The Roads and Road Transport History Association

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R&CHS Transport History Book Awards 2016

On 25 April 2016 the RRTHA was awarded the Railway & Canal History Society (RCHS) Road Transport History Book of 2016 prize for The Companion to Road Passenger Transport History. Ken Swallow, Chairman of the Editorial Group, and Martin Higginson, Editor, attended the Society's awards ceremony and dinner at the Hallmark Hotel, Croydon, formerly Croydon Airport Hotel. They are shown receiving the award from the RCHS President, Graham Wild (*Photo: Stephen Rowson*).



The prize is a handsome certificate, which it is proposed to display at the Kithead Trust, Droitwich and a cash award of £300, which we plan to devote to an appropriate and lasting project at Kithead.



There was stiff competition for the awards, which are made for the best books in each of four categories reviewed in the RCHS journal over the relevant year: Railways, Canals/Waterways, Popular Transport History and Other Transport.

The short-listed books were:

Canals/Waterways

The Trent & Mersey Canal: trade & transport 1770-1970 by Tom Foxon (winner, Canal Book of the Year)
The Old Forth & Clyde Canal by Guthrie Hutton
Shropshire Union Fly-boats by Jack Roberts (winner,
Popular Transport History Book of the Year)

Railways

The Functions & Organisation of the Midland Railway Engineer's Department by AE Overton & RF Burrows
The Railway: British track since 1804 by Andrew
Dow (winner, Railway Book of the Year and overall
Transport History Book of the Year 2016)
The Regional Railways Story: sectorisation to
privatisation by Gordon Pettit & Nicholas Comfort

Other forms of transport

Over Empires and Oceans: forging the international air routes 1918-39 by Robert Bluffield
Companion to Road Passenger Transport History by the R&RTHA (winner, Road Transport History Book of the Year)

We are delighted at the honour given to the 'Companion', which is the result over a decade's work by the Editorial Group and a team of some 150 authors, each experts in their respective fields. Particular credit is due to John Hibbs, the first chairman of the Editorial Group and his successor Ken Swallow; to Richard Storey for initiating the idea of following the R&RTHA's earlier Companion to the Road Haulage industry (Science Museum, 2002) with a passenger transport equivalent; and to Corinne Mulley, who was editor until handing over to Martin Higginson on her re-location to Australia to take up a post as Professor of Transport at the University of Sydney. Simon Blainey's role as project manager was invaluable in handling the vast quantities of data and information; and in being by far the most computer literate member of the team. Members of the Group were drawn from all four countries of the United Kingdom. John Hibbs died in 2014, but was fortunately well enough to enjoy the launch event in Birmingham during the last year of his life.

So what did the editorial group do? In the early days, it drew up a list of topics to include, such as operators – with a general criterion (to keep the Companion's size manageable) that they must at one time have owned at least 100 vehicles - manufacturers, personalities,

technologies and technical terms. It then had to commission each entry, some from members of the group themselves, but most from other experts in each area: on particular operators or manufacturers, propulsions systems, parts of the country and so on. A disciplined timetable was set out, to ensure the timely receipt of inputs.

Once the draft entries were received from their authors. they were circulated to the members of the editorial group for scrutiny. As each batch of comments was received, they were sent for scrutiny to the members of the group, who subsequently discussed them at regular meetings. A challenging task was to edit the entries to an appropriate length, from a starting point of knowing how much space each topic justified. The sizes of entries ranged from a few lines for an obscure topic such as Sedan Chairs, to several columns for major subjects such as large manufacturers (e.g. Leyland) or operating companies (such as Midland Red). For each entry, references are provided to further reading; another challenging task for the compilers was to choose which works to cite, as there are far more than we had space to accommodate. The 'Companion' also includes a more general historical bibliography and a chronology of key dates, which extends from the origins of the country carrier in the 11th century to the initial announcement in 2012 of the government's intention to devolve transport powers to the largest provincial conurbations.

We have often been asked how we ensured the entries were accurate. The process of scrutiny was much more than mere proof-reading, with sometimes conflicting evidence to be resolved: dates, technological details, company structures, details of mergers and takeovers, for example, which on occasion necessitated resort to outside experts in particular fields, in addition to the Group's own considerable knowledge.

A key decision was to publish the 'Companion' inhouse, which involved us in the additional tasks of full proof-reading, layout, design, selecting a printer and deciding the price and number of copies to print. Such is modern technology that we never met our invaluable printer contact, Pit Dafis at Gomer Press in Llandysul, West Wales, who honoured the price they had quoted, despite the long time that elapsed before we were ready to go ahead.

