



# Members Newsletter

October 2022  
Issue 4

## Welcome

BY JEFF COOPE, MANAGING DIRECTOR

Welcome to the autumn edition of the British Motor Museum Members Newsletter.

Although we live in changing times, it was with great sadness that we learned of the death of Her Majesty Queen Elizabeth II. The Queen leaves an unrivalled legacy of service to our country and her enduring support for the cultural sector has always been a beacon of light for organisations like the British Motor Museum. We are honoured to include some of the Queen's state and private cars in our collection. These vehicles hold great significance for us and are a mark of the Queen's long association with Britain's motor industry.

As we reach the end of the summer season, I hope you have been able to enjoy some time at the Museum and attend one or two of the many events that have taken place. The Gaydon Gatherings have been a huge success this year, helped no doubt by some glorious weather and (I like to think) demonstration runs of some truly amazing vehicles from the collection, including the Rover T3 gas turbine base unit (more of which later) and the unique Jaguar XJ13 Le Mans race car.

## INSIDE THIS ISSUE

- 1-2 Welcome
- 2 Dates for the diary
- 3-4 London to Brighton Veteran Car Run 2022
- 5 Online collections
- 6-7 Thornton donation
- 8-9 Gas turbine T3 base unit
- 9 Meet the Assistant Curator
- 10 Sandford Award
- 11 Making the most of your Membership

Soon we will be moving indoors, with a fresh programme of evening events such as the popular Pub Quiz. We'll also be introducing 'Evenings With', bringing in leading lights from the worlds of motoring and motorsport to chat about their cars, careers and experiences. Many events include supper so please keep a look out for more details and enjoy a cosy winter evening with us.

## Welcome continued

Finally, as we move into the second year of memberships, I would like to thank all of you for your continued support of the Museum.

I hope you have found being a Member an interesting, exciting and enjoyable experience and I can promise you there is so much more to come as we develop our offering to you over the months and years ahead.

With your vital help we are preserving not only the cars and archive material of Britain's motor industry, but also the memories of millions of people who helped to build that industry over the past 140 years and whose stories will become so valuable to generations yet to come.

I look forward to you visiting the Museum this autumn, where the warmest welcome awaits you.

Best wishes

*Jeff*



## DATES FOR YOUR DIARY

11 October - Gaydon Gathering

22-30 October - Magic of Science  
Half-Term Activities

23 October - Large Model Aircraft Show

29-30 October - Great British  
Railway Show

7 November - An Evening with Jon Wells  
(Head of Design, Morgan Motor Company)

29 November - Quiz Night

[Click here for a full list of  
WHAT'S ON and to book tickets.](#)



