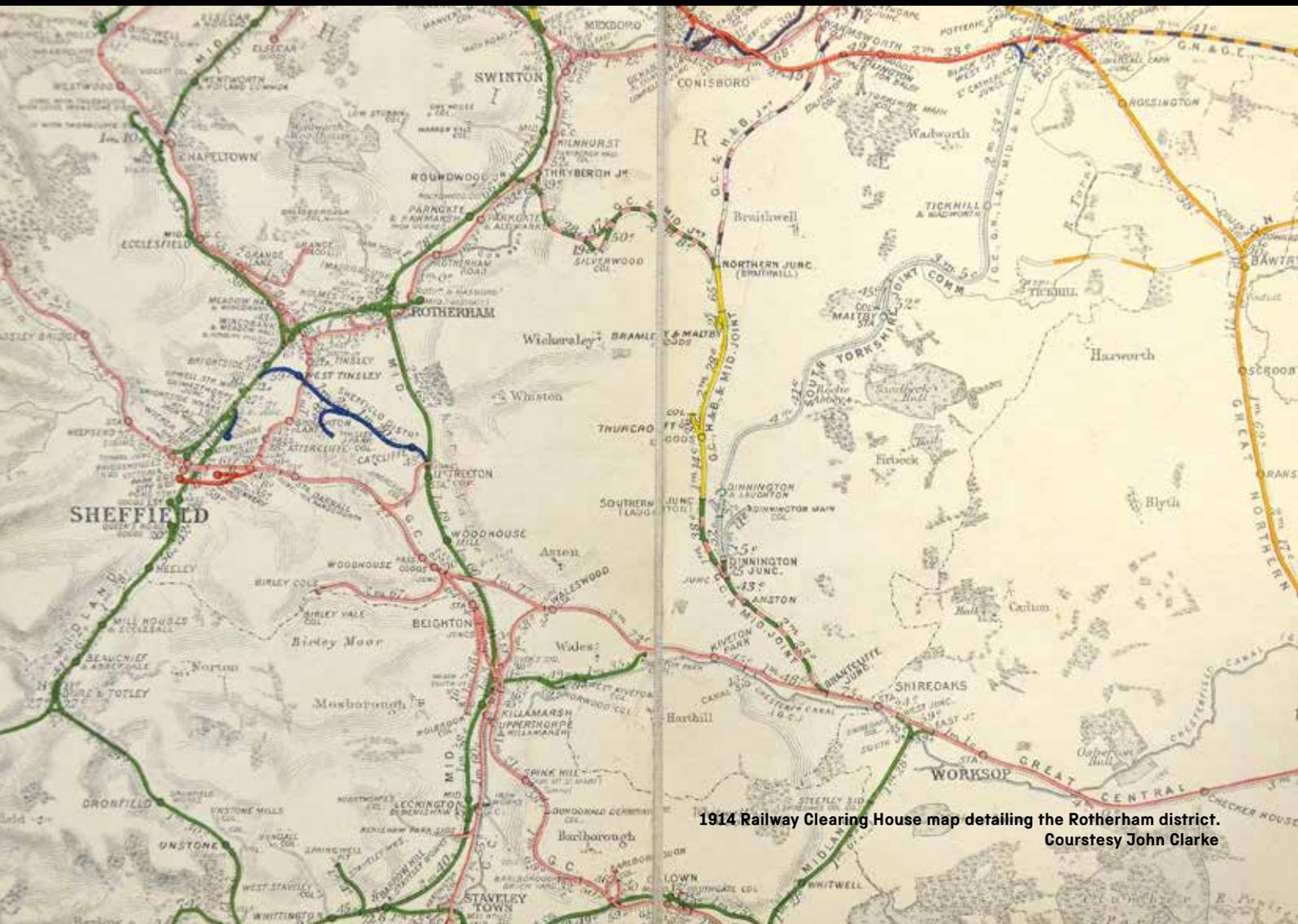


# RAILWAY MUSEUM

# VOLUNTEER

EDITION 34 AUTUMN 2018



1914 Railway Clearing House map detailing the Rotherham district.  
Courtesy John Clarke



Judith McNicol – Director

### **A WORD FROM EMMA**

Welcome to Volunteer News. In this edition we feature stories about volunteers and staff who support our archives and research in York and Bradford. Tony Oldfield, now Lead Volunteer, gives his regular update on the latest Forum meeting in June where he outlined his new role. On the back page we introduce a new feature to display photographs taken around the museum, of items in the collection.

