

MILEPOST JULY 2015

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Class 37s on the Cumbrian Coast - from page 135

Photo: Chris Taylor

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The Quarterly Magazine of the Railway Performance Society

Honorary President: John Heaton FCILT

Committee:

CHAIRMAN	Frank Collins 10 Collett Way, Frome, Somerset BA11 2XR Tel: 01373 466408 e-mail frank@frankcollins.co.uk
SECRETARY & VC (and meetings)	Martin Barrett 112 Langley Drive, Norton, Malton, N Yorks, YO17 9AB Tel: 01653 694937 Email: mandjbarrett@yahoo.co.uk
TREASURER (and membership)	Peter Smith 28 Downsview Ave, Storrington, W Sussex, RH20 4PS. Tel 01903 742684 e-mail: petersmith40@talktalk.net
EDITOR	David Ashley 92 Lawrence Drive, Ickenham, Uxbridge, Middx, UB10 8RW. Tel 01895 675178 E-mail: rpseditor@aol.com
Fastest Times Editor	Martin Robertson 23 Brownside Rd, Cambuslang, Glasgow, G72 0NL e-mail: mdr.fastesttimes@gmail.com
Distance Chart Editor	Ian Umpleby 314 Stainbeck Rd, Leeds, W Yorks LS7 2LR Tel 0113 266 8588 Email: ianumpleby@aol.com
Database/Archivist	Lee Allsopp 2 Gainsborough, North Lake, Bracknell, RG12 7WL Tel 01344 648644 e-mail l.allsopp@ntlworld.com
Technical Officer	David Hobbs 11 Lynton Terrace, Acton, London W3 9DX Tel 020 8993 3788 e-mail davidjahobbs@hotmail.co.uk David Stannard 26 Broomfield Close, Chelford, Macclesfield, Cheshire, SK11 9SL. Tel 01625 861172 e mail: david@stannard26.f9.co.uk
Steam Specialist	Michael Rowe Burley Cottage, Parson St., Porlock, Minehead, Somerset, TA24 8QJ. Tel 01643 862182 E-mail: Kchutney@aol.com
Committee member:	Michael Bruce , 234A Otley Rd., West Park, Leeds LS16 5AB Tel 0113 305 0367 E-mail: michaelbruce@virginmedia.com David Sage : 93 Salisbury Rd, Burton, Christchurch, Dorset BH23 7JR Tel 01202 249717 E-mail: davidsage1@ntlworld.com

Non-committee official:-

Foreign Fastest times: NEW: Alan Varley, 285 Chemin de la Costiere, 06000 Nice, France, e-mail: alan.varley@wanadoo.fr

Directors of The Rail Performance Data Foundation:

RPS nominees: Frank Collins, Peter Smith, Martin Barrett

Trustees: Frank Price, John Rishton

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Front Cover: 37606 waiting to head north on platform 6 at Preston station on Wednesday 3rd June, 2015 with the 1004 Preston to Barrow-in-Furness – photo: Chris Taylor

Enclosures (where subscribed): UK and Historic Fastest Times

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PUBLICATION OF MILEPOST

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REPRESENTING THE SOCIETY

The RPS is always keen to be represented at special media-type occasions. However, we do ask that anyone wishing to do this should do so with the express agreement of the Committee. Should the opportunity arise for any member or in exceptional circumstances, friend of a member, to do this please can contact be made with the Secretary (either by telephone or e-mail) setting out the circumstances of the occasion. Please give us at least one week in advance of the occasion.

SUBMITTING ARTICLES

Submissions may be sent as attachments to an email or by post as documents on a CD or diskette or as a printed document. If sending a diskette or CD, please enclose a hard copy of the article; this helps if file(s) are unreadable for any reason.

Please send all submissions to the editor whose contact details are in the inside front cover of Milepost. The editor will normally acknowledge email submissions within a few days, and always within 3 weeks. If sending by post and you wish to have a receipt, please enclose an SAE for reply. If you wish any material/CD/diskette to be returned, please clearly state this.

Milepost 23¾ gave detailed guidelines for submissions. The editor is happy to supply these, on request by email or by post. Please note that page margins are critical: one inch or 2.54cm top, bottom, left and right.

FASTEST TIMES

Following on from the changes explained last time, Alan Varley has offered to take on the compilation of Foreign Fastest Times. Details are shown on page 74. This means that UK and Ireland will be managed by Martin Robertson, and others by Alan Varley. Members who have subscribed to Fastest Times will receive the UK and Historic booklets with this distribution.

HISTORIC FASTEST TIMES

If you have any items to offer please contact me by email at either bevanprice666@gmail.com or bevanprice666@btinternet.com, or by post to Bevan Price, 24 Walmesley Road, Ecclestone, St. Helens, Lancs., WA10 5JT.

SALES ITEMS

Back Numbers: Certain back issues of Milepost, from Milepost 6 onwards, can be supplied at a price

of £2.50 each including postage. Supplies are extremely limited and once sold they will not be reprinted. Details of issues available will be supplied on request.

Milepost is available in the British Library; the Bodleian Library, Oxford; the University Library, Cambridge; The National Library of Scotland, Edinburgh; The Library of Trinity College, Dublin, the National Library of Wales, the National Railway Museum and the Railway Studies Library at Newton Abbot Library, and on the RPS web-site. Where a requested edition is out of print the member will be provided with a letter of authority from the Society (as copyright holder) to enable a complete copy to be taken from any of the Library copies.

Indices for volumes 7, 8, 10, 12 to 19 and 21 are available and will be supplied free of charge on receipt of an A5 size stamped addressed envelope.

Orders for all above sales items please to Peter Smith. All prices include postage. Please enclose the correct remittance with your order and allow 28 days for delivery.

THE MEETINGS SECTION

TUESDAY 21 ST JULY 2015	THURSDAY 24 TH SEPTEMBER 2015	THURSDAY 29 TH OCT 2015
The Grove Inn, LEEDS	The Royal Oak, Borough, LONDON	The Beaufort Arms BRISTOL PARKWAY
1700	1645	1600
Area Meeting	Area Meeting	Area Meeting

Note: It has been decided to start Bristol meeting at 1600 and finish around 1830 as this allows members to arrive home at a reasonable time (and in some cases on the same day!)