Sales have been moderate, some 200 to date, but copies of the 'Companion' are still available from our agents, MDS Books, Glossop (www.mdsbooks.co.uk), at a discounted price of £40 for RRTHA members. If you haven't already bought a copy, do so now and you will enjoy many hours of browsing and research.

Martin Higginson

Association News...Droitwich calling...

The Directors' Deliberations

The Journal

Since the publication of the report in the previous edition [No. 84, May, 2016] the directors have taken further steps to implement the proposals concerning the Journal's development there set out, which were first discussed at their meeting on February 13 and reported to the AGM on March 19. In specific terms, they have agreed that a group be now formed consisting of Mike Phillips, Peter White, Stephen Hole, Margaret McCloy and John Ashley to take forward the project. Mike has been asked to act as convenor.

Officers

Following suggestions from Maria and Amy, and subsequent consultations, the directors propose that Maria continues as Treasurer, assisted by professional commercial accountant Helen Fowweather who takes over the role previously filled by John Howie, of liaising with HMRC and Companies House on financial matters. Amy Graham will assist Tony Newman in research co-ordination. These changes will take effect as soon as it is convenient.

The Companion

Members were delighted to learn that the Companion had been short-listed by the R&CHS for their book of the year: a report by Martin Higginson appears on pages 1 and 2. The directors have proposed that the prize money be assigned to help digitizing articles from the Journal, a worthy cause that will be of special interest to serious students of transport history. They have set a limit of £1,200.

Wales on Wheels

A report by John Ashley is included elsewhere in this edition. Suffice it to say, the event was very enjoyable. Occasion was taken by your chairman, at the dinner, to urge the Museum and University to collaborate in the immediate search for new museum premises and the promotion of a student course involving practical skills in vehicle restoration!

The Autumn Meeting

The Autumn meeting will take place at the Transport Museum in Coventry on Saturday, October 29 commencing at 10.30am. Our principal speaker will be Roger Torode, a career transport professional with London Transport through to Transport for London and author of the acclaimed recent work Privatising London's Buses. It is hoped, too, Garry Turvey, our

former president and chairman, may be able to join us. A pro forma with further details is enclosed. In the interests of minimising cost and inconvenience of committee members, were they to make an additional journey on another occasion, the committee will meet at the Ramada Hotel on the previous evening on Friday, October 28, at 4.30pm, followed by our now customary Indian dinner. Any Association member is of course welcome to join us.

Until next time

As ever, should you suppose that, as far as you are concerned, the bus has taken the wrong turning, please ring the bell! The Committee would be pleased to consider your comments.

Robert McCloy, chairman June 25, 2016

Book reviews

British Coaching: Chassis Manufacturers, Coachbuilders and Operators. Michael Hymans 128pp, ISBN 9787-1-4456-6180-3, £12.99; Kelvin Central Buses David Devoy, 96pp, ISBN 978-1-4456-5484-3, £14.99; and North-East Scottish Independents Peter Findlay, 96pp, ISBN 978-1-4456-5903-9, £14.99. All published in paperback format June 2016 by Amberley Publishing, The Hill, Merrywalks, Stroud, Gloucs. www.amberleybooks.com.

These three publications follow a style similar to that of previous volumes from the same publisher as reviewed in this journal, i.e. a wide ranging set of illustrations with appropriate captions, with a short introductory text to set the scene, although that by Hymans differs in having a somewhat higher proportion of text on each theme covered. The two Scottish books are almost wholly in full colour, with a high quality of reproduction, which may justify the somewhat higher price despite a shorter length.

David Devoy covers the short-lived Kelvin Central Buses, a company formed after the earlier division of the Scottish Bus Group at the time of deregulation, operating in the traditionally high bus use regions around Glasgow, notably Lanarkshire. An intense phase of competition was generated both with numerous independents which expanded in the area. Kelvin Central was created by the merger of previously-separate Kelvin Scottish and Central Scottish. The company was sold to an MEBO in 1991, then passed to First Group in 1998. It is striking how many smaller independents were absorbed during that period - a total of 19 are listed - in some respects repeating the story of the 1930s, despite the inability to transfer route licences. A remarkably mixed fleet was operated, with numerous secondhand purchases as well as a wide range of vehicle types purchased new.