The museum hosts our local STEM Ambassador Hub, STEM Ambassadors are volunteers from science, technology, engineering and maths backgrounds who volunteer to help inspire young people into STEM. They are part of our wider community of volunteers and supporters and we're pleased to be including a regular interview with STEM Ambassadors in future editions, alongside our interviews with volunteers and staff- you can read the first one this edition.

Over the Summer Holidays our learning team have been testing activities for this year's Future Engineers. You can read about how volunteers have been involved in testing and improving the volunteer offer. I am going to end on a call for your help – Future Engineers was a great success last year and we want it to be even better this year. We need to put together a team of 50 volunteers to support activities happening around the museum – email me at [emma.faragher-smith@railwaymuseum.org.uk](mailto:emma.faragher-smith@railwaymuseum.org.uk) to offer your support.

Emma Faragher Smith, Volunteer Coordinator

### **A WORD FROM THE DIRECTOR**

We're in that curious time of year when some of our colleagues are taking well-deserved breaks whilst others are extremely busy welcoming tens of thousands of visitors to the museum every week.

Behind the scenes, we're continuing to develop our masterplan (which includes major ambitions for Locomotion in Shildon) as nine separate projects. These include a complete renovation of Great Hall, the creation of a Central Gallery that will unite our complex site, and a new interactive engineering gallery, Wonderlab.

Recently the outline planning application for the wider York Central project was submitted. This once-in-a-lifetime opportunity to regenerate 70ha of brownfield land includes plans for new homes, shops, offices as well as much of our masterplan. As of going to print, we are currently taking a little more time to consider all the access options through the museum site presented at public consultations last month.

Do visit the About Us section of the website for more details on our masterplan and York Central.

Thinking beyond York, next month I am lucky enough to be travelling to St Petersburg to visit the Russian Railway Museum, which – amongst other things – features a railway-mounted missile system. Now wouldn't that be an explosive addition to our collection?

Judith McNicol – Director



Collection Care volunteers work on the Run Wrake Collection.  
 Courtesy Guenievre Jacobucci

### BRADFORD VOLUNTEERS IMPROVE COLLECTION CARE AND DISCOVER SOME EXCITING NEW COLLECTIONS

SMG museums host incredible collections and here at the National Science and Media Museum amongst other amazing objects, we hold the oldest photographic negative taken by William Henry Fox Talbot as well as the camera used to capture the first ever moving pictures.

Of course, such wide-ranging objects need dedicated care, including appropriate storage and packaging to protect and preserve them for the future. Collections can arrive at the museum through a variety of paths: they could be purchased, transferred or donated and for different reasons, when they arrive at the museum, they may not be stored in the most suitable way. This is the case for two collections hosted by the museum that needed to be repackaged to improve their storage. The museum Collection Care volunteers have been working with Kirsty Fife, Curator of Library and Archives and Emma Hogarth, Conservation and Collection Care Manager, to help care appropriately for them.

One such collection comprises 600 film posters ranging from 1930 to 1980 donated by the Merseyside Film Institute. Unfortunately, the posters were stored folded and this is damaging as the paper deteriorates along the fold lines. With the help of some very enterprising and caring volunteers all posters have now been stored flat in appropriate new drawers. Alongside this process participating volunteers have also been able to collect long needed basic cataloguing information, including for example, the dimensions of each poster.

Volunteers have also started working on an exciting collection of art work by animator Run Wrake, a British animator and film director who developed a lot of animation for MTV over the 1990s. The collection was donated to the museum and volunteers are currently relocating his animation drawings into appropriate conservation graded boxes.

Our enthusiastic volunteers have been coming in once a week to work together in the research centre, Insight. They have been doing fantastic work and have made a real difference to the way these collections have been cared for. We can now be confident they are appropriately packaged and tended for the future. Throughout, the project volunteers have also been developing their practical skills in collection care and cataloguing and it has been a great opportunity to get up close with collections that may not be readily shown to our visitors.

Fifteen Bradford volunteers recently visited the National Railway Museum including Peter Harvey, who is a photographer himself and joined as a volunteer through the Royal Photographic Society, who was proud to say that he enjoys volunteering and 'definitely gets more out of it than he can put in', thanks Peter.

Guenievre Jacobucci – Volunteer Coordinator, Bradford



Leanne Roberts briefs the volunteers prior to testing the activities.  
Courtesy Stephen Hillyerci



Future Engineers activity with colour coded robots.  
Courtesy Stephen Hillyer

# FUTURE ENGINEERS: MORE VOLUNTEER OPPORTUNITIES THIS YEAR

Future Engineers, one of the most popular special events held at the National Railway Museum (NRM) in York, will offer volunteers new and improved opportunities this autumn. Now in its third year this innovative programme of hands-on activities is designed to introduce children to engineering at an early age, while encouraging young people to think about engineering as a challenging and interesting career.

