

It will be recalled that our late Chairman, David Stephens, left various model railway items to the Fraternity on the understanding that proceeds from their sale should go towards giving members a 'day out'. After consideration, the Committee decided that this should take the form of a visit to the West Somerset Railway on Thursday, 2nd October - the first day of a four-day Autumn Steam Gala to mark the 50th anniversary of the closure of Taunton loco shed (83B).

We could not have chosen a better day for the outing; the weather was pleasantly warm with sunshine all day. In all, 33 members and guests took part and everyone was provided with a Day Rover ticket, which allowed unrestricted travel over the line - and members certainly took advantage of this.

The special timetable was worked by no fewer than ten locomotives, all of GWR design. Several of the visiting engines masqueraded as long-since scrapped classmates which had been Taunton-based at one time or another. 'Hall' Class 4-6-0s 4936 and 6960 appeared as 4932 *Hatherford Hall* and 7909 *Heveningham Hall* respectively, 2-8-0 3850 as 3863, Large 2-6-2T 4160 as 4131 and 0-6-0PT 4612 as 9670. Another visitor, 7820 *Dinmore Manor*, ran as itself while resident WSR engines - 2-6-2Ts 4566 and 5542, and 4-6-0 7828 also took part. The last-named sported its new name *Norton Manor*, conferred to commemorate the local headquarters of 40 Commando, Royal Marines. Several members took advantage of the morning train which ran from Bishops Lydeard to the new platform near Norton Fitzwarren, where the recently-completed turning triangle was inspected.

In the late afternoon, most members made their way to the Beach Hotel, adjacent to Minehead Station, where a splendid cream tea was enjoyed before returning to Bishops Lydeard on the last scheduled train of the day. As happily there was still some money available from the 'outing fund', the Chairman was able to present a cheque to Paul Conibeare, General Manager of the WSR, to cover the cost of a new GWR-style station seat to serve as a memorial to David. We were delighted that David's widow, Myrtle was able to be with us at this presentation and also that she enjoyed the day in the company of so many of David's Fraternity friends.

This seat has now been obtained and can be found on Williton station with an appropriate plaque affixed to it, which reads:

IN MEMORY OF DAVID STEPHENS (1945-2012)

CHAIRMAN WELLS RAILWAY FRATERNITY 1999-2011.

In all, a wonderful day out to remember David - a day which I am sure he would have enjoyed greatly.

RAILWAYS IN WESSEX by CHRIS CHALLIS and
RIO GRANDE by PETER BOWEN (13 January 2015)

This evening saw two contributions from Fraternity members. First, Chris Challis took us on a 'Wessex Tour', featuring slides taken by Bill Chapman during the last days of steam on the Southern Region in the 1960s. Consequently many of the locomotives we saw, predominantly Bulleid 'Pacifics', were in a run-down and dirty condition. Nevertheless, the 'journey' was a most enjoyable and nostalgic one. We started at Portsmouth and proceeded to Southampton and Salisbury before taking a quick look at the Somerset & Dorset at Pylle and Shepton Mallet. Returning south again, we arrived at Swanage (in pre-preservation days, of course) and thence westwards to Weymouth for a run through the streets along the tramway to the Quay. Finally, we made our photographic way via Dorchester to Bournemouth. It was a splendid show, invoking memories for many of us.

RIO GRANDE

For the second half of the evening, we crossed the Atlantic to see a fascinating presentation of photographs and film clips, put together by Peter Bowen, on the Denver & Rio Grande Western Railroad. The 3'0" gauge lines of this company in Colorado and New Mexico were built in the late 19th century primarily to serve the many gold and silver mines in those states. When the lines became redundant, some sections were handed over to the state governments to further the growing tourist industry, and today two extensive and popular heritage railways still preserve the memory of the former D&RGW narrow gauge network. One is the Cumbres & Toltec Scenic Railroad which runs from Chama in New Mexico and Antonito in Colorado - most of the 64-mile route being in the first-named state. The other is the Durango & Silverton Railroad, a 45-mile long line, opened in 1881 and entirely within Colorado. Both railways mainly use powerful 2-8-2 steam locomotives of the former D&RGW, mostly dating from the mid-1920s.