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Peter Findlay covers independents in the Aberdeen region, following his earlier volume on Northern Scottish, with illustrations being drawn mainly from the 1970s to the 1990s, plus an example of two vehicles with '16' registrations from this year. Much of the work depicted is the familiar mix of school, excursion and hire work undertaken by smaller independents, often with light-weight vehicles such as the Ford R-series and Bedfords familiar through the UK at the time. However, a number also relate to new services launched after deregulation, many of which were short-lived: it would have interesting to have more informative captions for these examples.

Michael Hymans has provided a book which is based on his personal collection of photographs, entirely in black and white, covering a period from the earliest vehicles to the 1980s, with some later examples. However, it is questionable how far the author understands his subject matter. For example, the chapter on chassis manufacturers relates as much to bus production as coach production by the firms concerned (the 'coachbuilders' chapter does relate more directly to coach types as such). The 'operators' chapter covers both scheduled express services, and those specialising in tour work such as Wallace Arnold.

Many of the captions are rather brief and vague. Some obvious errors appear in the text, which should have been picked up by a proof-reader – for example, reference to stagecoaches to Brighton in the 1880s (page 8 - presumably the 1780s is intended); 'charabanc' manufacturers in world war two (page 11 - presumably world war one is intended); and a caption for two ECW bus bodies, one of which is described as far more modern than the other, yet the illustrations show two virtually identical vehicles (page 88). The oddest statement of all is that referring to Epsom Coaches taking over London routes S1 and 413 in 1997, by agreement with 'London General' (page 94 - presumably a reference to the tendering process under London Regional Transport was intended).

The two Scottish volumes may be attractive for purchase by those with an interest in that region; however, it is very difficult to see who would find the coaching book worthwhile.

PRW

(continued on page 10)

Traffic Signals – A historic perspective

Alistair Gollop FIHE MIET, Senior ITS Engineer, Mott MacDonald

A lot of people are surprised to find out that the history of traffic signalisation pre-dates the advent of motorised vehicles. The technologies that lie at the root of this actually emanate from research work undertaken by the British Admiralty, for Communications and Maritime Navigation.

Communications

To enable the Admiralty in London to communicate quickly with the naval ports along the south coast of England, a chain of optical telegraph stations were erected in the late 18th century. The operation of the telegraph was further improved by work undertaken by General Pasley in the early 19th century, who observed the system perfected in France by Claude Chappe, which resulted in the adoption of the Semaphore style of telegraph from 1816 in the UK.

In later life, General Pasley became Inspector General of Railways and during this time, in response to rising accident rates, suggested the use of the Semaphore signal as a means of improving communication with locomotive drivers. The first of these was erected by Charles Gregory of the London and Croydon Railway at New Cross in 1842.



Above: General Pasley

Maritime Navigation

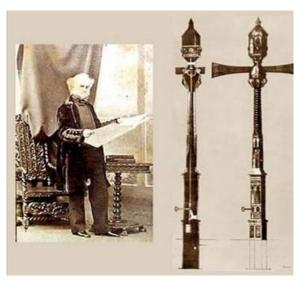
With the introduction of steam ships in the mid-19th century, there was a huge increase of collisions at sea, resulting in many ships being lost. Following the work of a Parliamentary Select Committee which first looked at the issue in 1831, a number of studies were carried out. These included investigating the use of coloured lights to make the direction a ship is travelling in more apparent to other vessels after dark. It was found that oil lamps with clear, red and green lenses could be viewed from the greatest distance, with minimal risk of misinterpretation. The outcome of this study was the recommendation that red and green lights should be used as navigation sidelights on vessels, which were adopted universally in 1858.

These two bodies of work, which were leading edge technologies at the time, resulted in two sets of developments:

- The widespread adoption of Semaphore signals to control traffic on the railways
- The use of Red and Green lights as visual warning signals

Below: Restored Chappe telegraph station at St Marcan, France





Above: J.P. Knight and the Bridge Street signal

Highway signals

In the mid-19th century, traffic congestion in London was getting worse and, in response to a suggestion made by a Parliamentary Select Committee, the first traffic signal in the world was installed in Bridge St, adjacent to the Houses of Parliament, in December 1868. This was undertaken to enable MPs to cross over this busy street. The signal, which was promoted by railway engineer J P Knight, who lived nearby in Bridge Street, was over 20 foot high. When the semaphore arm was extended horizontally it meant 'stop', and when lowered to 45° it meant 'proceed with caution'. At the top of the pole were red and green gaslights, which were used to augment the arm at night. The operation of the signals was controlled manually by a police officer turning a handle. Unfortunately, the signal didn't last for long because on 2 January 1869, leaking gas in the signal caused it to explode. The police operator was injured in the incident, resulting in the installation being removed.