As 2018 is the Year of Engineering the event has even greater significance, enabling the museum to support the Science Museum Group campaign to promote science, technology, engineering and maths learning. British companies are saying they need to attract and train thousands of young engineers and technologists to meet a growing skills gap.

Future Engineers will take place during half term week from 27 October–4 November. The project team hopes to attract at least 40,000 visitors this year compared to 43,000 who attended over two weeks last year. Following half term will be eight secondary school days from 7–16 November.

‘With Future Engineers we engage with children and young people aged between 3 and 14,’ says Joanne Robinson, Project Manager. ‘Secondary school students are beginning to think about their career options so when promoting engineering to them we highlight the three key skills of investigation, problem solving and team working.’

‘Future Engineers also provides valuable feedback which informs our educational programme, working with teachers when they are planning visits to the NRM.’ Says Leanne Roberts, who manages volunteers for the event: ‘We received really great and welcome feedback from volunteers after the event last year, including suggestions for what we can do better and how we can help volunteers feel more engaged. As a result, we’re working closer with volunteers and the Volunteer Forum to make sure volunteers are right at the heart of what we are programming.’

Leanne is currently working with a small team of volunteers to test some of the activities happening this year and after the great feedback you gave last year we have introduced two new volunteer tasks for 2018, designed especially for our existing volunteers:

- Future Engineers Info Point: ideal for volunteers who know the museum inside out; fountains of knowledge with friendly faces required.
- Engineering Hub Buddies: supporting the visiting engineers not familiar with the museum to set up and deliver their activities.

We need up to 50 volunteers to run Future Engineers this year and by volunteering you will make a real difference in helping to make it a success. Email [emma.faragher-smith@railwaymuseum.ac.uk](mailto:emma.faragher-smith@railwaymuseum.ac.uk) by 30 September to get involved.

If you’re not volunteering for Future Engineers but want to know more there will be half hour briefings for all colleagues at the museum, starting at 9am at the Great Hall info point on: 3, 8, 11, 13, 16 and 19 October.

Here is a summary of Future Engineers activities happening this year:

- Engineer Like Me: An interactive show with 75 visiting engineers with differing skills and experience.
- Passenger Flow: A hands-on floor game.
- Robot Railways: Colour coded networks; will the robots be on the right lines?
- Screwball Signals: A popular game returning after two years.
- Science Busking: Also proved popular last year.
- Coding for Under 5s: Using mini-robots to describe coding.
- Engineering Hub: Supported by different engineering companies each day.
- Science Rapper: Performances on both weekends.
- 3D Drawing Workshop.
- Research Zone: A look at new technology with university researchers.

Ron Miller – Information Point Volunteer



**Crab Railway Reading Lamp.**  
 Courtesy John Clarke

**NATIONAL RAILWAY MUSEUM RESEARCH TEAM**

Dr Oli Betts, Research Lead at the National Railway Museum and Dr Thomas Spain, Research Associate, are involved with the wide-ranging research programme of the Museum Group. While the curatorial team forge relationships with the heritage sector and public partners, Oli and Thomas develop and maintain contacts within the academic sphere with a view to establishing long-term programmes of collaboration with universities and colleges.

One aspect of their role comprises the championing of our rich object and archive collections, both nationally important in terms of breadth and scope and providing a unique snapshot of a service industry. Raising the profile of the museum as a research-driven, collaborative organisation forms part of its remit to use world-class research to underpin permanent and temporary exhibitions.

One difficult yet rewarding task is helping bring research projects to fruition. The museum has been involved in supervising several collaborative PhDs, including Thomas's own on 'Food Miles' and finding new academic partners and students to work with is a major part of their effort. Applying for major funding bids is becoming a key part of museum strategy and Oli and Thomas have been working on several large projects rooted in railway history and our collections.

The museum collection is so much more than source material for the pursuit of railway history; it has meaning and resonance amongst a wide range of academic disciplines and creative arts. The archive provides inspiration for creative writing, artwork, marketing and business management, as well as wider social and economic history, all of which emphasises the importance of the industry to society. For these reasons, the team has developed links with academic institutions and provides a first point of contact for student visits or meeting visiting academics at the museum.

Collaboration with other institutions has included 'Murder on the Rails', which saw students from the English Department of York St. John University use the collection for a creative writing module. The team is involved in maintaining our long-term relationship with the University of York Institute for the Public Understanding of the Past, where the challenges of putting public history on display are revealed and discussed.