DIRECTIONS TO THE VENUES

LONDON – The Royal Oak, 44 Tabard Street, London SE1 4JU. From Borough tube station, turn left and at first road junction turn right into Great Dover Street and the almost immediately left into Long Lane. Tabard Street is a few yards on the right (5 minutes walk). **OR** from London Bridge walk down approach road and turn left into Borough High Street, Turn left by Southwark Local Studies Library, with St Georges Church on right, into Tabard Street. Cross Long Lane and continue down Tabard Street with Royal Oak on right (just over 10 minutes). Please let Richard Howlett know if you are coming on 020 8394 0340 or Richard.howlett@93pinner.co.uk

LEEDS – THE GROVE INN, Back Row (off Neville Street), Leeds

The Grove Inn is around 400 yards south of Leeds City station (under 10 minutes walk). From the south concourse at Leeds City station go past M & S Simply Food, cross the road and into a circular building, go down the steps and turn sharp right at the bottom, continue under the railway on Neville Street, past the Hilton Hotel, over the river, cross Water Lane, next on the right is a large new office complex called Bridgewater Place with Starbucks and a Tesco Express, turn immediately right after Bridgewater Place into Back Lane and The Grove Inn is on the right (an old building surrounded by modern office blocks). It is highly visible from Neville Street at this point). If you are going to attend this meeting, it would help if you can let Chris Taylor know on 07941 315846 or chrisrailfan@gmail.com

BRISTOL PARKWAY - THE BEAUFORT ARMS Members should leave Parkway station along the approach road, passing the bus stops and, at the mini-roundabout where the station approach joins Hatchet Road, turn right. Walk 100 yards and at the next mini-roundabout, turn right again. You are now walking along North Road. Meetings are held at The Beaufort Arms, BS34 8PB, which is on the left side of North Road after a further 50 yards. Meetings start at 16:00 and conclude around 18:30. The Beaufort Arms is open all day and food is served at all times. You can order and eat during the meeting should you wish.

Further information is available from John Rishton on 07804 418896 or j_rishton@yahoo.co.uk

BRISTOL MEETING JUNE 25TH 2015 – John Rishton

We tried a more secluded area of the Beaufort Arms for the June meeting and found it to be much more satisfactory. Our first business was to consider a new venue but no other option ticked as many boxes as the Beaufort. **Future meetings will however be held between 16:00 and 18:30**; please note the earlier start time should you be planning to attend a future meeting.

We opened with an in depth discussion of a very recent log of the 11:33 Paddington to Exeter. Leaving Reading over 20 minutes late arrival at destination was within a minute of time – an excellent run, especially the Cowley Bridge to platform 6 conclusion.

Other logs considered were a comparison of 156 and 319 running between Liverpool and Manchester and the Class 37 hauled 10:04 Preston to Barrow.

Topics also discussed included the current rarity of Radar Speed Monitoring, lack of accuracy of recording of the time of the actual stop of a train at its destination (and the effect on punctuality statistics), the current lack of visible progress on the GWML lineside and the continuing disappointing timings from de-rated and “engine out” class 22x runs.

Do try and come along to our next meeting, Beaufort Arms - 16:00 - 29th October 2015.

FREE SOCIETY MEETINGS

All society meetings are free of charge to Members attending; i.e. no contribution will be asked towards the hire of rooms.

The committee wishes to encourage Members to come along to meetings, talk to other train timers and share information and experiences of traction performance.

The Society has a digital projector and if any member would like to give a short presentation at a society meeting using this projector (or without if they prefer), or if anyone has any topics for discussion at meetings please contact the Meetings Organiser.

Distance Chart Editor's Report – Ian Umpleby

The past three months have seen a large but pleasing amount of material received, including a set of official yardages between mile posts for which I am most grateful. Sorting this out, plus a lot of travelling collecting further data, never mind the start of the gardening season, has meant so little spare time that no fully updated charts have been produced. The plethora of new lines around Reading has been a tough challenge to sort out with an extended visit not being totally successful. Sean Emmett has measured the new Ebbw Vale Town extension and Network Rail has issued the Sectional Appendix diagram for the Borders/Waverley line which has some 85/90 mph sections. All should appear on the web site in mid to late July. A complete overhaul of the Northern Ireland Railway charts is underway but all other projects are on hold; hopefully things will ease over the coming months. Keep looking at the web site for infrastructure/speed updates as well as the weekly Temporary Speed Restrictions list. Once again, thanks to all contributors.

MARTIN TASKER MEMORIAL LIBRARY – Lee Allsopp

The Society holds a large number of books (~170) containing articles on performance, or containing information of use to Society Members. Full details of the books held are contained in past issues of Milepost.

The books are available for borrowing by contacting me by letter, phone or E-Mail. The borrower will be responsible for postage in both directions. It will be possible in many cases for arrangements to be made to pass books on at Society Meetings to avoid postage costs in one direction at least. The length of the loan can be flexible by agreement.

The Society will be happy to receive donations to the Library. Items should be related to Railway Performance (no Magazine Collections please). Again please contact me regarding this. New items received into the Library will be notified in updates published in Milepost. The entire contents of the library will be listed on the Society Website.

RPS ARCHIVES – LATEST UPDATES – Lee Allsopp

The RPS Archive consists of material collected over the years from submissions and donations of material and collections by members. We are also indebted to the Steam Railway Research Society (SRRS), and the Stephenson Locomotive Society (SLS) for giving us the opportunity to scan some of their material for inclusion in our archive.

The following is a short summary of the material that has been added to the Archive on our Website since the last issue of Milepost. The Website is generally updated on a monthly basis, normally the first Sunday in the month. If you haven't had a look yet, then please give it a try!