Most of the scenes we were to see dated from the 1960s and we witnessed many breathtaking views taken on the two lines. The Cumbres & Toltec route passes through the Cumbres Pass where it reaches its summit at just over 10,000 feet above sea level ! A most amusing interlude was provided by a short film of a crew trying to turn a locomotive on a turntable - and failing to get things quite right. The operation therefore took several minutes to perform as the engine was moved to and fro in an attempt to get the right balance - one was reminded somewhat of Buster Keaton in 'The General'. Peter concluded the show with a quick look at a magnificent model railway commemorating the D&RGW and some shots of present day Union Pacific diesel locos which had been repainted in the 'Rio Grande' livery under a 'Heritage Paint Scheme'.

A vote of thanks to both Chris and Peter for two most interesting contributions was given by John Uncles.

MAPPING OUR RAILWAYS FROM THE AIR MAYNE

by TRAVIS

(10 February)

This evening's subject was a most unusual one for the Fraternity when Mr Travis Mayne gave a presentation entitled 'Mapping Our Railways from the Air'. Mr Lane was employed by Blom Aerofilms Ltd, a name unknown to most of us but all became clearer when he told us that the noted British company, Aerofilms Ltd., which had been founded in the 1920s (and the name of which was more familiar) had been taken over by Blom in 1997. Blom Aerofilms, a Norwegian company with its headquarters in Oslo, had grown to the extent that it now operated in nine countries throughout Europe; its British office had been located in Cheddar since 2003. The company used the latest technology in aerial surveying and now operated a fleet of 16 survey aircraft and two specially-equipped helicopters whilst experiments were being undertaken with the use of remotely-controlled 'drone' aircraft.

We were amazed to see the great degree of accuracy now being achieved using very sophisticated digital cameras, a development which is rendering traditional surveying using theodolites etc on the ground virtually obsolete. Amongst other advantages, aerial surveying eliminated the considerable dangers to staff when undertaking a conventional survey of a railway or road. Although not aerial surveying, the company also operated a small number of road and railborne vehicles capable of undertaking highly detailed surveys using similar technology. We saw a video of a rail vehicle carrying out a survey of a stretch of line, recording not only all levels but the condition of every sleeper. also highlighting problems with embankments, cuttings and even lineside fencing - all at a speed of up to 50 mph !

MAPPING OUR RAILWAYS FROM THE AIR - continued

Mr Mayne outlined recent work which the company had carried out with regard to various railway enhancement projects and surveys for new electrification schemes - including the proposed route of the controversial HS2 high speed line between London and the Midlands. He added that Blom were currently engaged in aerial surveys of the whole National Rail network, involving some 16,000 kilometres of line, and that it was hoped to finish this work during 2015.

Ken Smith proposed a vote of thanks to Mr Lane for a thought-provoking presentation which had highlighted the rapid and amazing advance of new technology.

THE GWS STEAM RAILMOTOR

by PETER JENNINGS

(10 March)

This evening we welcomed Mr Peter Jennings, a member of the Great Western Society, who gave us a most interesting and informative talk on the GWR steam railmotor No.93, which has been restored to working order. He began by illustrating one of the first attempts at creating a self-propelled railway passenger vehicle; this was of local interest, being the 'Fairfield', built by the Bristol & Exeter Railway in 1848. It was not, however, until the very end of the Victorian era that interest in providing a unit which would be much more economical to operate over lightly-used branch lines and which could compete with the new electric trams, really developed. The GWR was not amongst the first companies to pioneer railcars - the Taff Vale Railway for instance experimented not only with steam but also battery-electric and petrol-driven vehicles. Following the loan of a steam railcar from the London & South Western Railway, a Great Western design appeared and, between 1903 and 1908, no fewer than 99 steam railmotors were built - making the GWR the greatest user of such vehicles in Britain. The Great Western ones took the form of an open saloon carriage with a nominally independent small steam locomotive incorporated at one end. A linkage system enable the railmotor (as they were known on the GWR) to be driven from either end. The engine unit had a vertical boiler with no fewer than 419 fire tubes, a water tank holding 450 gallons and drove a 4-wheeled bogie, using unusually for the GWR, outside Walschaerts valve gear. Each railmotor weighed 42 tons in working order.