Students from the University of Sheffield seized the opportunity to obtain a placement at the museum; this is a two-way partnership in which the student can obtain first-hand experience of work in the cultural sector and gain new perspectives on research and working practices. A recent collaboration with the University of Sheffield Faculty of the Arts and Humanities was a conference on Museums in Context and Partnership including publication of a book, 'Railway Cultures', combining literary, artistic and historical research in one volume.

Dr Oli Betts and Dr Thomas Spain



Hitachi volunteers plan their work.  
Courtesy Stephen Hillyer

## **LOCOMOTION – HITACHI VOLUNTEER PROGRAMME**

Locomotion is running a programme of school visits for Key Stages 1 to 4 reflecting the Science, Technology, Engineering and Mathematics (STEM) elements of the school curriculum and a programme for children with special educational needs. There are a number of different educational programmes available for schools to choose from and the details are available on line at [locomotion.org.uk/learning](http://locomotion.org.uk/learning).

This article is about the programme for Key Stage 2 (9 to 11 years of age) which involves Hitachi volunteers in a 'hands-on' STEM workshop called "Electric Engines" where children design and build their own battery-powered locomotive.

Although the two Explainers at Locomotion have overall supervision of each visit, the delivery is carried out by a team of volunteers from the Hitachi Rail Vehicle Manufacturing Facility, operated by Hitachi Rail EU, the manufacturing and assembly plant for Class 395 Javelin trains amongst others, at nearby Newton Aycliffe.

There are currently fifteen Hitachi employees that form the volunteer team. They have a variety of roles at Hitachi including engineering production, technical training and administration and come from a wide range of backgrounds including a soldier with REME and policeman. At the time that I met the Hitachi volunteers their employment with Hitachi ranged from two years to just six weeks. Before their first presentation to school children the Hitachi team complete a short training programme under the guidance of Explainers Gareth Shaw and Claire Madley.

A common theme amongst the Hitachi team is their enthusiasm and pleasure in helping children develop engineering skills as well as team building and having fun whilst learning. The "Electric Engines" visit programme starts with a discussion about the pros and cons of a steam engine, using LNER Green Arrow as an example, against an electric locomotive, NER Bo-Bo No1. This includes dressing up by the Hitachi staff and role play by the children using signs for smoke and fire.

Circuit diagrams are then explained and discussed including a comparison of plastic, wood and metal as conductors of electricity followed by an interactive circuit building session to build, test and draw different circuit types. During this activity the children enthusiastically volunteer to wear tabards representing the various circuit parts including holding ropes to represent wires that complete the circuit. The children then form small teams which are provided with a selection of equipment including parts from a model construction system together with wires, switches, wheels, gears etc. all of which enables them to achieve the objective of building a working electric locomotive.

The final element of the workshop is a race to test the locomotives against each other which all the children enjoy even if they don't win.

Bernie Waddington – Contributor



(Top) Stonehenge, Salisbury-GWR negative A1682.  
(Bottom) GWR stand, Shepherd's Bush Exhibition 1911-GWR negative A1037.

# PHOTOGRAPHIC COLLECTIONS ARCHIVE

The photographic archive in the National Railway Museum (NRM) is a goldmine of information in visual form that could evoke lost memories for many people. Many of these records are being translated into digital format soon to be available on-line for the perusal of everyone. We take a look at how the project is going and some of the people involved in making it happen.

Zoe Wolstenholme arrived at the NRM in February this year after working as Archive Assistant at the National Science and Media Museum in Bradford. Zoe studied English Literature at the University of Exeter where she volunteered at the Bill Douglas Cinema Museum which is a public museum as well as an academic research facility. She went on to study for her Masters degree in Art Museum and Galleries and became a Curatorial Fellow at the Charleston Trust where she wrote a research paper on dress and hat design. When she had recovered from all that Zoe went on to work as a gallery assistant at the Royal Botanic Gardens in Kew. Whilst at the Science and Media Museum Zoe worked on such famous projects as those from the Daily Herald Archive where she honed her skills in the art of archival cataloguing from her supervisor Kirsty Fife.

Zoe is now the Archivist for the photographic collections here in York and a large proportion of her work involves working with volunteers who are engaged in digitising, researching, listing, typing up registers and generally looking after and preserving the collection. These volunteers include the Liverpool Street volunteers, Caledonian Railway Association volunteers, London North Eastern Railway Society volunteers, South Western Circle volunteers, Great Western Railway volunteers and Derby Official Negative volunteers as well as individuals such as Miriam Davey, Anne McLean and Nick Ansell.

Using methods standardised across the Science Museum Group, records are added to Media Library, a database currently on the Intranet which will eventually make the images available via the Collections-Online site. Volunteers work on the creation of digital images as well as listing references from photographs using information such as notes found on the back of prints. Keen to promote the work of the archive Zoe explained how 'we celebrated International Archive Day in June with a cake baked to a recipe taken from a household recipe book in the archives, which was used in George Stephenson's house.'