- Latest material from Lee Allsopp
- Latest runs from Ian Umpleby.
- David Adams logs from the 1st Quarter of 2015
- Milepost 35¾ and 36
- Latest runs from Bob Jennings
- Latest runs from Charles Foss
- Latest runs from Peter Smith
- Latest from Richard Neville-Carlé
- Logs from John Rishton to go with his Fastest Times entries
- More from Bevan Price, including recent runs from the past few years.
- 11 more books from David Lloyd-Roberts covering commuting from Tunbridge Wells to London along with a wide variety of other material through the years
- Scanned images from John Heaton's notebooks to go with logs already in the database
- More from Philip Tromans covering the Midland Main Line and some runs in France
- 19 more books from a collection by John Wrottesley covering 1968 to 1986
- 10 more notebooks from S A W Harvey covering mainly Southern Steam on the South Eastern from 1938 to 1941.
- 15 more folders of material from Paul Ritchie covering a wide variety of steam railtours and running in the West Country from 2004 to 2014
- 4 more Books from Frank Collins covering Oct 2013 to Aug 2014
- Scanned images of 3 more of Alan Varley's notebooks to go with the details already in the database
- 4 Books of material from Dr Adrian Sumner covering a wide variety from 1954 to 2011
- Details of Brian Milner's runs from 2010
- A large number of runs from David Ashley covering the 1980s and 90s

RPS ARCHIVES – Coming soon! – Lee Allsopp

Thanks go to two of our members, Kevin Daniel and Frank Waterland who are continuing to scan some of the vast amount of material that goes into the archive.

The following is a taster of material that will appear in the archive, as it is scanned and processed, together with topical material received from a number of members.

- David Lloyd-Roberts has made his vast amount of material available to the society. These will be scanned and added to the archive over the coming months. Data from 106 books has been entered so far.
- More from Bevan Price's notebooks, covering a vast amount of travel over many years.
- Again mentioned above, 78 books from S A W Harvey have been lent to the society. These are being scanned and will appear in the archive over the next few months. 38 books have been entered so far

NEED MATERIAL FOR ARTICLES? – Lee Allsopp

Do you feel that you could write an article for Milepost if only you had access to material to do so? Just want some information to satisfy an idle curiosity? Even if you don't have access to the Society Archives on the website, you can still get information and logs for that article or whatever by contacting me direct by either E-Mail, phone or letter. Just ask me the question and I'll see what we can come up with!

PROVISION OF CURRENT MATERIAL FOR RPS ARCHIVE – Lee Allsopp

With many members now being connected by Broadband, we are now in a position where we can receive contributions via E-Mail of current material from as many members as wish to contribute. A member could record a log one day and send it to me immediately for inclusion in the database and archive. Would any members who may wish to participate in this please contact me by E-Mail for further details.

I can accept material in a number of formats, Word, Excel, Acrobat pdf files and scanned images of hand written material (eg notebooks). For scanned images we find that scanning at 150 dpi gives perfectly acceptable results, while producing files of a reasonable size (200KB-1MB depending on size of paper, density of printing etc)

EMUs on the ECML: Past and Present Part 1

Andrew James

It is now remarkably, nearly four decades since suburban EMUs started running on the ECML. A world full of British Leyland *Allegro*'s, Ford *Cortinas* and Robin *Reliants* (my dad had one of the three-wheeled legends) and a copy of *Modern Railways* would set you back an amazing 30p! I was 3½ years old and had just moved to Kidbrooke, London, on the Charing Cross-Dartford (via Eltham) route where the very archaic EPB units were the mainstay of services.

In the world of football, and I know there are at least a few in the RPS membership with a penchant for this sport, Liverpool dominated the domestic scene and went on to crown the 1976-1977 season with a league title and an FA cup final appearance. The pinnacle was achieved, however, with a fine 3-1 win in the European Cup Final over the much vaunted Borussia Monchengladbach. This was when you actually had to win your own domestic league to be in the Champions league. No doubt in today's PC climate this would be criticised for being elitist, but I digress! This review is not intended to be a comprehensive review of EMU running on the ECML since then, but to highlight the enhancement in performance that has occurred, with a few examples. It wasn't only on ECML expresses that a quantum leap has occurred since 1976 as the logs below will amply demonstrate. I have also where possible included the work of their predecessors to give an idea of the impact they made on the performance front when first introduced.

It was back in November 1976 that the Class 313 units replaced the Classes 105, 116 and 126 DMUs with loco-haulage in the form of Class 31 workings on the inner-suburban services out of Kings Cross. Table 1 compares their work with one of their predecessors, the Class 105 Cravens' units. It is interesting looking back to this era when the perception was that the 1955 Modernisation Plan fleet was thought to be bordering on life-expired where now there are no immediate plans, as far as I'm aware, to replace the 313 units, despite them being in service for at least as twice as long as the previous generation of motive power! On most sections, the DMUs would barely get into fourth gear, which would occur in about the 38-40 mph range.

Typically, a first generation DMU with a similar nominal power/weight ratio as the Cravens unit featured here would reach about 40-45 mph in the first mile from a standing start. The 313 by contrast would get to 60 mph as evinced by the speeds at MP 7½ and 13¾ respectively. This is my own arbitrary criterion for suburban EMU performance these days. The Classes 323 and 350/377s on 25 KV can manage about 68-75 mph in the same distance. The acceleration of the 313s is beginning to look a little slow by today's standards, but by the standards of 40 years ago was certainly acceptable.

Like their DC counterparts, the 313s are designed for a maximum speed of 75 mph, although there are actually very few opportunities where these units can reach this figure on the ECML due to the nature of their work that normally encompasses all-stations trains. One exception is between Stevenage and Hertford North on the Hertford loop line. Both units in Run 3 were driven quite vigorously between stops, although the favourable nature of the line in the up direction consisting of a series of 1 in 198 downgrades provides more than a sufficient degree of momentum.

After the introduction of the 313s in 1976 out of the 'Cross' there then followed the 312s on the outer-suburban service on Kings-Cross-Royston services. Completion of the electrification scheme to Cambridge did not follow until a decade later in 1988, as I'm sure most members of the RPS are aware.

