

CONTENTS

Origins of Lincolnshire Bus Operators	
- Peter White	Page 1
October 2013 Conference	Page 6
Obituary: Gordon Mustoe	Page 7
Obituary: T B Maund	Page 8
Association Report October 2013	Page 9
Battery Electric Road Vehicles:	
The Early Years - Keith Roberts	Page 11
Kent in World War Two: Transport in	
'Doodlebug Alley' – Robert McCloy	Page 14
Book Reviews	Page 18

JOURNAL

No 74

November 2013

www.rrtha.org.uk

ORIGINS OF LINCOLNSHIRE BUS OPERATORS

Peter White

This paper is adapted from a talk given to the Bourne branch of the Family History Society in June 2011, aspects of which were also presented at the R&RTHA meeting in Coventry in March 2012. For this purpose 'Lincolnshire' is defined as the county up to 1974, comprising the 'Parts' (administrative divisions) of Lindsey (the north), Holland (south east) and Kesteven (south west), the County Borough of Grimsby, and City of Lincoln. From 1974 this was reformed into an upper-tier county authority, with lower-tier districts, except that the northern part became part of Humberside County. Subsequently, this was recast into unitary authorities, those on the south bank of the Humber becoming the present-day North East Lincolnshire (covering the Grimsby area) and North Lincolnshire (covering the area based on Scunthorpe, extending north to the Humber and west to Isle of Axholme). Throughout this period, boundaries with adjacent counties have been unchanged – Yorkshire (now the unitaries of South Yorkshire) in the north east, Nottinghamshire (largely along the Trent), Leicestershire, Peterborough/Cambridgeshire, and a short common boundary with Norfolk near Kings Lynn.

The railway network

As featured in a recent Michael Portillo railway travel programme (on Friday 18 January 2013) the region is predominantly agricultural. However, the nineteenth century also saw marked industrial development in the north of the country, notably the commercial docks and fishing port at Grimsby,

and iron & steel production at Scunthorpe. The manufacture of agricultural equipment also developed into a wider engineering industry, notably in Lincoln and Gainsborough. A striking difference in the policies of the two main railway companies in the county could be seen. The Great Northern operated the east coast main line through Grantham, together with the 'Lincolnshire Loop' via Boston and Lincoln, and many rural branches in the south and east of the county. However, the GNR's direct investment was relatively limited, many of the branch lines to serve rural areas being built by local capital (although generally operated from the outset by the GNR). In contrast, the Manchester Sheffield and Lincolnshire (MS&LR), later the Great Central (GCR) was actively involved in infrastructure investment as well as rail development *per se*, notably the docks at Grimsby and resort at Cleethorpes. Conversely, while Skegness was served as a resort by the GNR, its development was largely undertaken by the local landowner, and the port at Boston was built by the municipality. GNR's only attempt at dock construction, at Sutton Bridge near Kings Lynn, collapsed shortly after opening. The culmination of GCR's investment can be seen in the port of Immingham, now handling 25% of all rail freight in Britain, which opened in 1912 and celebrated its centenary last year. In the long-term a far more significant impact than that of the better-known London extension: in the latest EU transport statistics it is shown as handling the highest tonnage among all British ports included.

Roads & Road Transport History Association

PRESIDENT:

Professor John Hibbs OBE

CHAIRMAN:

Dr Robert McCloy
32 Marina Villas, Swansea SA1 1FZ
robert.mccloy36@sky.com

to whom general correspondence may be addressed

TREASURER:

Royston Fisher
209, Llantarnam Road, Cwmbran, NP44 3BG
royston130@talktalk.net

EVENTS ORGANISER:

John Ashley
6, Cefn Glas, Tycnoch, Swansea SA2 9GW
John@GlobeSpinner.net

to whom membership enquiries should be addressed

JOURNAL EDITOR:

Peter White
13 Lingwood Gardens, Isleworth, TW7 5LY
whitep1@westminster.ac.uk

*to whom all articles, illustrations and letters for
publication should be addressed*

ADMINISTRATIVE OFFICER:

Philip Kirk
11 Pickenfield, Thame, OX9 3HG
philip.kirk125@btinternet.com

RESEARCH COORDINATOR:

Tony Newman
16 Hill View, Bryn Y Baal, Mold CH7 6SL
toekneenewman@gmail.com

ACADEMIC ADVISOR:

Professor John Armstrong
42 Inglis Road, Ealing, London W3 3RL
john@johnarmstrong.eu

Roads & Road Transport History Association

A Company Limited by Guarantee No 5300873.

Registered Office:-

100, Sandwell Road, Walsall, WS1 3EB

Company Secretary: - J Howie

ISSN: 2044-7442

(continued from page 1)

However, from the shareholders' point of view, the GNR presented a far more attractive proposition, paying a modest but steady dividend for most of its life, while the MS&LR/GCR paid no return on part of its capital after about 1900 (in the reported words of one cynical investor, the change in initials represented '*money sunk and lost*' to '*gone completely*')¹.

Limitations of rail technology

As in other parts of Britain, the railways gave a great improvement in mobility to the towns they connected, and those villages which happened to have intermediate stations on the interurban lines (albeit naming a station after a village was not necessarily an indication that they were directly adjacent!). However, for many rural settlements, horse-drawn transport remained the only option for local movement. The railway was a very capital-intensive mode of transport for such flows, and indeed later stages of rail network expansion probably represented uneconomic operation from the start (the last lines to open, the North Lindsey and Isle of Axholme light railways, were short-lived, passenger services ceasing in the 1920s and 1930s).

Attempts were made to adapt rail technology to suit more modest flows, in the form of steam tramways which followed existing road alignments. One of the very few such lines to be built in Britain was the Alford & Sutton Steam Tramway, linking the small market town of Alford with the seaside village of Sutton-on-Sea. However, this was very short-lived, running only between 1884 and 1889². More ambitious schemes were planned, notably one between Lincoln and Brigg, along the line of Ermine Street (present-day A15), on which some construction is believed to have commenced. Elsewhere in Europe, such technology was used on a much larger scale (notably the 'Vicinal' network in Belgium), but in Britain never really took off, the Light Railways Act of 1896 perhaps being too late for this purpose. The Grimsby and Immingham electric railway, opened in 1912, was a striking exception, being operated as an interurban tramway. However, its function was very much to provide Immingham Docks with a labour force from Grimsby, rather than serving existing rural settlements. Demand grew after World War Two as new factories opened on the Humber Bank, and the line survived until 1961.

Page 3 >>>>>

The country carriers

Through the nineteenth century and up to around 1920, the horse-drawn country carrier's cart provided basic form of goods and passenger transport, typically based in villages, and running to market towns on respective market days. County directories, such as Kellys, enable an inventory of these services to be provided. For example in 1896 we find that Stephen Bradley of Billingborough (a village about 15 km south east of Sleaford) operated to Sleaford on its market day (Monday), southward to Bourne on Thursdays, and west to Grantham on Saturdays. We can also use that directory to examine the range of services provided to Bourne (a small market town in the south of the county). Its Thursday market attracted carriers from a range of about 15 kilometres. In addition, Bourne was linked to the market town of Stamford on its market day of Friday, and Peterborough on Saturdays.

These services provided a ready base for motorised transport, when relatively cheap vehicles become available. In most cases, this was in the period immediately after World War One, arising from army-surplus vehicles, and also mass-produced new types such as the Ford T. A number of carriers switched to motor transport, initially maintaining similar market-day services, but subsequently expanding to more frequent operation, typically offering Saturday as well as market day services, which in some cases extended into the evenings.

An example is the service of Rushby of Binbrook (a village in the Wolds, about 18 km south west of Grimsby), whose cart and subsequent motor vehicle are illustrated. W.Rook of Beelsby, another Wolds village, likewise adopted the Model T.



The carrier's cart operated by Rushby of Binbrook, [from the collection of the late W.E.R.Hallgarth, Grimsby]

Types such as Ford T also provided a basis for entirely new services from around 1920. An example can be seen in the operations of Balderson

of South Kelsey, between Market Rasen and Caistor, offering a service with an 8-seater model T to adjoining towns.

Early motorbus operators

The longest-lived continuous motor vehicle operation is that of Hornsbys of Ashby, first established in 1914, and still running local services in the Scunthorpe area. The longest history is that of Delaine of Bourne, established as a business in 1867, and running local transport services from the late 19th century. The name of Applebys, established at Conisholme near Louth in 1913, also continues, albeit as a brand now owned by an unrelated operator in Brigg.