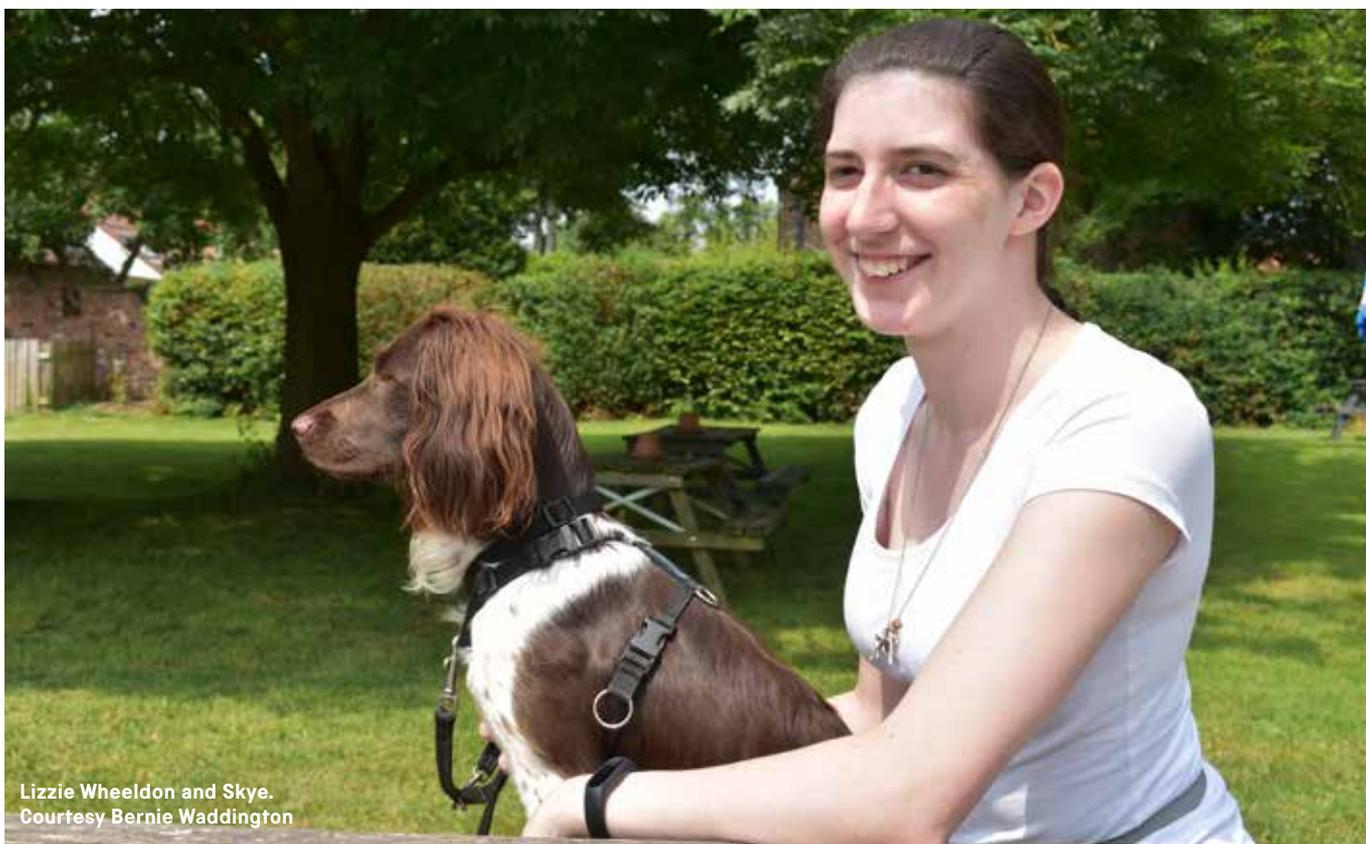
One of Zoe's interests in the collection is how the Great Western Railway used photography to market the British landscape and monuments such as Stonehenge on 'the holiday line' which is how they quote themselves in the image of the Great Western Railway stand at Shepherd's Bush Exhibition in 1911 (see facing page). Both images were digitised by the Great Western Railway photographic volunteers.

Another project, this time using Volunteers from Network Rail, involved repackaging and listing photographic collections. First, they worked on digital photography stored on CDs which needed to be repackaged and moved to create space in the Photographic and Sound Store as CDs do not require the same lower storage temperatures as many photographic processes. The CDs were listed, ordered and put into new archival CD storage boxes.