Table 1						
Run no	1			2		
Date	15.12.75			5.11.14		
Train	13.10 Kings Cross- Welwyn Garden City			12.58 Moorgate- Welwyn Garden City		
Motive Power	Class 105			313037		
Load	4/108/114			3/105/110		
Recorder	P.Smith			A.James		
m c	[sch]	m s	mph	[sch]	m s	mph
2 41 Finsbury Park		0 00	37 max	**	0 00	
3 33 Harringay	[3]	2 14		[2]	2 07	
3 33		0 00	37 max		0 00	38 max
4 03 Hornsey	[3]	1 46		[2]	1 34	
4 03		0 00	38 max		0 00	39 max
4 77 Wood Green/ Alexandra Palace *	[3]	2 12		[3]	1 50	
4 77		0 00	42 max		0 00	51 max
6 35 New Southgate	[3]	3 12		[3]	2 43	
6 35		0 00	40 max		0 00	
7 40 Mp					1 29	60
8 28 Oakleigh Park	[4]	3 53		[3]	2 59	
8 28		0 00			0 00	42 max
9 13 New Barnet	[3]	2 13		[3]	1 50	
9 13		0 00	41 max		0 00	57 max
10 49 Hadley Wood	[3]	3 27		[3]	2 25	
10 49		0 00	43 max		0 00	60 max
12 60 Potters Bar	[5]	4 11		[3]	3 16	
12 60		0 00	45 max		0 00	
13 60 Mp					1 22	62
14 39 Brookmans Park	[4]	3 18		[3]	2 47	
14 39		0 00	45 max		0 00	54 max
15 45 Welham Green				[3]	2 07	
15 45					0 00	
16 40 Mp					1 21 1/2	60/65
17 56 Hatfield	[6]	4 02		[3]	3 24	
17 56		0 00	54 max		0 00	55/39*
20 26 Welwyn Garden City	[7]	4 08		[4]	4 40	

* Known as Alexandra Palace from 1982
** Winter timetable 2014

To show what a fast working was like prior to this, a good Class 31 effort recorded by Bevan Price features in Run 4. No. 31171 managed around 1,020 edhp/ 1,200 rhp between Wood Green and the summit at Potters Bar. Most 31s on this weight of train decelerated infinitesimally on the 1 in 200 gradient between these two points, where 31171 went the other way in the most subtle of fashions.

The Class 312 by comparison *waltzed* up to the summit, although slightly below par from the best runs I have seen recorded with members of the class. However, it did obviously represent a quantum leap in performance and just what commuters would expect from the ‘sparks effect.’ The actual run recorded by Peter Semmens was timed prior to the full introduction of the outer-suburban electrification scheme in February 1978. D. Percival in his book *Kings Cross Lineside 1958-1984* says that the first of these units entered service on the ECML on 3 October 1977, so whether this run was a special test trip or simply the date is incorrect on the log is a matter for conjecture.

Table 2					
Run no		3			
Date		19.2.11			
Train		14.29 Stevenage-Kings Cross			
Motive Power		313023/038			
Load		6/210/216			
Recorder		A.James			
M C		m s	mph		
27 46	Stevenage	0 00			
26 47	Langley Junction				
28 02					
26 00	Mp	4 49 1/2	67/78		
25 00	Mp	5 38	76		
23 72	Watton-at-Stone	7 12			
23 72		0 00			
23 00	Mp	1 15 1/2	66		
22 00	Stapleford	2 06	78		
19 48	Hertford North	4 37			
19 00	Mp	0 58 1/2	53		
18 00	Mp	1 57	66		
16 54	Bayford	3 36			

Date		15.7.76		28.9.77	
Train		19.30 Kings Cross-Cambridge		Kings Cross-Royston	
Motive Power		31171		312001/003	
Load		8/270/285		8/310/320	
Recorder		B.Price		P.Semmens	
M C		m s	mph	m s	mph
0 07	Kings Cross	0 00		0 00	
2 41	Finsbury Park	5 32	44	5 12	
5 00	Wood Green	8 16	55	7 59	75
8 28	Oakleigh Park	11 41	59	10 33	81
9 14	New Barnet	12 30	57	11 08	85
10 44	Hadley Wood	13 58	55	12 08	84
12 60	Potters Bar	16 14	57	13 45	84
14 39	Brookmans Park	17 48	65		
17 56	Hatfield	20 19	74	17 54	
20 26	Welwyn Garden City	23 10		20 23	

Moving on to a further generation of motive power, we trace the evolution of improvement in performance through the Class 317s to the latest Class 365 ‘Networker’ stock. The Kings Cross-Stevenage stretch, provided a clear road and fast line is obtained, is one of the best stretches in the UK to appreciate the work of the suburban EMU. The second batch of 317s were built in 1985-1986 for the extended electrification schemes to Peterborough and Cambridge respectively which were subsequently energised in 1987/1988.

Run 6, in Table 4 features 317364 and shows a modest improvement on the ascent to Potters Bar over the 312s they replaced. This was crowned off with a bit of exuberance in

the dip at Hatfield where a maximum of 105 mph was attained. It would be very rare now to record such a maximum on today's tightly regulated railway.

The last EMUs built for line were the Class 365 'Networkers' in 1997. In Run 7 a pair of the units, Nos. 365525/536 shows the discernible improvement it has over the 317 going uphill, reaching the flat 100 mph at the summit, unlike the previous 317/319/321 generation- which in my experience seem to run out of puff in the 90-95 mph range. The 365s by contrast seem to be good to at least their nominal maximum of 100 mph. Note the slight check after New Barnet and the very swift recovery after Hadley Wood. Paradoxically, Networkers do seem to be variable on this ascent in my experience, but I think this more to do with the current supply and line usage as opposed to the actual hardware of the units.