In addition to village-based operators running on a small scale, a number of larger concerns set up in the county. A notable early example was the Mail Motor Company, which inaugurated a service between Grimsby and Caistor via Laceby in 1906. Caistor was the only market town of any significance not be served directly by rail, due to its location at a relatively high point in the Wolds, resulting in the MS&L Lincoln – Market Rasen – Grimsby line of 1848 being routed slightly to the north via the Barnetby Gap. The company also established services to villages near Grimsby. However, given the poor nature of roads and vehicle technology of the time, this service was very short-lived, a receiver being appointed in June 1907.

A more substantial operation in the Grimsby area dated from 1909, in the form of bus services set up by the Provincial Tramways Company, owner of the Great Grimsby Street Tramways Co., operating the street tramway in Grimsby and Cleethorpes (electrified in 1901). These operated to the nearby villages of Waltham and Laceby, and formed the basis of continuous operation, now provided by Stagecoach. Provincial expanded their bus services further in the 1920s and early 1930s. Although the Grimsby section of the trams was sold to the municipality in 1925, the Cleethorpes section continued in company ownership. However, from 1934 the local bus services of provincial and another local independent, 'Ada', from Grimsby to Waltham and Humberston were sold to the Grimsby municipal operator, and from 1936 the adjoining Cleethorpes Urban District Council took over the remaining tramway section and bus operations. The last section of tramway ceased in 1937, replaced by trolleybuses.

In the south of the county, the Progressive Motor Omnibus Company established a substantial operation in the Boston area in 1921, with a similar

base in Scunthorpe 1922³. The Boston operation eventually passed to United Automobile, while the Scunthorpe area passed to W.T. Underwood Ltd of Clowne, Derbys and then to the locally-based Enterprise & Silver Dawn company (E&SD) under W.Drury.



A line-up of Progressive vehicles at the foot of Doncaster Road hill, Scunthorpe, c1923 [original from family of J.A.Hankins, 1960s]

The company that was to dominate the county, Lincolnshire Road Car, was first established as Silver Queen, a subsidiary of the Clacton-based company of that name, in Lincoln in 1922, adopting its better-known name in 1928⁴.

Drivers setting up as independents

A feature of development in the later 1920s was that of drivers of some of the earlier, larger concerns setting up independently as owner-drivers of their own businesses. This was, for example, the origin of Hunts of Alford, set up by Fred Hunt in 1930 with an Alford – Spilsby – Eastville – Boston service. Hunt had formerly driven for Wrights of Louth, one of the more substantial independents in the county, which survived until sale to Road Car in 1950. Another example was that of J.A.Hankins of Scunthorpe (who drove for Progressive), setting up his 'Reliance' operation in 1924/5 (its scheduled services were sold to E&SD in 1946, but the firm continued as private hire operation until 1962). The Hunt business continues to this day (as Hunt (Coach Hire) Alford), and while the original Boston route has ceased, a more substantial Alford – Chapel St Leonards – Skegness service (set up at deregulation in 1986) now forms the base of local scheduled operations.

The bus network & market town catchments

While in some respects the bus network simply reproduced the focus on services to the nearest market town that characterised the carriers (albeit at much higher speeds and frequencies), it also created new opportunities for interurban travel, especially from the later 1920s. Direct links between

smaller market towns and regional centres (such as Horncastle to Lincoln) offered much more direct links than the railway network, or in other cases, links between urban areas that had developed after the market towns (such as along the coast between the resorts of Skegness and Mablethorpe).

The earlier directories can be used to estimate the catchment areas of market towns, by reference to the carriers serving them and villages in which these originated. By examining the fully-developed bus network of the 1930s one can see to what extent similar links were provided. In many cases, a broadly equivalent catchment area for the market towns can be traced (for example, Bourne in the south), but there were some notable exceptions where minor market towns did not become the focus for the bus network, which instead tended to serve more recent settlements whose growth stemmed from rail provision.

For example, the seaside resort of Skegness clearly provided a wider range of shopping and other activities than the nearest small market town of Wainfleet a few kilometres inland, and buses duly focussed there. In the sparsely-populated north west of the county, the area south of the Humber and east of the Trent had few significant towns. Winterton was the focus of some market day carriers' services, but the iron and steel centre of Scunthorpe clearly provided a better alternative.

The Isle of Axholme had likewise some small market towns, such as Epworth and Crowle, but bus services mainly concentrated on links to larger centres outside the Isle, such as Gainsborough, Scunthorpe and Doncaster. A further feature of services to Scunthorpe was that its population proved insufficient to meet the employment demands of the iron & steel industry, so a pattern of commuting substantial distances from adjoining towns and villages developed, with direct bus services provided to the main steelworks to suit shift times (i.e. for 0600, 1400 and 2200 – their timings usefully provided a complementary demand to the work, school and shopping peaks already served).

Later years

As in the rest of Britain, a gradual process of consolidation took place after the 1930 Road Traffic Act, locally-based firms being absorbed by larger 'area' operators. Lincs Road Car took over many such firms, for example Friskneys, running a local network around Horncastle in 1934. Enterprise & Silver Dawn embarked on a similar process in the north of the county. *(continues page 5)*



Some of Friskney's fleet and staff in Horncastle Market Place, June 1932, prior to takeover by Lincs Road Car in 1934. FW2726, seen on the right, was a Bedford WLB 20-seater of 1931 [author's collection]

Following nationalisation of Road Car (as part of the Tilling Group), 1950 also saw the sale to the state of Enterprise, and Wrights of Louth, becoming absorbed in the Road Car operation. Other independent businesses continued, but eventually on retirement of their owners, operations passed to others. In a few cases, Road Car provided replacement services (for example, the Goole - Crowle - Epworth - Gainsborough of Yorks & Lincs., Swinefleet, when its owner retired in the early 1960s), but in others remaining independents absorbed the operations (for example, Applebys taking over Brown of Caistor).

However, a substantial number of independents remained, and their role has expanded since 1986, including the emergence of substantial new operations, especially in the south of the county. Today, Bourne and Stamford are served wholly by independents, with only limited operations by larger companies (both Stagecoach subsidiaries) at Spalding and Boston.

The basis of research evidence

Much of the work behind the examples quoted in this article was undertaken in the late 1960s and in the 1970s.

Prior to the 1930 Road Traffic Act, effective from the following year, licensing was implemented by local authorities in the area, often in an inconsistent manner. However, in some cases very detailed deliberations are recorded, forming a valuable record not only of the basic licences given to services, but the debates behind them (for a more comprehensive account based on such records, see 'Working's Buses' by Laurie James, as reviewed in issue 70). This was true, for example in the cases of Scunthorpe, Grimsby and Holland. In other cases,

such powers appear to have been used to only a limited degree, and less thoroughly documented.

From the implementation of the 1930 Act, the Traffic Commissioners' 'Notices & Proceedings' (N&Ps) provide a record, using those held in the Omnibus Society collection - Lincolnshire was placed within the East Midlands Traffic area, except for a very small part of the county near Kings Lynn falling within the Eastern Traffic Area.

When conducting research work in the 1960s and 1970s, it was possible to approach directly operators who had inaugurated services in the 1920s. In some cases, an address shown in N&Ps from the 1930s remained valid (for example for Rook of Beelsby). Another source was the features provided in local newspapers (such as the Grimsby Evening Telegraph), on 'bygones', including photographs and recollections of pioneer operators, who in some cases could then be contacted directly for further information (such as Bontoft of Middle Rasen). Another case where it was possible to make personal contact was that of H Orme White (no relation), who in the 1920s had been the local manager for Provincial Tramways in Grimsby, and in the 1960s was still responsible for the remaining Provincial operations in Gosport and Fareham. My only regret is that the opportunity could have been taken to obtain a much more comprehensive 'oral history' rather than simply obtaining details of services run and vehicles operated which formed the focus of my interests at the time.

1. For a fuller background, see the author's chapter ('Roads replace Railways') in Mills, D.R. (ed) Twentieth Century Lincolnshire. History of Lincolnshire Committee, Lincoln, 1989
2. Dow, G. The Alford and Sutton Tramway. Second edition, published by the author, 1984
3. A fuller history of Lincolnshire Road Car is given in the author's 'Passenger Transport in Lincoln', Omnibus Society 1973
4. See 'A History of Bus and Coach Services in North West Lincolnshire' Omnibus Society, 1982

Further information is also given in the author's entries on Grimsby-Cleethorpes, Lincolnshire Road Car, and Enterprise & Silver Dawn in the forthcoming Companion to Road Passenger Transport History.