The railmotors proved highly successful and popular and worked in all parts of the GWR system with many new halts being built on lightly-used branch lines. In fact, they were often too successful - the service in the Stroud Valley for example seeing a staggering 700% increase in passenger numbers in the first year. This led to the introduction of trailer cars but these naturally inhibited the railmotor's performance. The GWR was to return to the use of normal locomotives, developing its push-pull system, whereby up to four trailers could be used. Nevertheless steam railmotors operated for many years with the final services not being withdrawn until 1935.

No.93 was one of the final batch built in 1908 and its restoration by the Great Western Society commenced in 1997, the work being undertaken at the workshops of the Llangollen Railway with the boiler work being entrusted to the well-known company of Israel Newton & Sons Ltd of Cromford, Derbyshire. The work was completed in 2012 and No.93 moved to its new permanent home at the GWS Didcot Centre, where it has been joined by a restored trailer car.

THE GWS STEAM RAILMOTOR - continued

No. 93 has proved extremely popular and has visited several heritage lines, as well as spending an extremely successful weekend visit to the Liskeard to Looe branch line, still thankfully part of the National Rail network. For this No.93 made its first outings onto the main line, being hauled in steam by a diesel locomotive between the Bodmin & Wadebridge Railway and Liskeard. We also saw photos of No.93 at the famous 'Three Bridges' location on the Southall - Brentford branch line where the railway, Grand Union Canal and a road all meet at the same point - a real challenge for a photographer.

Peter ended his presentation with a real treat for us - a video taken in the cab at the 'business end' of No.93 on the climb up from Coombe Junction to Liskeard on the Looe branch. Not only were we able to enjoy the activity in the cab - Peter stated that experience had soon revealed that it was not possible to fire the railmotor effectively whilst it was in motion - but also the wonderful sounds made by the little engine.

Peter was accompanied on his visit to the Fraternity by the No.93 Project Team Leader, Graham Drew, and, after our questions had been dealt with, an appreciative vote of thanks was given by Derek Lampard.

45 YEARS OF RAILWAYS AT WORK AND PLAY by DAVID HARTLAND

(14 April)

Our speaker on the 14th April was David Hartland and his subject was intriguingly entitled '45 Years of Railways at Work and Play'. David began by briefly summarising his career following his graduation from Cambridge - where he had been an active member of the University Railway Club. He first of all joined GEC where he gained experience of the electrical industry. In 1984 he moved to Brecknell, Willis & Co Ltd, retiring 30 years later as its Engineering Director. He calculated that during his time with Brecknell Willis he had travelled some 2.3 million miles on company business and visited 42 different countries. He had kept all his tickets and showed us a photograph of part of his collection to illustrate the point !

Henry Brecknell had founded the company in 1854, originally specialising in the production of brass castings. Later the company became Brecknell, Munro & Rogers Ltd and towards the end of the nineteenth century entered the new electrical industry. At its peak the company employed some 1,000 people, mainly in its factory in Thrissell Street, Easton, Bristol. An important early contract was for the supply of overhead wiring and equipment for the Bristol Tramways which in the 1890s were being converted to electric operation from horse traction. The company also pioneered a trolley reverser system to dispense with the necessity of this having to be done manually by the conductor at tram termini. In the 1920s Arnold Willis became a partner and the company acquired its present name, developing its specialisation in electrical equipment for trams and later trolley buses and railway vehicles; over the years some 20,000 sets of gear were supplied for trolley buses alone. The company built its first pantographs in 1924 for use on trains on the pioneer electrified Morecambe to Heysham line of the Lancashire & Yorkshire Railway.

In the years immediately before the Second World War, the Government provided incentives to encourage vulnerable industries to relocate away from the major cities and in 1938 Brecknell Willis moved its factory to Chard. Nevertheless the company retained some offices in Jacob Street, Bristol, and these were destroyed in the air raids of January 1941.