Tower Bridge

After this, the only other recorded traffic signal installation in the UK was part of the bridge interlocking system which controlled the lifting operation at Tower Bridge. The system was designed and manufactured by the railway signal firm of Saxby and Farmer, who had also made the earlier signal at Bridge Street. Included in the system were semaphore signals (also fitted with green and red gas lights) for both river and highway traffic, which worked in



Above: a modern traffic signal installation in Bridge Street, Westminster

relation to the operation of the current bridge position. Part of the mounting bracket for the original signal is still visible today. Since opening in June 1894, the traffic signals have continued to control traffic flow on the bridge which arguably makes Tower Bridge the location which has been signalised for the longest period of time in the world.



Above: Tower Bridge signal installation from the late Nineteenth century: the semaphore signal can be seen on left hand side of road.

Experience in USA

No further attempts seem to have been made at mechanised traffic control, until the growth of motorised traffic in the U.S. lead to a need to control junctions in the early 20th century.

A plethora of differing signal systems were developed over the coming years, but these mainly fell into two families, semaphore arms and light signals. One of the most famous of the semaphore type of signal was patented in 1922 by inventor Garrett Morgan.





Upper: A close-up of the Nineteenth Century semaphore signal. Centre: Tower Bridge today. Lower: a detail shot of the semaphore location.



His signal consisted of rotating arms, red and green lights and a bell (which warned of an impending change). Although this system was hand-cranked, it had the added sophistication of including an all-stop period between opposing traffic streams to allow the junction to clear. However, it soon became apparent that semaphore styles signals were an evolutionary dead end.

The first electric traffic light was invented by Lester Farnsworth Wire and installed in Salt Lake City in 1912. Lester was the head of the traffic division of the Salt Lake City Police Department. His signal had two lamps, one red and one green, and was installed in a large wooden box with two six-inch holes on each side. It was operated by a patrolman who used a two way switch to change the light's colours. However, in this instance, the same signal was displayed to all approaches. The colour it illuminated (red or green) signified traffic could flow on a particular approach, i.e. north and southbound or east and westbound.

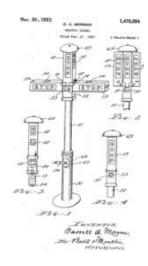
William Potts, a Detroit policeman, invented the first three-colour lights in 1920. His four-way signal head used railway signal lamps and was designed to be suspended over the centre of a junction to control traffic from four approaches. It was the first signal to resemble the operation we know today.

London

In England, the first manually controlled electric traffic lights were installed in Piccadilly, London, in 1925 and the first automatically controlled signals were installed in Princes Square, Wolverhampton in 1927. Today, this junction has specially painted black and white signal poles to commemorate its historic significance.

During the 1930s, experiments were carried out in the use of vehicle actuation to make the traffic signals responsive to vehicles using a junction. An early attempt at this utilised a microphone placed at the side of the road, which would make the lights respond to motorists sounding their horns. Although this system worked, it was very unpopular with people living nearby.

Later experiments used electrical pressure mats and pneumatic tubes which were extensively used up to the 1970s when they were replaced with inductive loops for permanent installations. However, pneumatic tubes are still used for temporary count sites, where they are fitted to the surface of the carriageway.



Above: Garrett Morgan's patent application. Below: Morgan's signal.

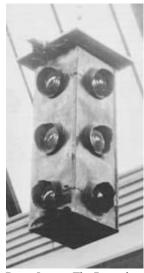


Below: Lester Farnsworth with the two aspect signal





Above: William Potts



Upper: William Potts. Lower: The Potts three aspect hanging four-way signal

Below: Piccadilly traffic signals, circa 1925





Above: The Wolverhampton site today



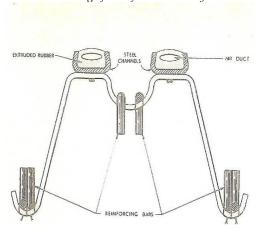
Sound-actuated traffic signals

The first vehicle actuated site in the UK was installed in 1932, at Gracechurch St / Cornhill in London. Unfortunately, history repeated the events of 1869 when the controller blew up. In this case though, gas had seeped into the controller cabinet base, from a nearby leaking gas main, and was sparked by the electrical apparatus in the controller. However, on this occasion, the accident did not block the course of progress and within a couple of year's vehicle actuated controllers were being used widely across the country.