**Best Wishes for Christmas and the
New Year to all our readers**

CONFERENCE 2013

This year's conference was held as usual in Coventry, commencing with a dinner on the evening of Friday 18 October at the Ramada Hotel. An entertaining speech was given by the Welsh writer **Peter Read**, illustrating transport themes from a variety of writers, including Charles Dickens, Dylan Thomas, and R.S.Thomas. He also provided examples of his own work, notably 'Dai Vest' (based on a character encountered in a Swansea pub), which may be found in his 'Read Only: A collection of Poems', published by Pinewood Press, Swansea.

The Saturday event commenced with a talk by **Ian Yearsley** on the theme of 'Edwardian Transport', highlighting the shift from horse-drawn to motorised transport. One of his main sources has been the Mitchell and Kenyon collection of films, now restored by the British Film Institute. No less than 826 reels include a host of street scenes, taken between 1900 and 1913. There is often an assumption made that the changeover from horse to motor traction came about quite suddenly, perhaps around 1910. The evidence from these films is that outside London motor vehicles were still quite few and far between on the streets even as late as 1913. In contrast to the rapid decline in horse traction on tramways and bus operations, horse traction for goods transport declined much more slowly, and so mass unemployment was avoided.

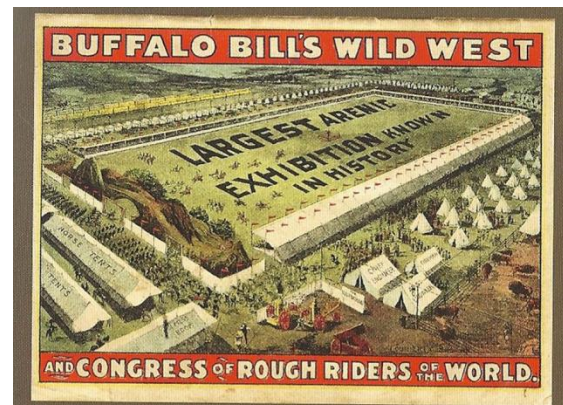
Electric traction was adopted very rapidly on tramways, the number of tramcars almost doubling between 1901 and 1910, to reach 14,488, by which date horse and steam trams had fallen to 508 (statistics taken from D.L.Munby's monumental book on Inland Transport Statistics).

There were only limited impacts of car ownership. Cars themselves were largely used only for local travel.

Horse-drawn vehicles with metal rims were remarkably noisy when used on cobbled streets of the period. Ian showed a map of the streets in central London (City and West End) which had been wood-block paved by 1884, which to a noteworthy extent matched the area in which tramway operation was always very limited and buses (first horse, then motor) were the main surface public transport mode. However, the dominance of the motor bus on the streets of central London toward the end of the Edwardian era was highly untypical, other cities using buses to only a very limited extent, mainly as a tramway feeder.

Ian also stressed the importance of Ackerman steering on the development of the motor bus and motor car, i.e. the system by which the steering wheels on the front axle are steered to move in parallel, with the axle itself remaining fixed, rather than the axle itself being pivoted around a central point. This greatly aided stability. Another important technical innovation was the automatic drop-level frog developed by the Estler company, which enabled the trolley pole of a tramcar approaching a junction to actuate the points for the appropriate track.

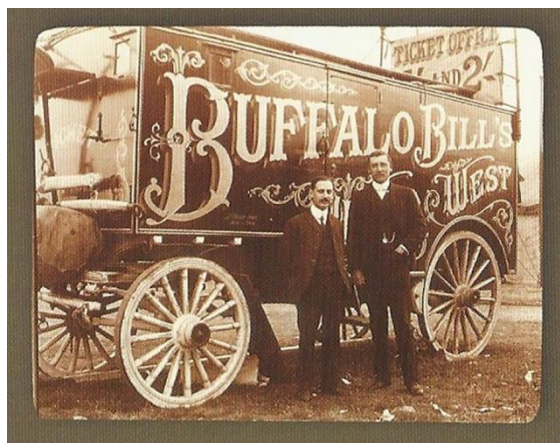
The Edwardian theme continued in the talk by **Keith Roberts** on battery electric vehicles, highlighting their major role in the early stages of motor transport – the full text of his talk appears in this issue.



A poster for Buffalo Bill's Show, indicating the extent of the showground and adjoining tents housing performers and supporting facilities

John Ashley drew on his research into the touring shows of 'Buffalo Bill' (Colonel William F. Cody) – *Buffalo Bill's Wild West* - which took place not only in the USA, but covered much of Britain and other parts of Europe. A remarkably intensive schedule was followed, with many smaller towns being visited in the British case. His extensively illustrated talk highlighted the scale of the shows, and the logistical problems involved in shifting from one location to another. Special trains were operated, utilising sidings close to the grounds being used. *(continues page 7)*

The Show was self-sufficient, with separate vehicles and teams of horses and men for loading and unloading the trains, transport between the rail head and the showground, and the Show itself. The Wild West is one of the subjects of John's PhD research into the economic and social impact of the touring shows of the late nineteenth and early twentieth centuries.



The cart which served as ticket office for the Show

The conference concluded with our Chairman **Bob McCloy** providing reminiscences of a wartime childhood in 'Doodlebug Alley', the first part of which appears in this issue.

FORTHCOMING MEETINGS

Our next meeting will be the Annual General Meeting on **Saturday 15 March 2014** at the Herbert Art Gallery & Museum in Coventry, 1030 – 1530. The (non-exclusive) theme will be 'Vehicle Design Past and in Prospect'. The AGM will be followed by two or three talks. These will be £15 per head including lunch. Further details and a booking form are enclosed with this issue.

The **October 2014** conference will also be held in Coventry, on Friday evening **3rd and Saturday 4th**. Speakers will include John Minnis, co-author of 'Carscapes' which was reviewed in our previous issue

PRW

Obituary: Gordon Mustoe

The road haulage historian Gordon Mustoe died on 26 September at the age of 82. For this Association his particular significance was as a valued contributing editor to the *Companion to British Road Haulage History*, published ten years ago.

His other works were *Fisher Renwick: A transport saga* (1997), *BRS The early years 1948-1953* (1999), and *BRS Parcels* (2002). The last two titles were produced in collaboration with Arthur Ingram, the third also with Robin Pearson. At the time of his death Gordon was working on a history of Pickfords, which was apparently approaching publication-readiness.

By profession a librarian, with a hands-on, lead-from-the-front approach, at Solihull library, he took a special interest in the mobile library service and its vehicle design, with an HGV licence enabling him to drive them. He took early retirement at the age of 56, then working hard in a variety of occupations, gaining an extra qualification in TQM, and, most importantly, having more time to research road haulage history.

It is appropriate for the Association that the editor of the haulage Companion, Dr (Prof?) Armstrong, and two contributing editors, Grahame Boyes and Richard Storey, were amongst the large congregation of family, friends, neighbours and former colleagues, at Solihull Methodist Church for the service of thanksgiving on 16 October, which was also attended by Arthur Ingram and Robin Pearson. In a tribute which appeared in the November issue of *Classic & Vintage Commercials*, Arthur rightly characterised Gordon as 'a true gentleman'.

Richard Storey

We regret to report the death of Chris Taylor, a significant south Wales transport historian and creator of a priceless archive. An obituary will appear in our next issue.

Left versus right

Not a political point, but simply an amendment to a caption in our last issue. The view in the right hand lower corner on the front page does of course show Sir Peter Hendy on the left, and Alan Kreppel on the right.

PRW

Obituary - T B Maund 1924-2013

Noted transport historian and author

Thomas Bruce Jones Maund, former bus company manager, author of some of the most authoritative books on transport history, died on 1 October 2013 at the age of 89.

Bruce Maund was born in Wallasey on 10 August 1924. He started work as a junior railway clerk in a local goods office, but after WW2 Army service in Africa he began work in the bus industry in 1948 with Basil Williams's Hants & Sussex. The following year he obtained a position with Ribble Motor Services, later becoming District Traffic Superintendent at Blackpool. In 1966 he was seconded to the Merseyside Area Land Use/Transport Study (MALTS). He took the opportunity early in 1970 to move abroad to take up a position with United Transport in Kenya, moving on to Western Greyhound in South Africa in 1976. He retired in 1991 and he and his wife Kathleen ('Kay') made their home in Prenton, Wirral.

Alongside his professional career, Bruce was developing a reputation as a thorough researcher of transport history and a prolific author of his findings. He could trace his interests in transport to the late 1920s, having clear memories of the introduction of double-deck buses in his home town of Wallasey in April 1928 and of its tram system, which closed in November 1933.