Next, the volunteers worked on the Stanier House Collection. When the 'Big Four' railway companies were nationalised in 1948 their assets were acquired by British Railways. The assets included virtually all the official photographic collections which had been produced by the private, main line railway operating companies since about the 1870s. The photographs in the Stanier House collection were produced by the London Midland Region Public Relations Office, originally based at Euston House in London and then at Stanier House in Birmingham, hence the name of the collection.

The Network Rail volunteers worked through four boxes of material, placing the prints in archival sleeves and separating duplicates. 'We are very grateful for the work done by the Network Rail volunteers, which we would not have been able to do without their kind offer to help.' 'Working with volunteers is brilliant' says Zoe as she continues to gain a real insight into the collection from them, learns lots and is proud to say 'she couldn't do it without them.'

Brian Gardner – Assistant Editor



Lizzie Wheeldon and Skye.  
Courtesy Bernie Waddington

#### **STEM AMBASSADORS – DR LIZZIE WHEELDON**

Lizzie Wheeldon is a “Yorkshire Lass” who attended Ripon Grammar School before enrolling at The University of York, in October 2010. She has recently graduated following the completion of her PhD.

Soon after becoming an undergraduate on her initial chemistry degree course, Lizzie took part in her first event as a STEM ambassador which was a science trail in the chemistry department assisting with a DNA model workshop. Following this, Lizzie took part in the ‘Chemistry at Work’ programme and I suspect that it was not a total coincidence that one of her next visits as a STEM ambassador, was to her old school, Ripon Grammar.

Over the years Lizzie has taken part in STEM workshops in schools, attended speed networking events and a primary teacher conference where she helped promote the use of STEM ambassadors to an audience sometimes unaware of their existence.

Lizzie is also involved with various outreach events in the York Science Outreach Centre, which are dedicated labs in chemistry for outreach, such as Salters Institute festivals, sixth form conferences, chemistry in colour and chemistry of art. Also, this year at the annual ‘Inspirations’ event run by North Yorkshire Business and Education Partnership (NYBEP) at Elvington Air Museum she ran a ‘Women into STEM’ stand. Although Lizzie’s specialist subject is chemistry, she also talks about the other primary sciences and the other elements of STEM i.e. Technology, Engineering and Mathematics. Lizzie says that ‘being a STEM ambassador during her university studies constantly reminded her why she likes science so much.’

Lizzie also takes part in the “York Festival of Ideas” held in June each year. In 2016 the theme was ‘Tick Tock’ and Lizzie was part of a team that built a clock with a liquid crystal display powered by electricity. The interactive activity for the public was to insert zinc and copper electrodes into potatoes, lemons or cola to show how the created flow of electricity will power a light or show voltage on a voltmeter.

The process that allocates STEM events is self-supporting via a website that all ambassadors can access, and they are free to choose which events to attend. Jonathan Hopwood-Lewis the regional STEM Ambassador Hub Manager, based at the National Railway Museum, tells me that ‘Lizzie is one of the longest serving and most trusted ambassadors who is very independent and rarely needs help from the Hub team’. Jonathan also says that ‘she has been a great help passing on new contacts and giving feedback on how various activities can be improved.’

Currently Lizzie is coordinating and delivering STEM events with NYBEP based at York Science Park, Heslington.

Bernie Waddington – Contributor



Lead Volunteer and Forum Chair Tony Oldfield.  
Courtesy Steve Hillyer

## **VOLUNTEER FORUM UPDATE**

The quarterly Volunteer Forum Meeting was held on 25 June 2018. Following a Masterplan update from Judith McNichol, Leanne Roberts outlined the 2018 Future Engineers programme and explained ways volunteers can help, see Future Engineers article for more details.

The next topic discussed was the Lead Volunteer Role which is part of the Volunteer Development program for the National Railway Museum. I accepted the role after some deliberation for a number of reasons. It is clearly an opportunity for volunteers to have a direct interface with senior management and I believe this is good for the museum and volunteers, although it brings three interesting challenges. The first challenge is the need to give the collective viewpoint of all volunteers rather than my own personal ideas on matters that affect us all. Secondly, we need to improve our lines of communication to gather comment on specific subjects that matter to us and this involves volunteer interaction with the Forum and vice versa; setting this up must be a priority. The third challenge is involvement in volunteer strategy and values, working with Emma our Volunteer Coordinator, to assist her ongoing development of these subjects. It is a challenging personal move, but I am confident I can meet the challenges and ensure it succeeds as part of the enhancement of the volunteer experience in the museum.