## London to Brighton Veteran Car Run 2022

BY PAUL GILDER, WORKSHOP MANAGER

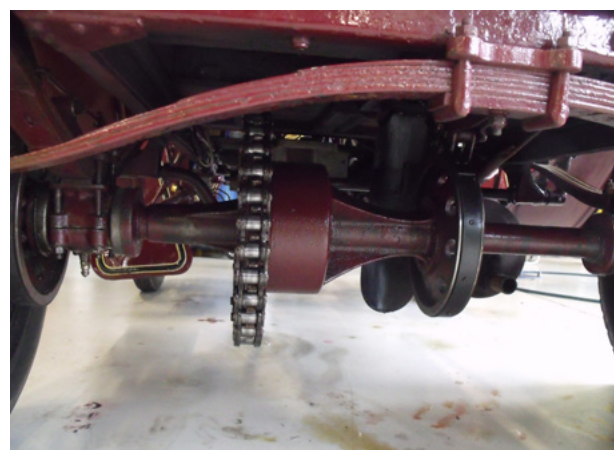
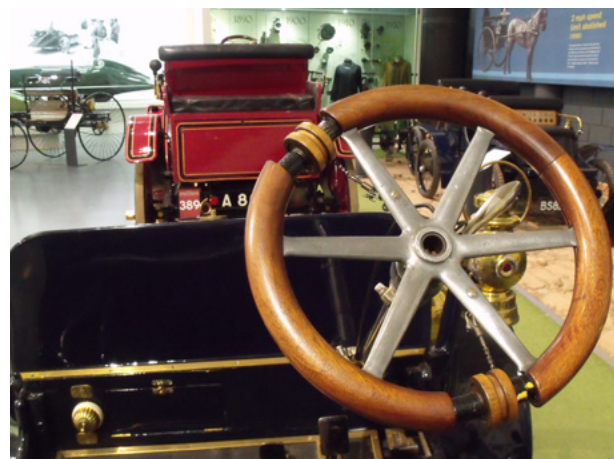
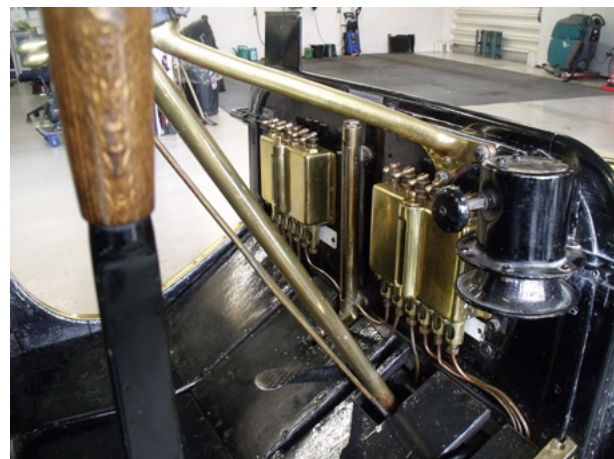
Drive a car 56 scenic miles from London to Brighton. Should be easy enough don't you think? Well not if that car is over 118 years old!

This year the Museum will be entering six veteran cars from the collection into the annual London to Brighton run, which takes place on the first Sunday of November. Work has already started on the preparation of the vehicles by the team of technicians in the Museum Restoration Workshop.

Cars of this age are similar to modern cars in that they generally have four wheels, a seat for the driver and an internal combustion engine for propulsion - although there are some exceptions. They differ in a variety of ways; such as tiller steering, chain drive, total loss oil systems, trembler coil ignition (or buzz coil if you are American), wooden wheels and solid tyres, to name but a few.

The skill of the Museum Technician does not lie in computer diagnostics or the fitting of new parts off the shelf. He or she needs to have an understanding of the basic engineering principles used in the early cars and has to develop a feeling for the way the car is running. Almost everything can be tweaked and adjusted to fine tune the way the car drives and stops.

One of the most important parts of the preparation is a thorough nut and bolt check. These cars tend to vibrate a lot from the engine and, coupled with the road bumps travelling up through the cart-like suspension, it leads to all sorts of things working loose and sometimes even falling off.





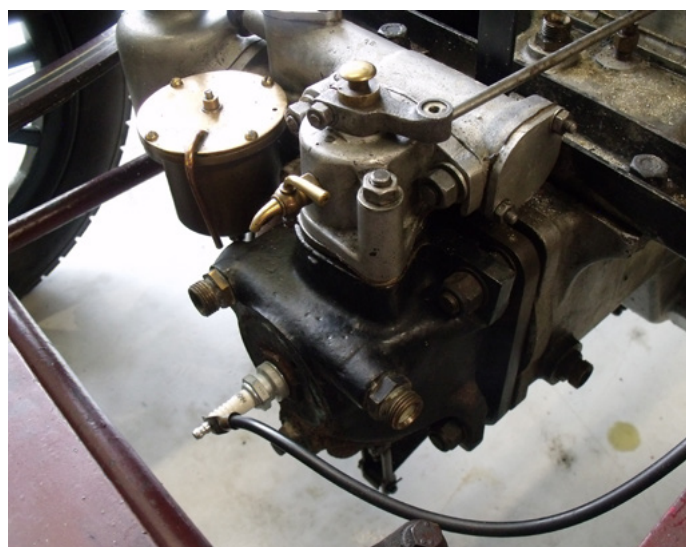
## London to Brighton continued

When all is checked and fettled and we are happy with the way the car is running, we put them through a MoT test to have a second pair of eyes check the safety aspects of the car.