His first published piece was an article about Bere Regis & District for *Modern Transport* while based at Salisbury during the latter years of the war. He followed this up with a piece on Kenya buses when posted to that country by the Army in 1945-7. Deciding to concentrate on the area he knew best, Merseyside, he began work in the early 1950s on what was later to emerge as the five-volume Liverpool series, jointly authored with John Horne. He revelled in making new discoveries from minute books and other records and in debunking some oft-repeated inaccurate statement. His first publication, *Local Transport in Birkenhead & District*, was a booklet in January 1959 Omnibus Society, followed soon after by *Transport in Rochdale &*

District. These were to be followed over the years by a number of texts based on his research.

The Horne-Maund partnership produced the first volume of *Liverpool Transport* in 1975, and the lavish set of five books stands as perhaps the most thorough piece of published transport research in any UK city. It is all the more remarkable for the fact that for most of the period Bruce was living in South Africa and much of his research was conducted on trips back to the UK where he and Kay would work as a team at the Public Record Office and local archives.

Following his return to the UK in retirement, Bruce's output averaged almost a book a year, with detailed books on Crosville, Ribble and St Helens (the latter jointly with Mervyn Ashton) and a series of illustrated soft-back books for a Wirral-based publisher of local interest titles. Although predominantly targeted towards buses, his researches expanded to cover titles on tramways (a Birkenhead and Wallasey title with Martin Jenkins in 1987), two volumes on Mersey Ferries (the second again with Martin Jenkins) and three railway titles. He was persuaded to write up some of his previously unpublished material on Birkenhead and early bus services in South Lancashire and these were published by the Omnibus Society, the latter being his final title in 2011.

This prodigious volume of published work, displayed at his funeral at Landican Crematorium on 9 October, is a fitting legacy to a man who devoted a large part of his life to his researches and, importantly, ensured it reached a wide public.

He was a Fellow of the Chartered Institute of Logistics and Transport. Bruce was loyal to his friends and colleagues and a devoted family man. His wife Kay predeceased him in 2002 after just over 50 years of marriage, but he is survived by his two sons (Derek and Philip), one granddaughter and one great-granddaughter.

Charles Roberts and Ken Swallow

Association November 2013 Report

The Management Committee met on 13 September, 2013, at Cowley House, Oxford with a goodly attendance.

Members agreed to confer with a view to nominating a director, with effect from the AGM, in place of John Howie. John Howie agreed to remain company secretary which members warmly welcomed. The committee noted that the office of membership secretary remained to be filled, albeit the committee was pleased to note that Keith Roberts had volunteered to assist in recruiting new members.

Arrangements for the Autumn Meeting Annual Dinner and Conference, on 18 and 19 October at Coventry, were confirmed.

It was agreed that **Coventry Transport Museum** be asked to promote the Association's events, inviting interested visitors to attend sessions, on their website, in appropriate leaflets, and in a prominent notice displayed in the Museum on the day of any Association event and for a few days proceeding, such copy being provided by the Association to specifications acceptable to the Museum. It was further resolved that the Museum be asked to permit the erection of a small cabinet displaying information for visitors about the Association, stressing its collaborative role with the Museum, detailing its programme and giving advice about joining.

At the request of the Waterfront Museum, in Swansea, the **Wales on Wheels** event will be repeated, albeit in a modified form [displays and stands, but no lectures], on 17 May, 2014. The Committee requested John Ashley to incorporate a Dinner into the programme.

As for the Association's finances, Roy Fisher, Treasurer, reported that balances were reasonable.

On the publications' front, Martin Higginson and Ken Swallow reported that plans for the 'Companion' were being finalised, the editorial

board had held its final meeting, and that it was firmly resolved to publish in the current year. The committee expressed its appreciation of the patience and industry being exercised, in particular, by Martin Higginson, Simon Blainey and Ken Swallow. The committee noted that, on the recommendation of the editorial board, a cover price of £50 had been agreed. The design of the flyer was the subject of appreciative comment. As for the **Tilling Group History Project**, the committee agreed that since it was a highly specialist book a conservative estimate for sales should be initially assumed. Further planning would take place on this basis. The committee, however, resolved that no orders for printing should be made prior to the successful launch and assurances of income for the 'Companion'.

The committee was pleased to note that membership was once more increasing and stressed the need to follow up any lapses in membership.

Peter White, Editor of the Journal, reported that he would welcome the assistance of a committee member in checking the text of the Journal prior to passing it to the printer. Philip Kirk kindly agreed to take on this task. Martin Higginson reported that he had commenced the production of a comprehensive index.

John Ashley, who had undertaken a comprehensive overhauling of the **website**, sought from committee members' observations and contributions, and reiterated the need for a regular supply of new material. The committee were very appreciative of the work undertaken and comment was offered to the effect of its high standard. Members are urged to examine the site and offer comments and contributions.

The committee once more turned its attention to the **recruitment** of new members and considered a number of initiatives.

On research co-ordination, Tony Newman presented a listing of road passenger transport archives. The committee warmly welcomed this aid to research and it was agreed that copies be circulated to committee members and that, suitably

edited, it be published in The Journal and on the website.

The committee resolved to establish an archive policy and thereafter make arrangements for the secure custody of the archives. Tony Newman undertook to confer with Richard Storey with the aim of producing such a policy.

It was confirmed that the **Spring AGM** and Conference would take place on 15 March and the conference theme would be 'Vehicle Design Past and in Prospect'.

It was confirmed that next year's **Summer 2014 event** would take place on the weekend 2/3 August, subject to further consultations with London Bus Museum, and be held at Brooklands, in association with LBM's programme, with the Association's particular events, on the theme of Transport on the Eve of the First World War, and a formal dinner, taking place on 3 August. John Ashley and the chairman would be visiting Brooklands on 28 September to finalise arrangements.

The Autumn 2014 event: The Annual Dinner and Conference would take place at Coventry on 3/4 October, embracing the theme of the highway and motoring organizations. On the recommendation of Peter White, John Minnis, of English Heritage, will make a presentation.

Swansea Bus Museum: The chairman reported that John Ashley was in discussion with officers of the Swansea Bus Museum with a view to establishing how the Association might be able to assist the Museum in obtaining accredited museum status. John Ashley, meanwhile, had requested the committee to consider possible lines of approach. In a preliminary discussion, the possibility of effecting links with other bodies who had sought accreditation, of hosting such discussions, of helping to draft submissions, and of supporting any submission, were cited.

The committee gave preliminary consideration to the possibility of revising the **Association's name**. In addition to the suggestion made in The Journal, the 'Highway Historian', and one submitted by a member in response, Ken Swallow suggested the

possibility of simply shortening the title to 'The Road Transport History Association'. It was agreed to give the matter further consideration notwithstanding general agreement to retain the existing title for official and legal purposes. On the recommendation of John Ashley it was agreed that he should prepare a plan for digitizing the Journal. The Committee resolved that the next meeting of the Committee would be held on Friday, 10 January 2014.

Robert McCloy, Chairman

Make it easy for yourself!

The payment of the annual membership fee can sometimes be a bit of a nuisance. This is not because we don't appreciate what a bargain it is but rather because we ask ourselves "*Have I paid it?*", "*Have I still got a cheque book*" or "*When was it due?*"

You can now brush aside such little concerns by using our spanking new application form for payment by standing order, the benefits of which are obvious to us all. In addition, the job has been made easier for you. The form is already in your possession and the payee details and date of payment are already included on the form! So why not go ahead, fill it in and get it to your bank. You know it makes sense!

RF

'War Effort'

Under the above title the Coventry Transport Museum has staged an impressive exhibition on the 'shadow factories', by which the motor industry was mobilised for military production before and during the Second World War. Drawing on its own and other collections, it gives vivid picture of an industrial (and agricultural) nation geared up for war. Coventry is obviously a major theme of the exhibition, but not at the expense of other centres – a large annotated wall-hanging shows principal locations of shadow factory production throughout the UK. The exhibition is open to the end of the year and, whatever your interests or your feelings about armed conflict, I would strongly recommend a visit.

Richard Storey

Battery Electric Road Vehicles – The Early Years

Keith Roberts

A paper presented to the October conference

We all know the question, 'Which came first – the chicken or the egg.' Well, when it comes to the history of battery electric vehicles in the United Kingdom, the answer is more readily available, the power source came first, the vehicle later!