Opposite: Inauguration of the Gracechurch Street / Cornhill signal installation by The Lord Mayor of London, Sir Maurice Jenks, 14th March 1932 (see also following page)

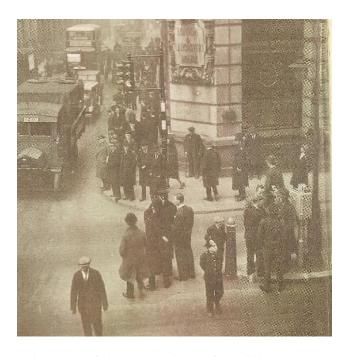


Above: Tube detector installation. Below: Cross-section drawing of tube frame assembly



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Above: View of the Gracechurch Street / Cornhill junction

Book reviews (continued from page 4)

From Veg Runs to Oil Drums...and Beyond. The First Sixty Years of Spiers and Hartwell. Robin Masters, 2016. 123pp, illustrated. £10 from the author at 15 Lime Street, Evesham, WR11 5AW

The chief traffic of a road haulage business in a prime vegetable and fruit growing area can safely be assumed to be the reliable delivery of fresh produce. This was the origin of S&H in 1954, but, as with numerous road haulage companies, the course of its ownership and development over more than sixty years has not been straightforward. Unusually, Middle East traffic was added in the 1970s, with ultimately disappointing results. This was followed by collaboration with Clearpoint International Transport (C.I.T.), 'The Spanish Specialists', until there was a concentration on UK work. Pages 73-80 deal with C.I.T., illustrating its vehicles in operation, and they are followed by coverage of the rebuilding of Spiers and Hartwell (pages 81-98). The earlier part of the narrative is complex, as it incorporates the reminiscences of numerous drivers. This makes for a very interesting read, and the chapter arrangement helps to guide the reader through the ups and downs of the business and its relations with other firms. An interesting range of vehicles, traffics and locations is shown in the illustrations, the quality of which inevitably varies. The text would have benefitted from some closer subediting, but as an absorbing study of numerous aspects of road haulage this book can be strongly recommended.

RAS

Autumn Conference 2016

The date for our Autumn Conference is set for Saturday, 29th October 2016 at our usual venue, the Transport Museum, Coventry. Our principal speaker will be Roger Torode, a career transport professional with London Transport through to Transport for London, and author of the acclaimed recent work *Privatising London's Buses*, (reviewed in our May issue).

A booking form is enclosed.

Mobility and Public Transport

John Edser

This article has been triggered by Amy's 213 bus presentation and our Chairman's thoughts on this area in the May Journal

I have to declare two areas of interest: -

- In the 1950s and early 1960s I was an occasional user of the 213 and have pictures of the rebuilding of the Worcester Park railway bridge in November 1962 which allowed the route to convert from single to double deck operation
- I am a member of the Chartered Institute of Logistics and Transport Accessibility and Inclusion Forum. Its major aim is to ensure that the ageing population; any of the approximately 12 million people with a disability (seen & unseen), and those with a temporary disability in the 'parent and buggy', category are able to make a journey from house to destination and back again without any problems.

Studies have shown that, with the opportunity for increased mobility, these sections of the population make a net contribution (after all benefits etc. are taken into account) of £2 billion to our economy.

Access to all forms of public transport is dependent on several factors, not just the operator:

- information and its availability
- town planner and architects
- local authorities
- social services
- staff training

Information is the key. While so much is now available on computer/phone systems, there is still a considerable percentage of the population that do not have access to them and, of those that do, many find the multi-choices offered - particularly the fare systems - confusing. A recent Commons Select Committee report has stated that more than 12 million adults lack basic digital know-how and an estimated 5.8 million have never used the internet).

Passenger Information

This is where co-operation between Local Authorities, Social Services and the operator can prove beneficial. Timetables posted at bus stops and stations are useless, other than a confirmation of whatever prior information you have been able to obtain. Your journey starts at home, not at the bus stop.

In the author's small town, local rail timetables are posted outside the Civic Centre, while the well-used library stocks both local and long distance pocket road and rail timetables and has to put them out in small numbers at a time to ensure an even distribution. One member of the staff has the responsibility of keeping them up-to-date. How many instances of this good practice occur country-wide is unknown but it is a very useful source. Journey planning can begin at home.

The local authority, town planners and architects all play their part in the physical aspects of the journey. Now that the majority of buses are 'low floor/easy access' it is important that the pavements and kerbs are kept in good order. Raised kerbs at bus stops, well defined bus bays, and a well-marked 'bus stop' in the road all give potential passengers easy stress-free access to their bus. Easy access can influence whether they use the bus or not. It is essential that Local Authorities enforce proper use of bus bays and 'bus stop' markings as again it can influence passenger choice if the 'easy access' is blocked.