Table 4					
Run no		6		7	
Date		11.1.92		14.4.06	
Train		10.48 Kings Cross-Cambridge		11.51 Kings Cross-Cambridge	
Motive Power		317364		365525/536	
Load		4/137/145		8/288/299	
Recorder		D.L.R		A.James	
M	C	m	s	m	s
0 07	Kings Cross	0 00		0 00	46 max
2 41	Finsbury Park	3 16	79	4 41	
2 41				0 00	
5 00	Alexandra Palace	4 59	90	2 56 1/2	91
6 39	New Southgate			3 54	94
8 28	Oakleigh Park	7 20	89	5 04	98
9 13	New Barnet	7 52	89	5 33 1/2	100/sigs
10 44	Hadley Wood	8 50	88	6 23	94
12 60	Potters Bar	10 18	87	7 45	100
14 39	Brookmans Park	11 26	96	8 47	100/99
17 56	Hatfield	13 23	105	10 43 1/2	100
20 26	Welwyn Garden City	14 58	90	12 18	97/99
21 76	Welwyn North	16 04	91/90	13 17 1/2	98
23 67	Woolmer Green	17 17	92	14 32	75*/73
25 03	Knebworth	18 03	98	15 31	76
26 47	Langley Junction	19 04	94	16 47	69
27 48	Stevenage	20 17		18 01	

The current crack schedule in the winter 2014 timetable for the latter units is on the 18.40 Kings Cross-Peterborough which is scheduled to cover the 41.1 miles from the terminus to Biggleswade in just 28 minutes, a cool 88.1 mph start-to-stop. I must confess I stumbled upon this working by accident. Anxious to record the last days of the Class 67s out of Marylebone, this made a convenient connection for me off the 15.55 Birmingham Moor Street-Marylebone.

I'm sure that in the right circumstances that it is achievable, but it is certainly on the tight side and the density of traffic heading north of the Welwyn bottleneck, usually engenders signal checks from previous services. Both runs were slightly circumspect in their running, I guess because of this. Run 8 was timed in total darkness from a stopwatch with the aid of the excellent RPS mileage chart. I don't guarantee the speeds to be absolutely correct, but the log averages have the air of plausibility. Run 9 is currently the RPS record for the section and should be beatable with slightly higher speeds and a unit in better condition, although the density of traffic heading up the ECML at this time of the evening may influence the speed at Potters Bar and elsewhere due to the drain on the current supply as mentioned earlier and maybe a low reading speedometer.

To complete this survey we will finish with a Class 313 run on a Welwyn Garden City- Kings Cross stopper, still faithfully carrying out the duties they were designed for in a very competent manner. The nominal maximum of 75 mph was never in danger of being attained, but 71 mph between Oakleigh Park and New Southgate was quite creditable in a distance of less than two miles between these successive stations, despite the obvious advantage of a 1 in 200 downgrade.

Table 5					
Run no		8		9	
Date		10.10.14		28.5.11	
Train		18.40 Kings Cross- Peterborough		18.40 Kings Cross- Peterborough	
Motive Power		365514/531		365541/505	
Load		8/288/310		8/288/310	
Recorder		A.James		F.Collins	
M C		m s	mph	m s	mph
0 07	Kings Cross	0 00		0 00	
2 41	Finsbury Park	4 14	74	4 36	66/94
5 00	Alexandra Palace	5 52	95	6 23	92/90
6 37	New Southgate	6 50 1/2	91	7 20	94
8 28	Oakleigh Park	8 03	95/97		
9 13	New Barnet	8 33 1/2	96/92	9 01	97
10 44	Hadley Wood	9 26	95	9 53 1/2	96
12 60	Potters Bar	10 47 1/2	98	11 15	96
14 39	Brookmans Park	11 53	94	12 10 1/2	98
17 56	Hatfield	13 52	100/sigs	14 16 1/2	99/97
20 26	Welwyn Garden City	15 38	75/60	15 54	97
21 76	Welwyn North	17 05	73	16 54 1/2	98
23 67	Woolmer Green			18 05	97
25 03	Knebworth	19 22 1/2	95	18 49	97/98
26 47	Langley Junction				
27 48	Stevenage	20 57	100	20 23	97
31 76	Hitchin	23 40	91	23 04 1/2	99
35 50	Three Counties	26 57 1/2	100	25 10	98
37 03	Arlesey	27 51 1/2	90	26 08	98
41 15	Biggleswade	30 05		29 29	

Table 6			M C		m s	mph
Run no	10		12 60	Potters Bar	0 00	64 max
Date	28.2.10		10 49	Hadley Wood	2 58	
Train	12.38 Welwyn Garden City-Kings Cross		10 49		0 00	62 max
			9 13	New Barnet	2 23	
Motive Power	313045/038		9 13		0 00	44 max
Load	6/210/215		8 28	Oakleigh Park	1 36	
Recorder	A.James		8 28		0 00	71 max
M C		m s	mph			
20 26	Welwyn Garden City	0 00		6 35	New Southgate	2 44
19 00	Mp	2 33 1/2	53/68	6 35		0 00
17 56	Hatfield	4 25		4 77	Alexandra Palace	2 18
17 56		0 00	62/66	4 77		0 00
15 45	Welham Green	3 06		4 04	Hornsey	1 47
15 45		0 00	50 max	4 04		0 00
14 39	Brookmans Park	2 04		3 32	Harringay	1 23
14 39		0 00	62 max	3 32		0 00
14 39		0 00	62 max	2 41	Finsbury Park	1 42
12 60	Potters Bar	2 38		2 41		0 00
				0 13	Kings Cross	6 02

Part 2 will concentrate on services north of Stevenage to Peterborough with a few runs on the Leeds-Doncaster route. I would like to thank David Lloyd-Roberts for his comments and suggestions regarding this article.

Realtime Trains and the offset problem

Martin Barrett

As we are all now aware Realtime Trains (RTT) has brought transparency to the presentation of actual running and this avoids controversy when analysing times which could be used in meeting targets and payment for delays.

However the information is only as good as the recording process. On 31 May 2013 I spent a few hours at Kings Cross recording arrivals (Appendix A) and then compared them with the times recorded by RTT. RTT only recorded the times in whole minutes and, as I suspected, the times shown by RTT varied quite significantly from those actually recorded – the average lateness being 58.42 seconds into the main line platforms and 49.5 seconds into the suburban platforms. To me, this indicated that the berth offset on the signal approaching Kings Cross was incorrect (or non-existent) and one minute should be added to all times at this signal. The running time from the tunnel mouth to the buffer stops at 15 mph is one minute exactly into the main line platforms and 27 seconds into the suburban platforms. I think this confirms there is no offset. However, the difference to the mainline platforms actually ranged from only 20 seconds up to 88 seconds which shows quite a variation in driving technique.