Prior to the event, all drivers, experienced or not, are given a lesson in the complex starting procedure of their particular car and also take a driving lesson with one of our technicians. Hand throttles, brake and clutch pedals the wrong way round, hand signals, and various knobs and switches for oil control are all part of the driving experience.

On the Friday before the run, the cars are loaded on to a transporter bound for London and at 6am on Sunday morning the fun starts.

Find out how the cars got on in the next Newsletter.





## Online Collections

BY CAT BOXALL, CURATOR

During lockdown, like many organisations, we soon came to realise that if people couldn't come to visit the Museum we had to take the Museum to them! In 2020 and 2021 we developed a range of new online activities, such as Science at Home, online exhibitions and virtual learning sessions for schools.

We also wanted to develop ways that people could explore our collections from the comfort of their sofa at home. You can find, for example, many fantastic images from our Archive on the Museum's Flickr page.

Recently, we launched one of our largest digital content projects to date, the new Online Collections. It's taken our Curatorial Team with help from the Marketing, IT and Volunteer teams, many months to produce this fully searchable database of all the cars we have in the collection. You can explore the catalogue in many ways, for example, by make or by date, and there is also an image and description for each car. You can even find out whether a particular car is in the Museum, is out and about at an event, or is spending some time in our Workshop – before you make a special trip to see it. You might even discover a car that you missed when you last visited the Museum.

In the future we hope to extend this to other objects and items in our collections. In the meantime, why not try out the Online Collections at [britishmotormuseum.co.uk/online-collections/](https://britishmotormuseum.co.uk/online-collections/)?

### Online Collections

What are you looking for?

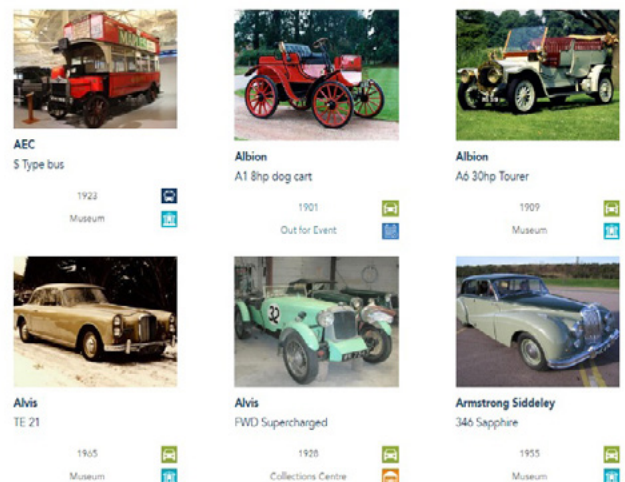
Decade

Make

Location

Sort By

### Results



## Thornton donation

BY PARAMJIT SEHMI, ASSISTANT ARCHIVIST

Whilst our Archive is based largely on material acquired directly from British car companies, our collection is always growing. This is often thanks to generous public donations. We are always grateful to anyone who gets in touch with potential items of interest, although we do try to assess whether the items are best suited to our collection before they arrive at the Archive. Understandably though, this is not always the case and sometimes we do get surprise visits and mystery items delivered to us!

This is exactly what happened in August, as a visitor to the Museum popped in to discuss some items that he had brought with him. After speaking with our visitor, it turns out that his donation was very interesting indeed! The material included personal items previously belonging to a Mr William H Thornton. Thornton worked for Morris initially between 1904 and 1906, when the company specialised in cycles and again from 1914 when it was producing cars.

Taking a closer look at the donation, we have been given two volumes of *The Automobile*, published in 1905 and kept in pristine condition by Thornton. These books proclaimed themselves as 'a practical treatise on the construction of modern motor cars'. We also received a book on Jet Needles, indicating the varying diameters which would allow for different fuel flows in

carburettors. This book is complemented by examples of the very jet needles that Thornton and Lord Nuffield would have used when travelling abroad with their cars.



The donation contains an abundance of material including; licences, membership cards, certificates, newspaper cuttings, event invitations and photographs. The photographs range from shots of vehicles at events and tours around the continent, to Morris employee group pictures. We have a few images of Thornton himself as featured in his passport and in an International Travelling Pass, allowing us to put a face to the name.