When new or re-developments in towns are planned, the LAs, town planner sand architects have the opportunity to create a people-friendly environment, including public transport access, increasing the mobility factor for everyone.

Bus stop location

Thus bus stops should be sited close to shopping centres and station entrances with appropriate signs/information screens to help people find their way. An excellent article on bus-rail coordination/information at stations by Ray Stenning appeared in April 2016 Modern Railways and shows both good and bad examples.

The re-development phase can be problematic. Cardiff have just destroyed a major interchange by closing the city's bus station, which was directly opposite the main entrance to Cardiff Central station, for at least two years. The buses will now stop in a variety of streets away from it [as I discovered last year attempting to find the departure stand for Penarth – ed]. How those with a mobility problem will cope is unknown. The replacement will be smaller, but still close to the rail station.

The 1996 Disabilities Act; the 2010 Equalities Act; the various Bus Passes, and low-floor buses have opened up many more social and economic opportunities for

the ageing and mobility-impaired population. Travel to see friends, go shopping, to the theatre, to clubs and societies all increase mobility and has known health benefits as people are keeping active in both mind and body. There are even benefits for Social Services with some reduction in the pressure on their services. In reverse, if the Social Services are plugged into the local transport information network, they might suggest ways for some people to go on trips that they did not know about. The key here is whether the network has a known high standard of friendly easy access.

However, all these advantages are lost if operator staff and staff attitudes do not support them. Staff training is vital to ensure passengers of all kinds are made to feel welcome and secure, helped where necessary and given up-to-date and correct information.

Many bus and coach companies now recruit 'those who are good with people', not necessarily top-class drivers. Good driving can be taught but good sympathetic social skills are not innate in everyone, particularly with the many and varied people and situations that they may meet each day.

Simple things, like making sure the bus draws up close to the kerb so that level boarding is possible, can make or mar someone's journey. Local Authority bus space enforcement is crucial here. A clean, tidy appearance and good knowledge of the route and its connections all help to make a pleasant trip. This applies just as much to staff and bus stations/major interchanges, all helping to ease the passenger's progress.

Buses are often thought of as noisy and uncomfortable BUT it is frequently the effect of the road surfaces they are driving over. Potholes, dropped drain covers, the remains of various utility diggings all disturb the smooth surface and this can affect the most modern buses. It is not their fault.

There are all things that can influence the choice and use of public transport and the social mobility of many people.

Once on public transport, there is one factor that discriminates against real social contact - the famous 'British Reserve'. When you board any bus, train or aircraft you come into forced contact with a very, very wide variety of people but you very, very rarely speak to them, except perhaps to ask them to move a bag etc. off the seat next to them so you can use it. You might also remark on the weather but your social contact is minimal.

The only exceptions to this are meeting a person on a regular basis on the same bus going to/from work - when verbal contact may result - or when club/society/evening class members travel to their

events. Public transport is used as the means to get somewhere, not a place for socialising.

Today, if you live outside the major conurbations and any large city, there are still considerable barriers to achieving this mobility - not just for the older age group. However, all over the country another form of social contact in buses has been reduced. Since the 2010 cut back in the provision of rural and non-statutory school buses - where social contact is rampant - the Campaign for Better Transport has recently estimated that it has resulted in an extra 100 million car journeys per year.

Another growing threat to mobility is the increase in Driver Only Operation of many trains. Coupled with many stations now being unstaffed, this is a real barrier to travel for many. However, there is some good news. Under the new 'Northern' rail franchise, 54 unstaffed stations will be staffed and a further 45 will have their staffed hours increased. This just shows what a lottery exists round the country.

In the country areas Lancashire County Council recently proposed withdrawing all subsidised bus services, which would have left several villages totally isolated from banks, surgeries and hospitals etc. However, after virulent protests, certain services were restored - but not every one.

The impact of service cuts

There are other less successful examples. In Scotland, a colleague of the author wrote the following: 'I was staggered to hear from an old friend (while waiting for a bus) that she was now taking a very circuitous route of 32 miles each way to get her husband to activities for those suffering from dementia in our neighbouring town 6 miles away. This arose because the bus company withdrew an hourly service and replaced it with one journey into town at 0815 and back after 1000. The Local Authority were eventually persuaded by the local community to fund an afternoon return service but the times are still no use to my friend or many of the other local people needing to get to medical appointments, shopping etc. The journeys withdrawn were at marginal cost between school contract work'.