Development of batteries

During the early part of the 19th century, several inventors were busy creating a chemical means of producing electricity, which became known as the Primary cell. Gautherot and Volta in 1800/1801 are recorded as discovering an electrical/chemical equation. Some years later, Michael Faraday's experiments were announced in 1831, but these remained confined to the laboratory. Georges Leclanché invented his primary cell in 1866, which became the basis for later dry cells (torch battery etc.). All these cells could not be recharged, so had limited use. Then in 1860, the Frenchman Gaston Planté, discovered the secondary cell, which could be recharged, and when connected to other similar cells, became known as the 'Accumulator.' Initially, they would be recharged from a set of primary cells! Shortly after, another Frenchman Camille Faure, improved on the original design, and it was this design that was later used to power electric vehicles.

Electricity generation

In 1871, a Belgian, Zénobe Gramme, perfected other inventor's designs, and introduced a rotating machine which generated electricity and became known as the dynamo, which soon after, became the means to recharge a bank of secondary cells connected together (by now, known as a battery). When a dynamo was used to charge batteries, the dynamo itself was driven by a stationary engine (gas powered, or steam, if that was continuously available). The DC generating dynamo could also be used as a motor, if electricity was applied to it, so later motor generator sets were common in many charging installations, fed from a DC main supply (Direct Current being the means of electricity transmission in the latter years of the 19th century). Another source of constant DC supply was invented by Peter Cooper Hewith in 1902, the mercury arc rectifier. Mercury arc rectifiers were very popular for supplying power for electric

tramways in the UK, at this time. Not many Mercury arc rectifiers were supplied for single vehicle applications, generally only for large fleets. It was possible to charge a battery directly from a DC mains supply, with a resistance in circuit, to lower the voltage to just above that of the accumulator voltage, but it was difficult to regulate the charge rate, and this resulted in many battery failures from overcharging, a common problem in the early days. Although Alternating Current (AC) supplies were becoming more readily available by the turn of the century, DC supplies still remained dominant. The more modern selenium plate rectifiers, used up to present times, did not become readily available until the early 1930s, so are really outside the scope of this article.

Direct current motors

Within a few years (1875), direct current electric traction motors became widely available, from such businesses as Siemens in Germany. At this time, considerable efforts were being made on the continent of Europe mainly, but also in the USA, to utilise these motors for vehicle propulsion purposes. In Europe the 'Julian electric street car' was operating in Antwerp, and in 1885 in competition with other cars (using steam and compressed air) was awarded first prize. A German electric car, called 'Flocken Electrowagen' is recorded as the first electric car in the world when introduced in 1888, but that is obviously not correct. Interestingly, an electric tricycle was driven in Paris in 1881 powered by Planté cells. Also in Paris around 1900 battery electric taxicabs first appeared.

By the end of the 19th century, motor cars, some powered by steam, others by internal combustion engines were increasing in number, and some enthusiasts were using them for racing. On the 29th April 1899 a Belgian, Camille Jenatzy, became the first individual to break the 100 kph barrier, when he attained 106 kph (66mph) in his battery powered car called, 'La jamais contente' ('the never content', apparently named after his wife!).

In the USA 'electrics' were gaining popularity all the time. Indeed in New York in 1897, a fleet of electric taxicabs were in operation. Several electric car manufacturers were established at the turn of the century, and in large cities the wealthy preferred this means of propulsion due to a simple drive system (no gears) and cleanliness of operation. Indeed, electric cars were available to purchase to the 1920's.

It is generally accepted, that the Locomotion Acts (Red Flag Acts) in the UK, were detrimental to the

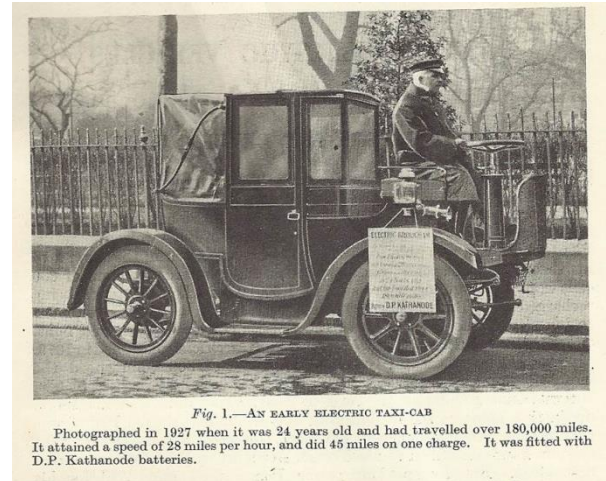
development of all forms of motorised traction. When the Acts were repealed in 1896, manufacturers began the race to produce new products. Here in the UK., battery electric traction had not enjoyed such widespread use, as in other parts of the world, so we were slow to adopt this mode of traction. The first battery electric vehicle to run in England was built in London in 1889, and Mr Frank Crawter, of the Chloride Electrical Storage Co. Ltd., makers of Exide batteries, drove it from Kentish Town to Oxford Street in London. Mr Crawter had to obtain special permission from Scotland Yard, because at that time, 2 mph was the regulation speed in this country for a mechanically propelled vehicle, and a man with a red flag had to walk in front of it!

Early developments in Britain

The Electric Construction Company of Wolverhampton, built an electric taxicab which looked like a horse drawn carriage, but was powered by a set of accumulators. This came out in 1897, but no information has been found as to how many were built. Other electric 'cabs' were in use in London in 1899, but they didn't last long.

In Brighton in 1887, Mr Magnus Volk (originator of the famous Volks Railway in Brighton), constructed an electric vehicle, not so much a car, more a dogcart. It received reviews in the press, and hearing of it, the Sultan of Turkey asked Magnus to make him one. He built a larger car with four wheels, but no further machines were made. By the turn of the century most electric cars were of American or European origin, but one company began manufacture here, the City & Suburban Electric Carriage Company of London. Sadly the electric car came too late to enjoy widespread use, but fortunately the commercial variation was more successful.

At the turn of the century, some businesses were looking at ways to replace horse drawn drays, and it was the railways who stole the march. In 1904 the Great Western Railway imported an American chassis (most probably made by the Riker Car Company), fitting their own bodywork and then operated it out of Paddington Station in. The original caption to the photo states that this was the 'first' commercial battery electric vehicle in the UK.



An example of an electric taxi used in London, new in 1903 and still running in 1927

It should be mentioned, that in these early days, there were many problems that owners had to contend with. Firstly, the state of the roads, most of the time running on cobble stoned streets, with solid rubber tyres. The vibration often led to premature failure of cells in the battery, and wear on the running gear too.

Early means of battery charging were not satisfactory, and reports of overcharging were common. Electricity, as we know it, was not so widespread beginning of the 20th century, and a shortage of skilled labour to maintain the machines, was a problem.

Commercial vehicles

From 1905 onwards, many more commercial electric vehicles continued to be seen on the streets of towns and cities. Yes, a few manufacturers had set up shop in 'Britain', but American chassis were being imported most of the time. Walker Electric Vehicles, from America were most successful and they supplied small vans and larger trucks to several organisations. Among those using lightweight versions were Harrods, Selfridges and Carter Patterson. Larger versions were in service with breweries, coal merchants, and railway companies too, were users. On a point of interest, a 1909 Walker van was sold at auction in May 2012 for \$127,500.



An example of a very early electric car, indicating the style of bodywork clearly taken from horse-drawn vehicles

Bodywork in these early years was, as can be expected, very antiquated, and followed closely those of the traditional horse and carriage they replaced! Larger models had the driver in front (very little weather protection) with a flat deck body for the railway companies and breweries, and special bodies for the municipal users. Drive to the rear wheels, was either by using a motor mounted under the deck space, with chains to the wheels or, two electric motors operating chains to each wheel on either side. The other option, was to have two motors mounted on a common beam axle, and driving each rear wheel through a series of gears, then via a toothed ring on the inside of each wheel frame. One manufacturer specialised in having a motor attached to each wheel, front and rear!

Electric buses

One interesting development took place in London in 1908, when the London Electrobuses Company placed into service 12 battery electric double deck omnibuses, for service on selected city routes. At its peak there were 21 buses, and although they were popular with passengers, the system closed in 1910 as a result mainly of share-dealing fraud. The buses were sold to Brighton & Hove Bus Company, and continued in service until 1916.

In the years leading up to the first world war, 'electrics' were brought into service with many businesses, and in the UK new manufacturers were setting up shop. For example, Richard Garrett & Co., Electromobile Co., Ransomes Sims & Jefferies, and the General Vehicles Co. Importing chassis from America were Walker Electric Vehicles, Edison Accumulators Ltd., and Lansden Electric Vehicle Company. Local authorities began to show interest in 'heavy' electrics for refuse collection, a duty ideally suited to stop/start operation on inner city



Fig. 1223 D.—The London Electrobuses, 1908 type, 34 passengers

The London Electrobuses double-decker

streets. Birmingham Corporation Salvage Department placed their first 'electric' into service in 1915. Other municipalities included Glasgow, Nottingham, Leicester and Blackpool.