It does seem that Thornton had a close working relationship with Lord Nuffield. In the documentation donated, Thornton's job is listed as being in charge of Final Test



## Thornton donation continued

of Vehicles, which would have been a very important role in terms of safety and quality control. Notably, his signature is featured alongside Lord Nuffield's on a menu for a luncheon celebrating the millionth Morris in 1939. Further newspaper cuttings mention that Thornton's invitation to such a prestigious event was due to the fact that he, alongside only six of his colleagues, were those with the longest service in the company. The donor of the material added that he believed that in Thornton's later years he was personal Financial Accountant to Lord Nuffield.

This a great example of how archive material can be a valuable research tool. From this resource, there is definitely potential to look further into Thornton's career to understand how he may have contributed to the management of Lord Nuffield's finances as well as testing vehicles for Morris!



## Gas turbine T3 base unit

BY STEPHEN LAING, HEAD OF COLLECTIONS

In 1950, Rover was the first company in the world to manufacture a gas turbine powered car, JET 1, now kept in London's Science Museum. T3, unsurprisingly, was the third design in the sequence, a pretty little coupé launched in 1956 at the Earl's Court Show. Underneath it was very sophisticated, with in-board disc brakes, De Dion rear suspension and four-wheel-drive. The rear mounted gas turbine produced 110bhp at 52,000rpm!

Behind the glamour of the finished car were hours and hours of experiments. Rover built a moving test bed – the 'base unit' – to try out all of the technology for T3, which consisted of the running gear and a very rudimentary frame and body with a couple of seats on top. Turbines and components could be swapped easily in and out of the car to try out different set ups.



For testing, a number of discs...  
 15-12-55 — Mock up intake ducts lined with (Inch) Binter rubber. Ducts pop riveted to base unit. Car wired up front suspension springs fitted.  
 19-12-55 Rubber sheet fitted to floor of car. Weight box clamped in position. Seats fitted. Stainless steel intake grille fitted. 25<sup>th</sup> thick steel distance pieces fitted to rear wheel hubs, to give clearance as wheel rim was fouling spring in rebound position.  
 21-12-55 Perspex mock up screen fitted. Spark box Oil Temp gauge + thermocouples fitted. Side panels fitted to base unit. Front wings strengthened.  
 28-12-55 Aurora Engine Mark 3 less heat exchanger fitted. All oil + fuel pipes connected. Straight up exhaust duct fitted (not silenced) Tyre pressures 28psi rear, 15psi front Batteries fitted. Gear changed adjusted (Worked all night Car tested on track at 4:30 am 23-12-55 by Mr S. King. Returned to shop. Car + Engine functions very good.  
 23-12-55 Steering retracted. Further circuits of test track. Engine running time in base unit to date 30 mins  
 23-12-55 Cable lengths Battery to engine = 14ft 6ins Earth = 18ins. Lead connecting Batteries = 12ins Total Weight 64 lbs  
 28-12-55 ① circuit of track Exhaust duct to be made of Alum + perforated metal and silenced with 1inch thickness stillite. Fuel leaks from filler cap on tank  
 2-1-56 Brake fluid reservoir topped up. Oil + Fuel pipe joints checked for leaks. 2 starts running time 5 mins  
 3-1-56 New exhaust duct made + fitted (weight 32lbs)



In the Archive we discovered the log book for the car, which recorded every test and change from when construction began in 1955. Its first proper outing, with fabled Rover engineer Spen King at the wheel, was at 4.30am on 23rd December 1955. Shortly after the car was recorded at 100mph with a 0-60 time of 9.75 seconds.

cont.



## Gas turbine T3 base unit continued

The base unit was kept in service until 1966, testing new components for T3 and later Rover turbines, before being parked in a corner of Solihull and forgotten. When our other well-known gas turbine cars joined the first collection in the early 1970s, the base unit came with it, albeit kept in a succession of stores out of public gaze – a real ugly duckling.