In the Potteries a five-day hourly service to the main shopping centre from Mow Cop has now been reduced to a Tuesday and Friday only service between 0930 & 1430 involving a change half-way. There was much vociferous local objection. The author had the following letter published in the local Chronicle:

' How will those who don't or can't drive and/or do not use computers have reasonable access to shops/banks/doctors etc. and those who use the bus to get to work may, through no fault of their own, have to give up their job. The bus company may save money but what about the additional costs put on Social Services? Additional home calls by doctors; ambulance calls to get people to or from hospital unless all appointments are made and can be completed on the two mornings when the bus runs (highly unlikely); the possible payment of benefits to anyone who loses their job as a result of the cuts. There may be other 'unknowns' as well'

It is not only buses and this country where there are problems of accessibility. Belgian Railways have just ordered 1300 new double-deck carriages. They say they consulted up to 200 interest groups but the access to both decks is by steps!!

While the 1996 and 2010 Acts have brought about much needed improvements in accessibility, there is still a long way to go to improve overall access to public transport and the many kinds of mobility and social contact that might follow.

[Since this article was written the DfT have published 'National Travel Survey Factsheet: Disability and travel 2007-2014'. This draws on the NTS sample to provide a comprehensive review, including differences between disabled and other users in trip rates, status, age groups, modes used etc., and difficulties encountered in use of specific modes, especially bus. It may be accessed via the website www.gov.uk/dft, by going to the 'statistics' heading. Ed]

Wales on Wheels 2016

John Ashley

The Wales on Wheels weather was kind to us for the fourth year in a row. This is not usual in Wales! Support for the event continues to grow, with cycle groups the latest recruits. A few participants stayed away because of industrial action by some staff at the National Museum of Wales (a dispute now thankfully resolved), but overall attendance by vehicles and the public was up on previous years. By late morning it

was becoming a problem to accommodate all the cars in Dylan Thomas Square. This is the kind of problem we like!

This year we had the innovation of a Concours d'Elegance award. The National Waterfront Museum donated a bottle of bubbly and a bottle of wine to the lucky winners. A magnificent Triumph Roadster won the fizz, and a stunning example of one of several MGB GTs was the close runner up. The Museum's Leighton Sault-Jones judged, inspecting every vehicle with clipboard and quizzical frown at the ready.



Above: A Triumph Roadster, the Concours winner (all photos by John Ashley)

Our good friends at Swansea Bus Museum were as ever at the heart of the show. They ran open-top bus rides to Mumbles, patronised at least twice by our Chairman. Other participants were: Ryland Classics, Classic Vehicle Enthusiasts Group, Swansea Motorcycle Club, Skewen and Pontarddulais Classic Car Clubs, Swansea Historic Vehicle Register, Wheelrights and BikeAbility, the Gilbern Club (who the next month gathered sixty vehicles for their annual meeting at the Museum), Bryngold Books, and several unaffiliated vehicles.

Add to these Wallace and Gromit's van and motorcycle (with sidecar), Swansea Vintage Engine Club (static engines), and the inestimable Yeoman Living History with two horses in their WW1 display. The Museum screened *The Titfield Thunderbolt* in the afternoon for those who wanted to escape the blazing sun.

The evening before the show we held our traditional dinner at the Marriott. Philip Kirk of this parish gave a lively and entertaining after-dinner talk that left few parts of Britain's bus industry untouched. 2017 has already been booked for the third weekend of May. All welcome, with or without vehicles of any shape or creed.



Above: a range of cars on display



Above: Vehicles from the Swansea Bus Museum, with a South Wales Regent V in the centre, flanked by Bristol VRTs



Above: MGB GT, the Concours runner-up

The feature by Ian Souter on route branding in our previous issue resulted in the following observations from our member Bob Williamson of Studley.

Destination Blinds and Information Display

Following Ian Souter's paper in issue 83 and Bob Williamson's comments in issue 84, Bob Williamson has provided a fuller review with the examples of the use of destination blinds to provide information to passengers.

Bus, coach, tram and trolleybus destination blinds were printed on linen for many decades. Very early tram blinds were not printed as such but were marked out in pencil, the letters being inked or painted around the characters. Screen printing processes gradually evolved but, before that, Manchester Corporation used a Linocut system originally for printing number/letter blinds. Each number was recess cut into sections of lino which were then attached to a large wheel (similar to a watermill wheel), and then physically rolled along a laid-out length of linen. The inked lino panels thus left a white number with black edges. The corners were chamfered at 45° as it is difficult to cut neat/consistent curves when cutting lino. This style of lettering was continued when more conventional screen printing was adopted.