Fig. 2.—AN EARLY RANSOMES "ORWELL" VEHICLE Used for local deliveries by a railway company. The drive was on the front wheels.

A Ransomes electric van, used for railway deliveries

Although the electric car was still available, we can see from the foregoing, that commercial applications were most successful. One story of interest is that in 1913 Arrol-Johnston Motor Vehicles, built a new factory in Dumfries to manufacture 50 electric cars ordered by the Edison Accumulator Co., but sadly there are no records as to how many were made.

During the First World War, there was a shortage of horses, as most had been requisitioned for the war effort. Equally, petrol was in short supply for the same reasons. This proved a boon for electric vehicle manufacturers (if they could get raw materials). So our story shall finish with the end of hostilities in 1918, and the end of the beginning! Thank you for your interest.

Kent in World War Two: Transport in “Doodlebug Alley”

Robert McCloy

This paper is based on a talk given by our chairman, Robert McCloy, to the October conference. He began by recollecting his evacuation from London.

Where it happened

Ironically, returning from a place of evacuation, I moved, at the age of seven, with my family to Eynsford in Kent, to the very path of the V1 and V2 rockets, “Doodlebug Alley”. Nevertheless, it was a place of enchantment, adventure, and the stimulus to a life-long interest in transport. Eynsford lies in the Darent Valley, a favoured place since Roman times, a rich agricultural location. Here, in a few brief years, 1942 to 1947, was to be witnessed, at close quarters, a remarkable range of transport, from the horse and cart to what was the destructive prototype of the Saturn moon rocket. The church, bridge and ford constituted the village’s centre. In the interwar years it had been intended to replace bridge and ford, long the community’s transport hub. Hore-Belisha, transport minister and local resident, intervened: this picturesque feature yet remains¹.



To the west, beyond the railway viaduct, lay the ghostly unused railway station built in anticipation of London’s airport, never to be built. To the north was the village of Farningham whilst to the south was Lullingstone, the seat of the Hart Dykes. The main road through the village was the A225, in an

¹ W.I.Curnow, “Eynsford; A Story Through The Ages”, Eynsford Village Society, 1953, p30.

earlier age a turnpike highway. Parallel and to the west was Sparepenny Lane, with its Toll Bar Cottage, suggesting that this had been a private toll road undercutting the principal toll road ². Though from the skies there was threat enough, there was freedom to wander. H.E.Bates recorded the mood ‘..in contrast to 1940 the battle [against the V1s] was entirely hated...people were rubbed raw...’ ³ That, however, was not my experience.

Roads and Rail

Relatively, the roads were free of vehicles, by the standards of today. Such vehicles as there were quickly became familiar. A few commercial lorries were in evidence: one for coal loaded at the goods yard adjacent to the station, delivered locally⁴. Another was R. & G. Brown, haulage contractors based at Priory Lane⁵, well known haulage contractors and suppliers of building materials⁶. Also located in Priory Lane was the fire station, which housed a fire tender with trailer pump⁷. The railway station was, however, ever a centre of attention. The tracks, electrified in the interwar years, provided fast efficient services to Holborn to the west across the viaduct; and to the south, to Sevenoaks. Yet the simple two-platform station boasted a station master, with stationmaster’s house, and a complementary staff of signalman, ticket clerk, porter [Hussey makes reference to Bill Blake ‘legendary porter for many years...’]⁸, signal box on the down line, a goods yard ever busy with trucks being shunted with local produce and coal. With the stationmaster’s indulgence, many an hour was spent in the signal box where I learnt the meaning of the regular sounding bells and the distinguishing colours of the leavers for the points and signals. As respite, there was the drama of movement in the goods yard whither the immaculately-maintained coal lorry took its regular supply for local delivery.

² Curnow, p59

³ TNA Air 20/4140, draft leaflet on flying bombs.

⁴ Brian Hussey, “An Eynsford Boyhood 1931 to 1950”, Farningham & Eynsford Local History Society, 2006, p20.

⁵ Hussey, p10.

⁶ Hussey, p13.

⁷ D.G.Burcham, “A Village at War: Eynsford 1939-1945”, Farningham & Eynsford Local History Society, 1995, p28.

⁸ Hussey, p14.



Transport on the land

Tractors, still few in number, soon became objects of appeal: a David Brown [in red], John Deeres [green with the very distinctive single front wheel]. These, with pneumatic tyres, used the village streets. Caterpillar-type tractors, largely confined to fields, also became familiar. As noted by Alexander, local farmer and historian, "Tractors were beginning to be used on farms before the war, the most common being the spade-lug wheeled Fordson. Their heavy weight and iron wheels tended to consolidate the ground, and farms were not initially fully aware of the damage they caused to soil structure. When track-laying tractors were available one of their selling points was their lightness of soil compaction coupled with the minimum of 'wheel-slip'"⁹.

Alexander records that in 1937 the farm had a Caterpillar 22 petrol/paraffin track-layer, and the first diesel engine tractor to be bought was the ever popular Caterpillar D2 which was started by its own petrol donkey engine. In 1939 this, costing £626, was ideal for ploughing and cultivating the derelict fields that were being brought into production during the war. Its ample pulling power and track grips were essential on the steep hilly fields of our farms. Two more D2s were bought in 1941 and 1942. The first rubber-tyred tractor to come on the farm was a John Deere, model BO, imported from America in 1940 at a cost

of £300 followed by a further three by 1945. They were much more versatile than the spade-lug Fordsons. The John Deeres were more flexible in use and did not compact the soil so heavily¹⁰.

Again, as observed by Alexander, mechanization was now rapidly taking place: farm horses in Kent reduced from 8,500 in 1939 to under 4,000 by 1949, tractors increased from fewer than 3,000 to over 10,000. Significantly, as noted by Alexander, 'A pair of horses could plough one acre per day; a tractor, with a 2-furrow plough three acres per day.' Nevertheless the requirement to give priority to military vehicle production meant that horses continued to play a key part¹¹. A consequence was the continuation of the crucial part played by the village smithy, adjacent to the village church. Burcham notes that the smithy, opposite the Malt Shovel, was owned by the Eynsford Foundry, in the High Street opposite the Five Bells, by Mr Gibson¹². Many a memory of distinctive smells and the sound of metal upon metal yet remains. I was given the opportunity of being in charge of the water tank hauled by cart horses and, to this day, valued the praise offered when, at the first attempt, the entrance to the hop field was successfully negotiated. This meant more to me than any achievement in school. The relative ubiquity of the horse was demonstrated too by a weekend loan of a pony and trap. Freely I drove the streets and lanes burdened by having to take my two year old brother. The return journey up the hill from Lullingstone was a challenge: the pony resisted my attempts to ascend the hill with the two of us on board. Necessity, it then seemed to me, required that my brother should walk holding on to the trap. Greater skill and charity on my part might have suggested alternative solutions. The guilt pangs yet remain.

Car and Bicycle

Cars were few and far between: the car of a prosperous neighbour [the Beards] remained in its garage for the duration, its wheels jacked up from the ground. Opposite our cottage there was a petrol station. Few indeed were the customers for the solitary pump. As a focus of interest it had little appeal. A late learner to ride a bike [in earlier evacuation there were no bikes to borrow], I practised on my mother's, eventually mastering the balancing act after falling headlong into nettles, at the site of the then unrevealed Roman settlement. Thereafter, the rather ungainly sit up and beg bike

⁹ William G.G. Alexander, "A Farming Century: The Darent Valley 1892-1992", Quiller Press, London, 1991, p77.

¹⁰ Alexander, p78.

¹¹ Alexander, p67.

¹² Burcham, p22.

was the means by which I undertook local shopping, transporting wireless accumulators for recharging [a hazardous business] and travelled further afield, to, for example, the Farningham terminus of the 21 bus, and the Country department's Swanley garage. On many of these expeditions the bike was imagined to be a single deck three-axle London Transport AEC Renown.