About five years ago, I showed it to our group of skilled volunteers – Pete, Neil, Jon, Ian and Andy – who look after the fabulous Rover-BRM Le Mans car. The car was moved to a secret location and the team set about stripping down and examining it – all in between their day jobs. Amazingly after all this time, the turbine worked almost straight away. There was plenty of work to restore the brake system, suspension and electrics and the crude body was sympathetically cleaned and repaired as necessary.

After a couple of private tests, the base unit made its first public appearance in more than 50 years at the Gaydon Gathering in September. It gives an insight into Rover's pioneering work and it also makes a great noise! It's a real triumph of British technology and a testament to the invaluable work our volunteers do for us.

## MEET THE TEAM



I'm Amy Forster-Smith and I have recently joined the team at the British Motor Museum as the new Assistant Curator. I worked for the National Trust over the last sixteen years, most recently as the Experiences and Programme Manager in South Worcestershire. For the last few years I have been focussed on using collections and curating exhibitions for a creative programme I designed. I have collaborated with artists and collections from around the world and, in June, finished an exhibition on the UK's first professional surfer!

In 2021 I completed my Masters in the History of Art at the University of Birmingham which really boosted my motivation to fully concentrate on collections and curating - I feel very lucky to be the new Assistant Curator at the Museum, and I have really enjoyed my first few weeks. With Museum Curator Cat Boxall, I have already been tackling upcoming exhibitions, vehicle audits and acquisitions to the collection, and have loved every minute. As a bit of a petrol-head, I am delighted to be able to look at, talk about and research cars all day!



## Sandford Award

BY - CLAIRE BROADER - EDUCATION OFFICER

Way back in January the Learning Team embarked on the process of renewing the Museum's Sandford Award. The award is an independent, quality assured assessment of formal, curriculum-aligned learning with recognition given to informal learning such as family programmes and outreach. The aim is to encourage the development and maintenance of standards of education at heritage sites. It is one of the highest national accolades for learning in the heritage sector.

During an intense two-and-a-half hour virtual interview, the team were thoroughly grilled on all aspects of museum education and challenged to present evidence of achievement against a range of assessment criteria. Being the Learning Team, however, we weren't about to leave it at that! We set our Learning Spaces up as if a school visit was in progress and once the more formal side of the interview process was complete, took our assessor through a virtual LEGO workshop. After this he was given a flavour of what a costumed tour of the Museum and 1923 London bus is like with Jim, our Bus Driver character (pictured). Then the long, nervous wait for the results began.

Our worries, of course, were unfounded as when the results finally came in in August we achieved the highest scores possible against all criteria. The assessor commented

that, "whilst the team may be small, the enthusiasm and dedication to learning here is abundantly clear... thinking outside the box is integral to their approach to learning" and that, "a visit to British Motor Museum must be a joy... This is very much more than a place for motoring enthusiasts, it is a signpost to both the past and what is to come." These comments mean such a great deal to the team and we are immensely proud of what we have achieved. We cannot rest on our laurels though, as now the new term has begun, the Learning Spaces look to be busy with school, college and university students.





## Making the most of your Membership

### Festive Lunches in the Sky Suite

It's hard to believe, but Christmas is just around the corner! Make the most of your Membership discounts and join us for a delicious Festive Lunch at the British Motor Museum. Enjoy a seasonal two course meal with all the trimmings in the stunning roof-top Sky Suite, a glass of wine or soft drink, crackers and tea or coffee.

To book your place, just call or email the friendly bookings team:

t: 01926 895295

e: [bookings@britishmotormuseum.co.uk](mailto:bookings@britishmotormuseum.co.uk)

[Click here](#) to find out more.

Members - 10% off

Premium Members - 20% off

(Quote your Membership number when booking)



### Renewals

Many of our members have now been with us nearly a year or more. Can you believe it?! We hope that you'll continue to support the British Motor Museum by renewing your membership.

**If you pay by direct debit, your Membership will renew automatically. If not, you can renew by logging into the Museum Membership Portal.**

[Click here](#) to login.

**If you have any questions about your membership please contact us.**

t: 01926 895295

e: [membership@britishmotormuseum.co.uk](mailto:membership@britishmotormuseum.co.uk)

[www.britishmotormuseum.co.uk/membership](http://www.britishmotormuseum.co.uk/membership)