Methods to improve communication were discussed and these ranged from a new noticeboard to a new shared inbox (now available at [Volunteer.Forum@railwaymuseum.org.uk](mailto:Volunteer.Forum@railwaymuseum.org.uk)), to contact the Forum. Forum members will be asked to sit on working groups, help with planned volunteering conferences and improving communication in our museum volunteer community.

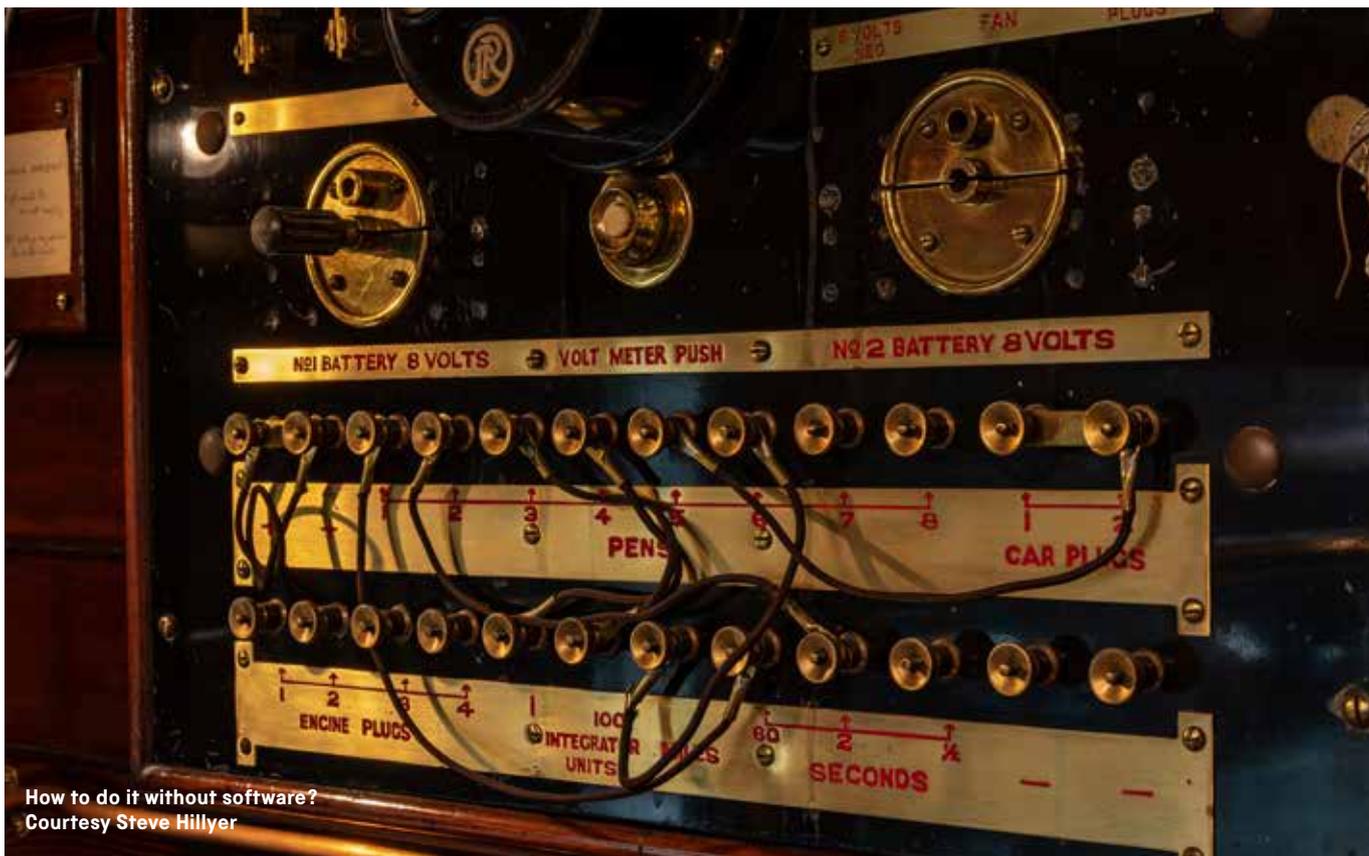
Next, we discussed the recognition and awards scheme which has been running for several years now. Forum members agreed that there may be scope to look at gaps in the current system where presentations are only made at ten-year intervals. It was agreed we should review this with any agreements being introduced in 2019.

Brian Goodfellow a member of Locomotion, sits on the Forum and presented a written report at this meeting. In summary, the report informed us that the new manager of Locomotion, Dr Sarah Price, will take up her role later in the year. Work is ongoing on the coal drops and should be completed in the Autumn and Locomotion volunteers will be supporting the Flying Scotsman visit in July with a series of planned events.