The Military

The reason for being in Eynsford had been the posting to nearby Lullingstone, latterly a RAF decoy station, of the RAMC, to which my father belonged. To accommodate night time operation in 1942 a dummy flare path was constructed, later augmented by installations codenamed Starfish, which simulated explosions on the ground¹³. As noted by Burcham, '...during 1943, Royal Engineers left the village and were replaced by 221 Field Ambulance, RAMC, mostly billeted at Lullingstone. Doctors and other medical staff were trained in retrieving the wounded from difficult terrain, and were given short toughening-up courses on what amounted to an assault course erected near the river. Other units, including the RASC made use of these facilities...' ¹⁴. Ignoring military regulations, my Father obtained a lease on Darenth Cottage [from a Mr Saddler] and did much to ignore the stringencies of war by, for example, playing the organ in the village church whither I was enrolled as the solitary chorister and organ pumper and where the lessons were imperturbably read by Sir Henry Fountain, *de facto* squire, notwithstanding interrupting bombing raids. The RAMC contingent was co-located with a unit of the RASC which latter, one would suppose, would offer rich pickings for the transport-minded. It was not to be. Few indeed were the corp's lorries that ventured into the village. Very occasionally, I witnessed a military ambulance.

Shortly, without advertisement, RAMC and RASC departed, the former most assuredly to India [from whence my father corresponded]. Thereafter, the American Army moved into Lullingstone. In November 1944, as reported by Burcham, 200 coloured American soldiers arrived at Lullingstone Castle and were by all accounts very popular in the village, especially among the young, who found their meagre sweet ration unexpectedly augmented¹⁵. The writer confirms this account. The American trucks, as opposed to British lorries, were much larger and seemed to be in greater use

for routine journeys ferrying friendly troops handing out the sweets, chocolate and gum. Even then it occurred to the observer that the trucks were used more casually often carrying little by way of goods. On the eve of D-day, convoys of vehicles passed through the village escorted by motorbikes, causing great excitement.

Transport by Sea: Landing Craft

Earlier I had been taken, in August 1943, to Hamworthy on the edge of Poole Harbour. There I had the great fortune to accompany my godfather, who was an inspector of landing craft, on test runs in the Solent. His name was Robert Newman, owner of the boat builders, Robert Newman and Sons, a magistrate and a committed member of the Church. In preparing for the Normandy landings, the Americans, with heavy commitments in the Far East, had resolved to allocate no more than a thousand landing craft, out of their 21,000, necessitating an immediate and extensive UK building programme. In addition to the boat yards in Poole, notably Bolsons and Sons, including that of Newman's, yards, garages and workshops elsewhere were commissioned to build the standard British Landing Craft Assault, LCA. In a world of calm purposefulness entirely free of hysterics and panic, even in air raids, he would take me from slipway to slipway, to miscellaneous workshops, to check on progress giving words of encouragement.

Completed vessels would be launched for sea-testing. The routine was exciting: we would clamber aboard and negotiate a circuit which, if accomplished without incident would lead to the signing off of the craft. Occasionally, the craft broke down and without fuss we would simply jump on to another craft and the stricken vessel would be towed to port. From recollection, what was being tested was general sea worthiness, including the engines. I recall being surprised that the interior walls were reinforced with what looked like concrete.

The craft examined were Landing Craft Assault [LCA] built for large scale landings of troops from transport ships. They had a capacity for 35 troops plus 800 lbs of equipment, an endurance of 50-80 miles, their dimensions were 41'x 10' with an armament of 1 bren gun in port cockpit. Their armour was described as '10lb DIHT to bulkheads and hull sides'. In commission, they would be crewed by one officer for every three craft and four men. Propulsion was provided by two 65hp Ford V

¹³ Burcham, p12.

¹⁴ Burcham, p14.

¹⁵ Burcham, p19.

engines, with twin screws, with a fuel capacity of 64 gallons¹⁶.

Doug Kingsbury, a skilled carpenter, employed making landing craft in J Bolson and Sons Ltd offers independent testimony¹⁷. He believed that Bolsons did well by the war but that the claim, sometime cited, of producing one craft a day was probably an exaggeration. He described his labour as 'filthy work, on one's back with only eighteen inches between keel and ground'. The vessels were of a laminated wood structure and Kingsbury commented that hundreds were made but not all by Bolson's. He considered British LCs 'to be overbuilt' compared with US versions. Elm, silver birch and plywood supplied by Admiralty were used. Ships were still getting in with wood supplies from Canada.' 'At peak production, Bolson's employed 800.¹⁸ Bolson, Newman, Dorset Yacht Co began making assault landing craft. Bolson's managed to produce one a day¹⁹. Though US turned out over 21,000 they would only allocate 1,000 to Overlord²⁰. A US coast guard cutter was severely damaged in Newman's yard when an American rating was killed when a petrol tank exploded.²¹ It seemed logical that V1s would be turned against invasion ports but like most of Britain, Poole did not suffer the 'doodle bug'²².

On the Eve of the Normandy Invasion

Thus it was that the run-up to the Normandy invasion was witnessed in an atmosphere of mounting excitement. As observed by Oldfield who must have been a contemporary, 'In spring of 1944 the build-up for D-Day began, and suddenly there were all sorts of activities in the valley...we rode our bikes...down the road to a large open field where lorry-loads of soldiers were being dispersed to set up tents and training facilities...being trained for the D-Day landings...Later that week, at the opposite end of the valley on the golf course at Woodlands, the RAF set up a barrage balloon site...' ²³. The RAF now came into area with bulldozers and another form of 'transport'. I first

encountered a barrage balloon site near the old quarry: a collection of bell tents, a mechanised winch and tethered thereto a giant balloon. Balloons were set at 1,524 metres forcing low flying bombers to fly high, making them less accurate and bringing them within range of AA guns.

In 1944, however, they were moved to combat the V1 to from a ring round south London. The V1 was Hitler's vengeance or *vergeltungswaffen* weapons and was first sighted on 13 June 1944. It, like the landing craft, was made of plywood and steel, 25ft long with 17ft wingspan, pilot-less, powered by jet engine and with 850kg of high explosive packed in the forward end of the fuel tank. When the engine stopped silence followed and moments later a great explosion²⁴. Burcham recalls that 'within a day or so of ...first sighting, the balloon lorries started to arrive...There were prepared sites behind the Bower Lane houses, in Pollyhaugh meadow, in Eynsford Rise, by the river near Little Mote, at New Barn Farm...and soon there were 50 or so airmen added to those already in or near the village.'²⁵

For my part, the crew at the old quarry, could not have been more welcoming and in the weeks ahead, after school, I spent many an hour at the site witnessing the excitement as the balloon, ascended, descended, and occasionally was lost, in attacks by the V1 ['Doodle-bug']rockets. As noted, the number of sites progressively increased to six in the area but my attention was divided between my original discovery and two others: one almost adjacent to where I lived near the station and another near to what, in later years, was the famous Roman Villa [incorporating a Christian house church of the fourth century], the site of my ignominious first cycle fall. This latter site, I recall, was crewed by the WAAF. Such was my interest in the doodle-bug I made a model of one.

Part Two of this paper will appear in the next issue

¹⁶ A.D.Baker, ed., "Allied Landing Craft of WW2, 1944, republished 1985", TBL.

¹⁷ Doug Kingsbury, "Poole History PHD9 oral history".

¹⁸ Ship and Boat Builders, p. 253, July 1956]

¹⁹ B.Dyer and T.Dervill, ed., "The Book of Poole Harbour", Wimborne Minster, 2010, p.155.

²⁰ D.Beamish and Others, "Pool and World war ii", Poole Historical Trust, 1980, p.165.

²¹ Beamish, p.209.

²² Beamish, p.209.

²³ Michael Oldfield, "A Boyhood in Knatts Valley and Eynsford in the 1940s", Farringham & Eynsford Local History Society, p.4.

²⁴ Burcham, p.16.

²⁵ Burcham, p17.

Book Reviews

The Toll-houses of Somerset

Janet Dowding & Patrick Taylor. Polystar Press,
277 Cavendish Street, Ipswich, Suffolk IP3 8BQ.
<polystar@ntlworld.com>
ISBN 978-1-907154-05-8. 176 pages, £9.95

This is the latest in a county-by-county series describing the toll-houses along the turnpikes that criss-crossed the English countryside from the end of the 18th century until the 1870s. The book follows a similar pattern to others in the series, covering East Anglia and Devon, which we have reviewed over the past four years (*Journal* nos. 60/61/64 & 65).

Turnpikes were set up from the early 1700s to overcome the dire state into which roads had fallen as a result of the growing volume of goods being transported from town to town. However, the condition of the highways was evidently a problem as early as 1555, when an Act of Parliament stipulated that every parish must appoint two surveyors to oversee the repair of roads by parishioners providing "statute labour" on four days a year.