45 YEARS OF RAILWAYS AT WORK AND PLAY - continued

The new factory naturally became involved in the manufacture of armaments but within 15 years of the end of hostilities, trams and trolleybuses had virtually disappeared in Britain and the company entered a very difficult period. In 1973, however, a new design of pantograph was developed and successfully tested initially on the little Seaton Tramway; this led to major orders in connection with the ongoing modernisation of British Railways and the 1,000th pantograph was delivered in 1984. In 1989 a Class 91 electric locomotive, fitted with a Brecknell Willis pantograph, achieved a record 162 mph during high speed trials on the East Coast Main Line. More experimental work was undertaken in the years immediately following and this involved the conversion of the electro-diesel locomotive No.73205 into a straight electric testbed as No.83301.

Brecknell Willis then became involved in several prestigious projects, including the Docklands Light Railway in London and the Singapore metro system. The DLR is interesting in that current collection is via a third rail with pickup on the underside as employed on several Continental systems and David commented that aluminium was now preferred for the third rail on London Transport with over 2,000 miles of such rail having been supplied. After 50 years with virtually no tramway development in Britain, Brecknell Willis became fully involved in the resurgence of light rail systems from the 1980s and work was undertaken for the Manchester Metrolink, Dublin LUAS and Birmingham Metro schemes, as well as the modernisation of the Blackpool system. The company was also very much involved with the design of the Channel Tunnel 'Eurostar' trains and as services were to be routed over the existing Southern Region d.c. lines from Waterloo until such time as the HS1 rail link was completed, it was necessary to include third-rail pickup equipment in addition to the 25KV a.c. and 3 KV d.c. pantographs. The French considered such a proposal to be impracticable - and indeed ludicrous - but the trains operated in a satisfactory manner for several years until the new line to St Pancras International was ready. In connection with this work another electro-diesel locomotive, No.73133 was made available for research purposes and the testing of the specially designed third-rail pickup equipment.

David's presentation was illustrated throughout with a fascinating selection of photographs and in its second part, we were entertained to a real miscellanea of railway items which had appealed to his sense of humour or interest. We started with the strange wording on the monument in Hawes churchyard in memory of the casualties in the Ais Gill accident of 1910 but then moved on to a collection of various and curious railway signs which soon had the audience laughing.

A most interesting and varied evening was concluded with a vote of thanks proposed by Brian Neill.

SWINDON WORKS**by BRIAN ARMAN****(12 May)**

The last meeting of the season took place at Wells Town Hall on the 12th May and, as is now a tradition of the Fraternity, this took the form of a talk by the Reverend Canon Brian Arman. Brian has recently retired, having been vicar of Filton in Bristol for many years, and is a great expert on the history of the Great Western Railway. Every year since 1999 Brian has given us a talk, usually on a GWR topic, and this year he took as his subject the early history of Swindon Works down to the year 1880.

In 1800 Swindon was a small market town with a population of about 1,100. The area had long been a junction of ancient trackways and roads with communications being improved by the arrival of two canals in the early 19th century. The building of the Great Western Railway between London and Bristol began in 1836 with the young Isambard Kingdom Brunel as engineer. In 1837 another young man, Daniel Gooch, was appointed as locomotive superintendent - a few days before his 21st birthday! In September 1840 the two recommended that the main workshops of the GWR should be established at the junction between the main line and a second railway then being built towards Cheltenham. This was near the little town of Swindon at a point some 77 miles from Paddington. Brunel and Gooch argued that this location would be ideal for trains to change engines as the line from London was virtually level whilst the remaining 41 miles to Bristol were somewhat hillier and would require more powerful locomotives.

Work got underway very quickly with the building of the new works, an engine shed and a major junction station, together with the first phase of a village of cottages for the workforce. As Wiltshire was a mainly agricultural county, it was necessary to attract men with engineering experience and many arrived, particularly from the industrial North East as well as South Wales and Cornwall. Some families walked hundreds of miles to Swindon, often taking many weeks to do so. Brian's own family had a background as blacksmiths and moved from nearby Wootton Bassett. His ancestor entered into service with the GWR in 1849 and he was followed over the years by members of every generation right down to his father.