Over the years, linen became more and more expensive and other materials were tried out in an attempt to economise. New blinds were constantly needed not only to replace worn out ones, but also the need caused by continual service alterations and extensions of existing routes. In most cases this did not apply to tram and trolleybus blinds as their very nature of fixed terminal points required little alteration. In the 1960s a thin plastic (known as 'Vitafilm') was used at least by Birmingham City Transport for the route number tracks which did last a little longer than linen ones, although they did tend to attract dust and discolour the numbers.

A heavy plastic was also the subject of some experiments – some West Yorkshire Road Car coaches were fitted with black on white blinds but were found unsuitable as the edges tended to split. Also the plastic was affected by strong sunlight and the illuminated bulbs from behind at night. The often-used displays such as 'LONDON' or 'LEEDS' soon lost the lettering, having been 'cooked' from both sides.

Tyvek

In the late 1970s a 'new' material called 'Tyvek' was introduced. It is believed that this material was either invented or developed by Dupont Chemicals in Canada. It was the subject of an article in a 1970s edition of the 'New Scientist' but, whatever its origins, the material was a polymer of plastic, paper and chemicals of much greater strength than paper or linen. A special ink had to be formulated as Tyvek is impervious to water (or any liquid). Very strong envelopes were manufactured, but the company logos or other information could not be printed with normal ink.

Destination blinds were then possible once the new ink had been developed and, because Tyvek is much thinner than linen, much longer rolls and therefore many more destinations could then be included. Many operators had used 'joint' depot blinds for some years (e.g. Western National Omnibus Co.) but it was now possible to produce one blind for, say, three nearby depots in the same area instead of three separate

listings. This is economic in its own right as it is far cheaper to print 150 blinds than 50 of each for three depots.

The earliest Tyvek blind was a 1978 London Country Bus Services single-deck blind at Guildford garage, but Tyvek blinds became almost universal over the next few years. Tyvek comes in various grades of thickness, and it has been discovered in recent years that some 1970s blinds are beginning to 'decompose'. A West Yorkshire PTE one was unrolled and, at a certain point, literally crumbled into fragments.

Subsequent to Tyvek, several plastic materials have been tried with varying degrees of success. A very thin plastic (exact name unknown) was used by a few operators in the early 1990s which became short-lived as it was *too* thin. For example, a route 214 bus in London was seen going to 'MOOATE' instead of 'MOORGATE' as the constant winding had caused the blind to collapse and fold-over down the centre of the entire blind. In more recent years, the 'best' plastic ones seems to be those printed on 'Polyester' - a much thicker and robust material.

Colours in blinds

The colours used for destination blinds is a very involved subject in itself, but following on from the covered in previous issues of this Journal, there are some further points. For example, the original Glasgow Corporation trolleybus blinds were indeed white on green, but later ones were white on black – it is believed these appeared in the late 1950s. Interestingly, the white on green number blinds went up to 120 in anticipation

of 'new' routes 111-120 which never materialised. The white on black blinds had only 101-110. White on green blinds were also used by London Transport for the 'EXCURSION' services. The early ones (1951 – c1954) were white on black with the green ones appearing c1955 onwards. This is the opposite of Glasgow Corporation practice!

White on red blinds (or red on black) is an interesting topic (together with 'red lights' on the fronts of buses/trams). This matter is covered by The Road Transport Lighting Act 1927, which forbade "a red light at the front". There was also a Ministry of Transport memorandum which did not allow 'green or blue lights on omnibus indicators on account of the possibility of confusion to engine drivers if bus routes run close to railway lines'. The green and blue restrictions seem to have just been forgotten about, or were maybe lifted by the MoT. However, it is believed that red/white bus blind display at the front is still illegal (quite reasonably so) and, if this is the case, many operators over the years were breaking the law. Hants & Dorset M.S. Bournemouth depot route blinds for many years had a red 'NOT ON SERVICE BOURNEMOUTH CORPORATION PASSENGERS' very prominently displayed at the front!

List of Members' Interests

As an amendment to the list circulated with the previous issue, please note that the interests listed for R.J.Williamson should not have included 'Berks' (Berkshire).

Our next issue will be no 86, November 2016. Copy to the editor by 4 October please

Viewpoints and opinions expressed by contributors to this Journal should be seen as personal, and do not necessarily reflect views of the Association.

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