The book includes photographs of those toll-houses still standing, giving Ordnance Survey grid references, and seeks to establish the location of those that have long since disappeared. The authors have used 19th century census returns to identify toll-keepers and their families, whose members also worked at trades like blacksmithing, making boots, garments, gloves, or even candles.

In most places the tolls ceased by the end of the 19th century, but the bridge over the Kennet and Avon Canal at Bathampton is one place where tolls are still collected today.

There were some risks to the business. In 1877 Halfpenny Bridge at Bath collapsed under the weight of people crossing it to visit an exhibition: the proprietors and toll-keeper are said to have been convicted of manslaughter. At Midford, just outside that city, the toll-bridge over the brook that runs through the village divided families, who took exception to over-zealous collecting of tolls. In the early hours of a January morning in 1853 the turnpike gates were wrenched out and stolen. A £20 reward for information proved insufficient: the missing gates were never found. **AHW**

Highland Buses John Sinclair ISBN 978-1-4456-1473-1, 96pp, price £14.99 and

The Buses of Northern Scottish Peter Findlay ISBN 978-1-4456-1528-8, 96pp, price £14.99
Both published by Amberley Press, The Hill, Merrywalks, Stroud, Gloucs. GL5 4EP.

These two volumes follow the familiar Amberley press style of illustrated books with a brief introductory commentary, in this case covering adjoining regions of Scotland. John Sinclair's volume in particular, offers many scenic settings in addition to the buses themselves. The preceding operations of MacBrayne are included, prior to the operations of Highland itself from its formation in 1952. The role of lightweight single-deckers, together with vehicles specially adapted to carry mail as well as passengers, is evident. Almost all illustrations are in colour, showing the transition from the red and green of MacBraynes. A surprising amount of double-deck operation is evident, notably for the Dounreay site. The story is taken to the late 1970s.

Peter Findlay's recollections as a driver for Northern take the story through to deregulation, including both the short-lived joint working with Grampian and subsequent direct competition. The great majority of illustrations portray the two-tone yellow livery adopted in 1961. Extensive use was made of single-deckers, notably the Albion Viking and Ford R-series models. The author's comments from the driver's perspective also indicate that many outwardly-similar vehicles could be very different in everyday operation. The long-distance coach operations of the company are also covered.

PRW

We Can Do It! by Roy Larkin

Available from the author at PO Box 3066, Reading RG1 9WP (e-mail Roy@historicroadways.co.uk, Tel 01189 817924). Price £12.95 (plus p&p - £3.00 within UK, £8.50 rest of world). ISBN 978-0-9565014-3-1. 112pp, card covers

This exceptionally well-illustrated book - written by the previous editor of this journal - describes the pioneering heavy haulage work carried out by Edward Box and later Ernest Holmes, as recalled by Fred Cooper. Ernest Holmes joined Marston Road Services of Liverpool in the late 1920s, being based

at their Birmingham office. The firm subsequent operated under the name Edward Box and Co. Ltd. The company survived independently until nationalisation in 1949, then being absorbed by Pickfords.

Fred Cooper joined Edward Box in the late 1930s, being involved in movement of heavy loads, then moving after 1949 to Ernest Holmes (Langley) Ltd., a specialist in moving and installing heavy engineering equipment. The recollections and illustrations come principally from the daughter of Earnest Holmes, Diane Brazier.

From an early stage the company specialised in moving very large loads, using Scammell vehicles designed for this purpose, competing in market initially dominated by steam haulage. The most striking feature of the book is a very early 100-tonner built by Scammell for Box in 1929, KD9168, which continued to operate, up to takeover by Pickfords, despite using solid tyres, until 1957. A tractor unit towed a low-loader trailer, the rear of which carried a steersman (initially in the open, later with very basic cabin). This features in numerous illustrations and recollections, highlighting many exceptional loads it carried (such as railway locomotives and carriages, boilers, chemical plant components, transformers, and fuel tanks). Perhaps the most unusual item was whale in a tank conveyed to Morecambe as tourist attraction. Recollections indicate the very low speeds at which such loads were often moved, and extensive special measures which had to be taken to make journeys feasible (for example, to ensure sufficient clearance under bridges, or cope with sharp corners).

The latter part of the text documents the career of Ernest Holmes after the sale of the Box operation to the state in 1949, and its absorption into Pickfords. He set up a new company specialising in movement and installation of heavy plant and equipment, for which Fred Cooper became managing director. Again, very extensive illustrations are provided, including the difficult tasks of installation as well as movement itself, including examples such as machine tools, and components for steel mills.

The book also includes appendices listing all Scammells operated by Box. The research is based

not only on the recollections which form the principal source, but also the role of other archive materials such as the Scammell Register and the technical press.

PRW

Drawing their own Conclusion by Bob Hill

Obtainable from the author at 12 Maygrove Road, Kingswinford, DY6 9BU, priced at £10 plus £2.50 p+p (proceeds to charity). 2013. 40pp, spiral binding

The author draws in his own experiences and those of his father in the employment of Marsh & Baxter Ltd., Brierley Hill, ham and bacon curers and sausage and pie manufacturers, to describe their extensive and varied transport operations. The business spread widely through the acquisition of numerous other concerns, of which the best known was C&T Harris of Calne. The wide range of vehicles required, from trunners to retail delivery vans, is shown, although some of the illustrations are less than sharp, or suffer from sideways elongation. One interesting feature which is clearly discernible is the low height of some of the earlier box van bodies, anticipating today's trend for low air resistance bodies to improve fuel economy. An interesting read, but a sad one in view of the demise of FMC ownership of the once thriving plant in 1979.

RS

The British Bus in the Second World War

John Howie. Amberley Press, Stroud. ISBN 978-1-4456-1708-4. 157pp, card covers. £14.99

As with other Amberley Press publications, this is profusely illustrated (despite the wartime conditions under which most of the photographs were taken), but also benefits from a very comprehensive text by John Howie, a member of the R&RTHA, who has drawn on his work for a Diploma in Transport History, in turn based on extensive archive research.

A variety of themes is examined, including the initial impacts of the declaration of war (evacuations, and blackout regulations), the supply of vehicles (the release of 'unfrozen' manufacturers' stock, followed by utility production, notably of the Guy double-deckers, and Bedford OWBs),

requisitioning of vehicles by the military, curtailment of express and excursion activity, use of alternative fuels, and labour supply (notably employment of female staff). Overall themes are complemented by a series of local case studies in an appendix.

It is evident that much confusion existed in the early stages, with varying local rules being developed for the application of the blackout, and improvisation by operators. A general theme emerging is that centrally-directed initiatives often achieved limited (or even negative) impacts, such as the use of producer gas units (many of which seem to have been operated in service for very limited



A theme examined in John Howie's book is the extent to which rationalisation of services by adjoining operators was encouraged to improve efficiency. This had some effects on smaller independents, but was unsuccessful in promoting mergers between adjoining municipalities, such as Grimsby (above) and Cleethorpes [an outcome finally attained in 1957]. This AEC trolley of 1936 (an illustration from his book) is shown outside the depot, from which the word 'Grimsby' has been obscured as a wartime measure.

periods, if at all), and alternative vehicle designs (such as articulated types). A more substantial innovation was the use of 'perimeter seating' in single deckers to increase standee capacity, albeit also unpopular with operators and staff.

While many of the main themes may be fairly familiar to readers of this journal, a number of less well known aspects emerge, notably the false belief

in 1941 that up to 1,000 vehicles were lying unused on the Isle of Man (page 71), and the fact that bus fares were regulated, but not those of trams nor trolleybuses.

The extensive range of photographs, many drawn from the Omnibus Society collection of work by Douglas Spray, Charles Klapper and John Parke, is complemented by reproductions of trade literature and adverts from the period.

Despite the wartime constraints, the rapid growth in ridership and reductions in service offered enabled operators to improve profitability in many cases, albeit with limited chances to invest in new vehicles. As well as the obvious growth in ridership directly due to war work (such as Royal Ordnance Factories), it is also interesting to speculate how far the return of full employment among the civilian population (with its consequent spending power) would also have been a cause of ridership growth after the 1930s depression.

Given the comprehensive coverage, the price represents excellent value.

PRW

Motor cycle combinations

Books, rather than the internet, may provide more detailed (and sometimes more reliable) information on a specific topic. No 132 in the excellent 'Shire Album' series (1997) is devoted to *Sidcars*. Their commercial use is covered in more detail in the entry on 'Motor cycle combinations' in the *Companion to British Road Haulage History* (2003).

RS

**Copy date for the next
issue (no 75, February
2014) is 1st February**