develop his concepts and a prototype demonstration jet was built by BTH Engineering at Rugby to Whittle's design.

As the war clouds gathered in Europe in the late 1930s, the British Air Ministry became more interested in the possibilities of jet propulsion, and Power Jets moved to old foundry premises in Lutterworth, Leicestershire to allow further development work to produce a practical jet engine capable of powering an aircraft, but Whittle continued to be concerned that the limited resources available were hampering engine development. The Air Ministry however ordered an experimental aircraft to the specification E28/39 from Gloster Aircraft to test the new Whittle jet engine.

But by the late 1930s, Germany was also independently working on jet engine technology and the World's first successful flight by a jet powered aircraft was on 24th August 1939 by a German Heinkel He 178, a few days before the outbreak of the Second World War and some 21 months before the first British jet powered flight on 15th May 1941 by the Gloster E28/39 powered by a Whittle W1 jet engine.

Heinkel He178

Gloster E28/39

During the Second World War the German aircraft industry was able to produce a number of types of jet powered planes – their most successful operational jet planes were the Messerschmitt Me 262 twin engine fighter and the Arado Ar 234 Blitz bomber and reconnaissance aircraft.

In Britain the production of Whittle's jet engine was initially assigned to the Rover car company but to accelerate the engine's development and production the responsibility was passed to Rolls Royce who were keen to become involved with the new technology . Britain's first operational jet fighter the twin engine Gloster Meteor came into service in 1944 just in time to help with intercepting the new German V1 'Doodlebug' pulse jet powered flying bombs (crude cruise missiles) being launched daily from Northern France towards London.

After the War, the Labour Government nationalised Whittle's Power Jet company and although Frank Whittle was promoted to Air Commodore in the RAF and honoured with a knighthood, he played no further significant role in British jet engine development and moved to

the United States. Sir Frank died in 1996 at the age of 91 years in Maryland in the USA.

The Midland Aircraft Museum's outdoor plane exhibits are mainly aircraft from the 'Cold War' years 1950s to 1980s, when Britain and her NATO allies were threatened by the Soviet Union and the Warsaw Pact nations. The jet aircraft displayed include examples from Britain, the United States of America, France, Poland and Russia including a Soviet MIG 21 supersonic fighter and MIL helicopter gun ship. Among the British aircraft displayed is the iconic Avro Vulcan delta wing bomber of Britain's V bomber force which had the responsibility for the UK's nuclear deterrent during the 1950s and 1960s.

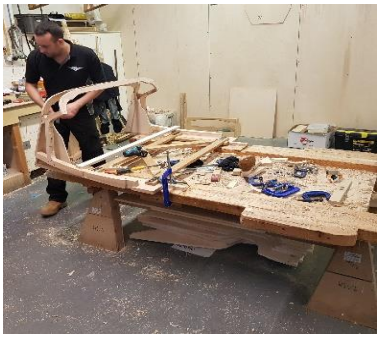
Morgan Motor Company - hand built iconic British sports cars

On 24th October West Midlands members had a factory tour of the Morgan Motor Company in the picturesque area of the Malvern Hills, Worcestershire. The company is about to celebrate 110 years of existence, having been established by Mr H.F.S. Morgan in 1909 who built his first primitive three wheeler car with tiller steering. The current factory has been on its present site for over 100 years, and at the time the factory was built it was in open fields, but is now in the built-up area of Malvern town.

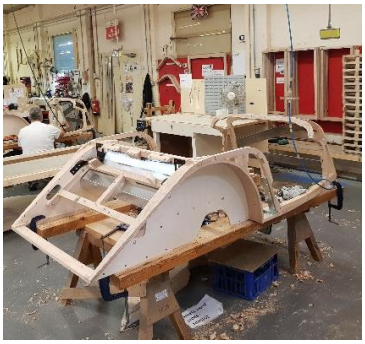
In many ways Morgan Motor Company production methods are a step back in time, compared to the mass production of cars at Toyota, Derby or the Mini factory at Oxford. There are no automated production lines, no robots and few computers. Morgan cars are literally hand built, using crafts and skills which would be familiar to the Morgan workers of 100 years ago.

The Morgan car range is basically three models of their iconic traditional classic sports car – all fitted with engines bought in from the Ford Motor Company. The engines ranging in size from the 1.6 litre 4 cylinder engine to the large capacity V6 engine fitted to American Ford Mustang.

Morgan's classic sports car is built on a wooden Ash frame and the aluminium body panels are formed by hand on the wooden frame. One craftsperson builds the basic body shell.



constructing the wooden body frame



The completed body frame

Attaching Aluminium panels to the body frame

Completed cars waiting to be moved to the paint and trim shops

Many specialist components are bought in from outside suppliers such as the engines, the Ash wood and the metal chassis for the Morgan 3 wheeler. By being hand built by a skilled specialist artisan each sports car is unique, for example the bonnet fit is adjusted to that particular body shell.

Morgan Motor Company Continued

In addition to the classical sports car, Morgan also build the current version of their famous 3 wheeler sports car model which is powered by a 2 litre air cooled V twin cylinder engine imported from the United States

Morgan 3 wheeler Sports Car built on metal chassis

Morgan Aero 8

During our visit, the last Morgan Aero 8 car (Morgan's streamlined top of the range model) was passing through the production stages, before this car is withdrawn from the model range.

Morgan Motors build 18 cars per week (compared with less than half that volume 25 years ago) and some 70% of cars are exported, and this was evident from the number of left hand drive models in the production process during our visit. Morgan cars have now satisfied the American safety and regulatory authorities and are being exported to the USA, as well as other parts of the World including China.

After the cars have been through the paint shop and all trim fitted, the completed car is road tested and then given a final quality inspection, before an outside contractor moves the car to a secure store and the car is only released to the dealer on receipt of payment.

Morgan Motor Company has a work force of less than 200 and is an equal opportunities employer but on our visit all the production operatives were male.

Although the Morgan family own the company there is now no longer a member of the family in a senior management position and the Company chairman is a long-standing company employee Mr Dominic Riley.

An interesting example of a company which has established itself in a highly competitive market in a niche segment with a unique product and a strong brand image, and a loyal customer base.

Other Region News….

A small group attended the **Region's Informal Lunch held on Saturday 10th November at the Old Irish Harp, Aldridge** and was an opportunity to network and catch up with the latest news.

The Region AGM was held on Saturday 12th January 2019 in the Coffee Lounge of The George Hotel, Lichfield. This was an opportunity to hear reports from your Region Officers for the last year and the plans for 2019. The Region Officers for 2019 are shown on page 5.

West Midland Region Officers for 2019

Region Chair – John Hopkinson Hon FMS

Region Treasurer – Julian Cutler FMS

Region Secretary – Steve Cullen FMS

Membership Development – Robert Haysom

Executive Member – Bill Acres AMS

To register your interest in the Spring Events

Please e-mail to admin@ims-productivity.com your:
Name
E-mail address
Telephone number
And events you are interested in and mark the e-mail for 'The Attention of the West Midlands Region'

By contacting us you agree to the West Midlands Region holding your personal information

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