However at the talk given by Tom Cairns from RTT it was confirmed that the process for recording times has now been refined to quarter minutes. On 9 October 2013 I undertook a further exercise to see if there was a different result. As seen from Appendix B, the difference had reduced to 37.3 seconds into the main line platforms (21 seconds betterment) and 17.3 seconds into the suburban platforms (32 seconds betterment). Once again the variation was large, ranging from 18 seconds to 57 seconds into the mainline platforms. I am of the opinion that a half minute offset is required with the use of quarter minutes.

Bearing in mind the signals approaching Kings Cross can route trains into both main and suburban platforms, a solution to recording an accurate arrival time is by having a variable offset, but is this possible?

Whilst at Kings Cross on 9 October I also took the opportunity to record some departures (Appendix C) and these come out as very reasonable with an average difference of only 16.9 seconds from mainline and 13.3 seconds from suburban platforms, except for short trains from the main line platforms. These FCC, HT and GC services take much longer to pass the starting signal so the average goes up to 36 seconds. How do you cope with that?

Appendix 'A' - Kings Cross arrivals Friday 31 May 2013						
From	Booked WTT	Real TT arr	actual arrival	plat	train type	Variation (secs) from Realtimes ML Sub plats plats
Edinburgh	1150	1143	11:43:49	1	91	49
Peterborough	1149	1151	11:51:44	8	321	44
Leeds	1156	1153	11:54:04	7	91	64
Peterborough	1200	1159	11:59:20	2	365	20
Cambridge	1204	1204	12:04:22	9	365	22
Cambridge	1232	1229	12:29:51	8	365	51
Kings Lynn	1235	1238	12:38:43	1	365	43
Glasgow C	1241	1241	12:42:04	5		64
Peterborough	1247	1250	12:50:47	10	317	47
Edinburgh	1249	1257	12:57:54	1	HST	54
Leeds	1258	1303	13:04:09	0	91	69

From	Booked WTT	Real TT arr	actual arrival	plat	train type	variation(secs)
Cambridge	1305	1306	13:06:20	9	365	80
Hull	1308	1308	13:08:36	7	180	36
Newark NG	1323	1320	13:20:58	2	HST	58
Cambridge	1319	1324	13:25:14	6	365	74
Leeds	1326	1326	13:27:02	8	91	62
Cambridge	1332	1333	13:34:06	11	365	66
Kings Lynn	1335	1335	13:35:48	10	365	48
Newcastle	1340	1339	13:40:19	3	91	69
Bradford Int	1343	1342	13:42:41	4	180	41
Peterborough	1347½	1348	13:48:04	10Front	317	4 (excl)
Edinburgh	1348	1349	13:50:28	5	91	88
Leeds	1356	1357	13:58:10	6	91	70
Peterborough	1401	1404	14:04:13	11	365	13
Cambridge	1404	1405	14:06:07	7	365	67
Cambridge	1419	1418	14:19:04	10	321	64
York	1423	1424	14:24:51	1	HST	51
Cambridge	1431	1429	14:29:32	7	365	32
Leeds	1426	1434	14:35:18	0	91	78
Kings Lynn	1434	1437	14:37:58	8	365	58
Edinburgh	1441	1440	14:41:13	3	91	73
Hornsey	1453	1446	14:46:56	9	365	56
Peterborough	1449	1451	14:52:15	5	317	75
Leeds	1459	1455	14:56:16	4	HST	76
Aberdeen	1449	1507	15:07:53	2	HST	53
average						58.42 49.5

Appendix 'B' - Kings Cross arrivals Wednesday 9 October 2013						
From	Booked WTT	Real TT arr	actual arrival	plat	Variation (secs) from Realtimes	
					ML plats	Sub plats
Edinburgh	1049	1051¼	10:52:33	3	48	
Cambridge	1119	1116¼	11:16:35	11		20
Leeds	1126	1126¼	11:27:08	5	53	
Ely	1131	1130¼	11:30:50	9		5
Edinburgh	1140	1140¼	11:41:00	0	45	
Kings Lynn	1144	1142¼	11:43:00	11		15
Edinburgh	1150	1144½	11:45:20	7	50	
Peterborough	1149	1148¼	11:48:44	8	29	
Leeds	1156	1156½	11:57:08	1	38	
Peterborough	1200	1200¼	12:01:16	2	29	
Cambridge	1204	1205	12:05:12	9		12
Bounds Green	1210	1208¼	12:08:57	6	42	
Cambridge	1217	1216¼	12:16:39	10		24
York	1221	1220½	12:21:08	2	38	
Leeds	1225	1224½	12:24:53	0	23	
Sunderland	1229	1227½	12:28:06	3	36	
Cambridge	1232	1231¼	12:31:57	8	42	
Kings Lynn	1235	1239	12:39:32	11		32
Glasgow C	1241	1242	12:42:40	4	40	
Peterborough	1247	1249	12:49:31	10		31
Edinburgh	1249	1251¼	12:52:27	7	42	
Peterborough	1302	1300¼	13:01:01	11		16
Leeds	1258	1302¼	13:03:03	3	48	
Cambridge	1305	1304½	13:04:52	9		22
Newark NG	1323	1323¼	13:23:56	2	41	
Leeds	1326	1327¼	13:28:34	8	49	
Cambridge	1332	1333¼	13:33:17	11		2
Newcastle	1340	1338¼	13:39:01	1	46	

From	Booked WTT	Real TT arr	actual arrival	plat	ML plats	Sub plats
Hull	1308	1341¼	13:42:42	5	57	
Bradford Int	1343	1344½	13:45:24	4	54	
Edinburgh	1348	1350¼	13:50:37	6	22	
Leeds	1356	1354	13:54:28	0	28	
Peterborough	1401	1400½	14:00:53	11		23
Cambridge	1404	1403¼	14:04:05	7	18	
Cambridge	1419	1418	14:18:06	10		6
York	1423	1423¼	14:23:37	5	22	
Cambridge	1431	1428¼	14:29:18	7	33	
Leeds	1426	1431¼	14:31:51	3	36	
Kings Lynn	1434	1433	14:33:32	8	32	
Edinburgh	1441	1438	14:38:23	1	23	
Aberdeen	1449	1451¼	14:52:12	7	27	
Peterborough	1449	1452	14:52:40	4R	40	
Leeds	1459	1500½	15:01:03	0	33	
Hull	1509	1508	15:08:31	4F	31	
				average	37.3	17.33
Running time tunnel mouth to buffer stops at 15mph = 1m00s plats 0 -8, 0m27s plats 9-11						