The GWR reached Swindon in 1840 and for a while terminated at a temporary station at Hay Lane, about three miles west of the town, the whole main line to Bristol being opened throughout at the end of May 1841. The development of the railway works initially was concerned with the company's locomotives but carriage and wagon works were added in the late 1860s. Gooch was succeeded by Joseph Armstrong in 1864 and under his superintendency a series of major extensions followed. In 1846, when the GWR built its first locomotive at Swindon Works, the company had 240 employees and this number would increase to some 16,000 by 1922. By 1900 the population of the town had reached 70,000.

During his presentation Brian showed us a marvellous selection of photographs mostly dating from about 1865 until the 1880s - including probably some of the earliest railway photos ever taken. These covered not only the trains of that period with their magnificent broad gauge engines but scenes in various workshops, accidents and other mishaps as well as a fascinating insight into everyday life in Victorian Swindon. The GWR was very much a paternalistic company, not only building houses for its employees but also schools, a covered market and the famous Mechanics Institute and Library. As Swindon grew, the GWR founded a building society and encouraged cultural activities and social events. A First Aid organisation was set up and, following serious typhoid outbreaks in the mid-19th century, it developed its own Medical Fund which provided comprehensive health care for its employees and their families, including the building of an extremely up-to-date hospital for the time.

We agreed that Brian had given us a truly fascinating presentation providing a splendid insight into the railway scene and life some 150 years ago and a heartfelt vote of thanks was given by Chris Challis.

The Chairman also thanked Brian for all the support he had given to the Fraternity over the years and stated that the society had in consequence unanimously agreed to confer Honorary Life Membership upon him. He then presented an appropriate certificate to this effect to Brian who expressed his grateful thanks and referred to the pleasure that his visits to Wells had given him.

RAILWELLS

Saturday 8 and Sunday 9 August

Railwells, our annual model railway exhibition, will once again be held in Wells Town Hall, from 10.30 to 5.30 on Saturday, and 10.30 to 5.00 on Sunday. Railwells 2015 will be our 38th exhibition, and includes Scalefour SouthWest and a special section for the 3mm Society's 50th anniversary year.

Members are reminded that they can come in FREE on production of their membership card. Better still, why not offer your assistance as a steward, or in some other capacity. To do so, please contact the organiser, Chris Challis, on 01749 938362.

More information including lists of layouts, traders, demonstrations and displays at <http://railwells.com>

GARDEN RAILWAY OPEN DAY

Saturday 12 September

Once again Terry Dumbrell has invited Fraternity members to visit his garden railway in Holcombe and bring along O gauge locos and rolling stock to run. Anyone interested please contact Andrew Tucker on 01749 830695.

NEW MEMBERS

Please welcome the following who have recently joined:

Brian Arman (Filton)

Tony Cardall (Bath)

Ian Elliott (Evercreech)

2015–2016 PROGRAMME

All meetings are on Tuesday evenings, at 7.15 for 7.30, in Wells Town Hall.

8 September	To the Edge of theWorld - The Story of the Trans-Siberian Railway	Christian Wolmar
13 October	Swanage Railway – Project Wareham	Frank Roberts and Mike Walshaw
10 November	The Royal Train	Michael Foster
8 December	AGM followed by Quiz, set by last year's winner,	Brian Neill
12 January	Members Memories of the Somerset & Dorset followed by: In Control, by	
9 February	Bristol Buses	Roy Kethro Mike Walker
8 March	S&D – The End of the Line	Mike Beale and Bob Bunyar
12 April	Rail Resurgence in the West Country	Nigel Bray
10 May	Swindon Works: Part II	Brian Arman

AND FINALLY

Did you know that in 1930, the LMS appointed the distinguished scientist, Sir Harold Hartley, to the new job of director of scientific research. He established at Derby a new research laboratory where products of every kind were tested, including (to the delight of the publicity people) a device called “the mechanical bottom” which for many hours thumped up and down on a carriage seat, happily testing it and its upholstery to destruction!