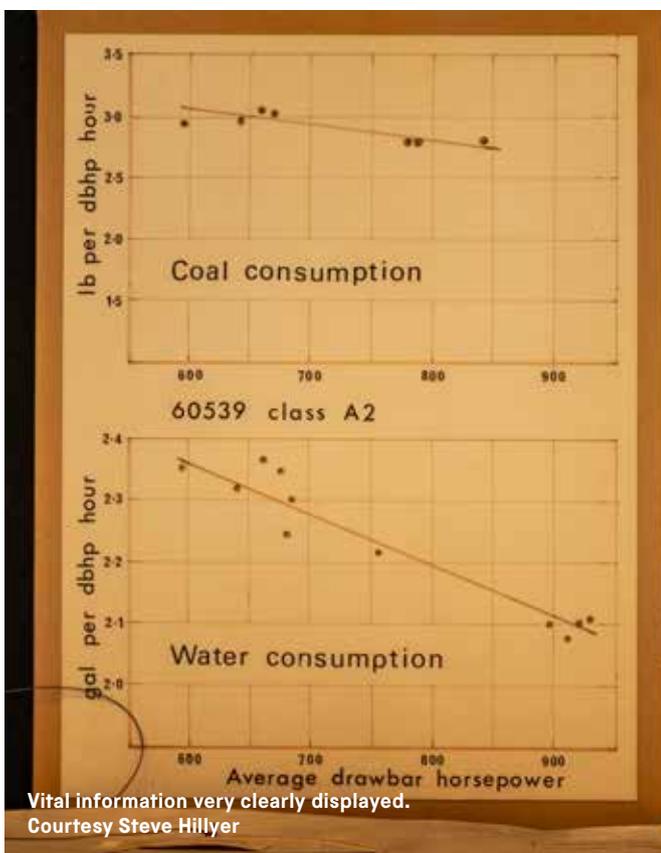
If you have query for the team or would like to suggest an agent item for their meetings please contact the forum on our new email [Volunteer.Froum@railwaymuseum.org.uk](mailto:Volunteer.Froum@railwaymuseum.org.uk) or phone Emma Faragher Smith who will ask a member of the forum to contact you.

Tony Oldfield – Chair, Volunteer Forum

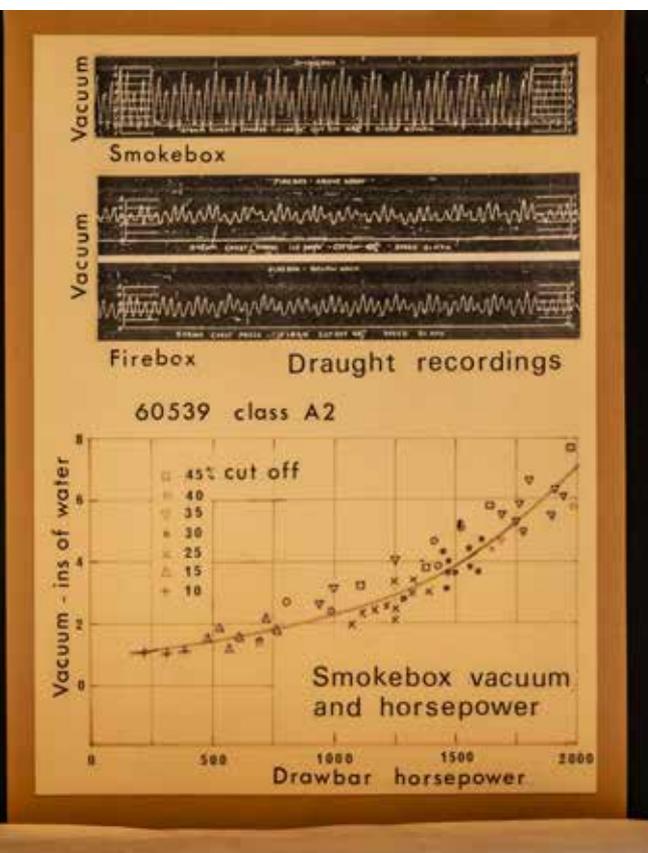
# DYNAMOMETER CAR



How to do it without software?  
Courtesy Steve Hillyer



Vital information very clearly displayed.  
Courtesy Steve Hillyer



For enquiries relating to Volunteer please contact Assistant Editor, Brian Gardner  
brian.gardner@sciencemuseum.ac.uk  
or on 01904 685715 (Mondays only)

Talk with us on Twitter  
@NRMVolunteers

For volunteering enquiries contact the Volunteer Team at Volunteer.nrm@nrm.org.uk