Appendix 'C' - Kings Cross departures Wednesday 9 October 2013						
To	Booked WTT	Real TT dep	actual dep	plat	Variation (secs) from Realtimes	
					ML plats	Sub plats
Sunderland	1121	1121¼	11:20:57	9		18
Peterborough	1123	1123½	11:22:57	0	33	
Edinburgh	1130	1130	11:29:42	7	18	
Leeds	1135	1135¼	11:34:58	8	17	
Hull	1148	1148½	11:47:58	6	32(S)	
Cambridge	1153	1153¼	11:53:05	2	10	
Inverness	1200	1159¼	11:59:38	4	7	
Newark NG	1208	1208½	12:08:17	3	13	
Cambridge	1215	1215½	12:15:00	2	30(S)	
Newcastle	1230	1230¼	12:29:53	5	22	
Leeds	1235	1235	12:34:40	7	20	
Kings Lynn	1245	1245¼	12:45:01	9		14
Sunderland	1253	1253½	12:53:02	3	28(S)	
Edinburgh	1300	1300	12:59:41	1	19	
York	1308	1308	13:07:43	6	17	
Peterborough	1323	1323¼	13:23:00	11		15
Newcastle	1330	1330	13:29:48	4	12	
Leeds	1335	1335½	13:35:14	0	16	
Hull	1348	1353¼	13:52:28	5	47(S)	
Aberdeen	1400	1400¼	13:59:51	7	24	
Leeds	1405	1404¾	14:04:40	3	5	
Newark NG	1408	1408½	14:08:23	8	7	
Cambridge	1415	1415¼	14:15:01	10R		14
Peterborough	1423	1423½	14:23:06	7	24(S)	
Newcastle	1430	1430½	14:30:04	1	26	
Leeds	1435	1435½	14:35:19	0	11	
Peterborough	1436	1436	14:36:01	9		1
Kings Lynn	1445	1445¼	14:44:57	7	18	
Bradford Int	1448	1449	14:48:13	4	47(S)	
Cambridge	1453	1453¼	14:52:57	11		18
Edinburgh	1500	1500	14:59:39	2	21	
Leeds	1505	1505¼	15:04:50	6	25	
Cambridge	1506	1506¼	15:06:01	8	44(S)	
York	1508	1508¼	15:08:31	5	14	
(S) = short train				average	16.9	13.3
					36(S)	

Fastest Times Update

Martin Robertson

Welcome to another Fastest Times Update. For the first time for a few issues there has been a scarcity of new FT's being recorded and submitted. My thanks to those who have submitted logs. A reminder too that I have taken over the Fastest Times listings from David Sage, and would request that all new submissions be forwarded to mdrfastesttimes@gmail.com. I will endeavour to acknowledge all submissions at least once a month.

Table 1									
Date				S 04-Oct-14					
Train				0605 Euston-Glasgow					
Loco				390013					
Load formation				9					
Recorder				D Ashley					
Position/ GPS				Cloudy 7/9 Y					
miles	M	C	Timing Point	Sch.	m	s	Mph	ave	
0.00	82	40	RUGBY	0.0	0	00.0	1L		
2.50	85	00	85		3	00.0	80	50.0	
5.45	87	76	Brinklow	3.5	4	43.0	118	103.1	
7.00	89	40	89.5		5	25.5	125	131.3	
8.86	91	29	Shilton		6	19.0	125	125.3	
11.00	93	40	Bulkington		7	20.0	126/128	126.1	
14.55	97	04	Nuneaton	7.5	9	01.0	125/127	126.5	
17.00	99	40	99.5		10	11.0	127/99	126.0	
19.80	102	24	Atherstone		11	44.0	101	108.4	
24.00	106	40	Polesworth		13	55.0	127	115.4	
27.50	110	00	Tamworth		15	37.0	118	123.5	
31.11	113	49	Hademore		17	25.0	123/125	120.4	
33.75	116	20	Lichfield	17.5	18	43.0	120	121.7	
36.33	118	66	Elmhurst		19	58.0	127/126	123.6	
38.58	121	06	Armitage		21	02.0	127	126.6	
40.38	122	70	Carwardine		21	54.0	128	124.6	
41.78	124	22	Rugeley	21.0	22	34.0	124	126.0	
44.56	127	05	Colwich	23.0	24	40.0	62	79.6	
46.95	129	36	Milford	[1]	26	20.0	99	85.9	
51.03	133	42	STAFFORD	29.0	30	34.0	1L	57.8	

We commence on the WCML with a very fine effort between Rugby and Stafford, recorded by David Ashley. I doubt if this is a regular interval service, as the train was the 06 05 from Euston to Glasgow. David comments:- *A record run from Rugby to Stafford, which was probably previously unbeaten due to the non-standard stopping pattern which only appears early in the morning or late at night. However, it represents a run that was well driven and up to the speed limits, and at a time when the line was clear of tsrs. Whilst the start from Rugby was not the fastest ever recorded, the deficiency against the WTT seems to be due to an impossible schedule*

Table 2 moves to the Midland Main Line with a fine effort recorded by Brian Milner from St Pancras to Luton. It is an interesting comparison with Alan Varley's run to Luton Airport included in the FTU of Milepost 35½ . A slightly faster start by Brian's run was maintained to Chiltern Green, the last common timing point. Brian comments:- *It was a fast start and I am unsure when the brake test took place! 111 mph up to Elstree was quickly followed by 126 mph before the St Albans slowing of 95/96 mph. A maximum of 116 mph before Harpenden, 94 mph through Luton Airport Parkway and a fast stop to Luton completed an excellent run.*

Table 3 has another offering from Brian on an East Midlands cross-country service formed by a Class 158 unit between East Midlands Parkway and Derby. Reasonable speeds but really slow acceleration in comparison with modern traction. Brian comments:- *This was a Norwich to Liverpool train diverted away from Nottingham. The train was 14.5 minutes late out of Peterborough, which became 20.5 minutes late into East Midlands Parkway (EMD), following a freight train. The stop at EMD was 5 minutes instead of the 2 minutes booked and the Guard decided to make the operational stop at Derby a passenger stop; several passengers alighted at Derby. It was a good run with a maximum of 87 mph, although the*

Table 2									
Date				24/06/2014					
Train				1200 St Pancras-Corby					
Loco				222015					
Load				5,249/260					
Recorder				B Milner 2/5					
Miles	M	C	Location	Sch	m	s	mph	ave	
0.00	0	17	LONDON ST PANCRAS	0.0	0	00.0	1.0 L		
1.38	1	47	KENTISH TOWN	3.0	2	34.5	64	32.0	
3.70	3	73	WEST HAMPSTEAD	5.0	4	23.5	81	76.8	
4.93	5	11	CRICKLEWOOD		5	14.0	95	87.3	
6.79	7	00	HENDON	7.0	6	19.5	106	102.4	
9.15	9	29	MILL HILL BROADWAY		7	37.5	111	109.0	
10.79	11	00	Scratchwood		8	31.0	111	110.2	
12.28	12	39	ELSTREE		9	19.5	111	110.4	
14.20	14	33	Radlett Jn	11.0	10	18.5	124	117.5	
16.79	17	00	Milepost		11	32.5	126/ 95	125.9	
19.70	19	73	ST ALBANS CITY	13.5	13	15.0	96	102.3	
21.04	21	20	Sandridge		14	03.0	105/116	100.3	
24.04	24	20	Harpenden Jn	16.0	15	39.5	113	111.9	
25.79	26	00	Milepost		16	38.5	105	106.8	
27.04	27	20	Chiltern Green		17	21.5	104	104.7	
28.99	29	16	LUTON AIRPORT		18	32.5	94	98.9	
30.08	30	23	LUTON	20.5	19	49.0	RT	51.2	

stop was slow as 158777 was already in the platform waiting to couple for the rest of the journey to Lime Street.

Table 3									
Date				21/08/2013					
Train				1257 Norwich-Liverpool					
Loco				158812					
Load				2,77/85					
Recorder				B Milner 1/2					
Miles	M	C	Location	Sch	m	s	mph	ave	
0.00	118	17	EAST MIDLANDS PKWY	0.0	0	00.0	23.0 L		
0.99	119	16	Trent South Jn	2.0	2	19.5	50	25.5	
1.51	119	58	Sheet Stores Jn	2.5	2	54.0	57	54.8	
3.27	121	39	Sawley LC		4	28.0	75	67.5	
5.79	124	00	Milepost		6	20.5	84/ 87	80.4	
7.68	125	71	SPONDON Shl	8.5	7	41.0	82	84.4	
9.04	127	20	Milepost	[1.5]	8	48.5	46	72.7	
10.25	128	37	DERBY	13.5	13	00.0	22.5 L	17.4	

Table 4 returns to more powerful traction with an HST and Meridian run from Leicester to East Midlands Parkway. The driver of the Meridian may not have been trying too hard on the runs, as the schedule was booked for an HST. Philip comments:- I predicted that the run published in July's Milepost would not be a fastest for long, and events soon proved me right. This HST ran extremely well and finished in 13 04.24, which as is my custom I have rounded up to 13 05. The running was excellent from a fast start to a maximum of 124 for a mile near Hathern. The 222 was a substitute for an HST during a recent strike by East Midlands trains maintenance staff. It was not a particularly good run, well down on my fastest runs to passing Barrow, and the braking was very severe at the end, so that the front coach barely reached the footbridge at East Midlands, but with an arrival in 12 59.84 we were well inside the schedule. The same applied on the final section, with 80 mph being reached eventually, but we were a little over three minutes early into Nottingham, so the driver had done more than enough and presumably saved fuel in the process. Looking at my best 222 runs from Leicester stopping at Loughborough, I think a time of 12 15 would be

quite possible for a Meridian from Leicester to East Midlands, but I think anything less than 13 minutes for an HST would require above limits speeds or very late braking.

Table 4			
Date	07/07/2014	28/07/2014	
Train: from to	10.15 St.Pancras Nottingham	10.15 St.Pancras Nottingham	
Power	43 064 & 43 0xx	222 023	
Load	10	5/243/248	
Recorder	E.P.Tromans 1D22	E.P.Tromans 1D22	
00.00 LEICESTER	00 00	RT	00 00 RT
00.91 mp 100	01 41½		01 25
02.91 mp 102	03 15	90	02 53 91
04.91 mp 104	04 29	103	04 03 109
05.91 mp 105	05 03½	108	04 36 109
07.91 mp 107	06 08	113	05 41½ 112
09.91 mp 109	07 12	111	06 46½ 110
11.91 mp 111	08 15	119	07 50 117
12.71 LOUGHBORO	08 34	120	08 09 119
13.91 mp 113	09 14½	122	08 50 120
14.91 mp 114	09 43½	124	09 20½ 112
16.91 mp 116	10 46	110	10 25 110
17.41 mp 116½	11 03	105	10 41½ 111
17.91 mp 117	11 20½	95	10 59½ 90
19.11 E MID P'WAY	13 05	2E	13 00 2E
<i>Schedule</i>	<i>15</i>		<i>15</i>

Table 5									
Day/Date				Sat 14th March 15					
Train				17 06 M'bone-Snow Hill					
Motive Power				67017+6Mk3TSO+DVT					
Load Tons				341/350 9.1hp/ton					
Weather				Dry					
Rec Pos Gps				J Rishton 3/8 Y					
miles	m	c	Location	WTT	m	s	mph	ave	
				Sch				1	
0.00	9	26	Bicester North	0	0	00	late		
1.00	10	26	Bucknell		1	54	54	31.6	
2.86	12	15	M40		3	35	75	66.3	
5.84	15	13	Ardley T'l		5	43	95	83.8	
9.10	81	16	Aynho Jn	8	7	52	81	91.0	
10.56	82	53	Kings Sutton		8	55	86	83.4	
12.94	85	03	M40		10	31	92	89.3	
14.10	86	16	Banbury	12	11	53		51.0	

Table 5 has a first offering from John Rishton, returning home from a London Committee meeting. A short snippet of a poor run which produced an FT from Bicester to Banbury, John comments:- I returned from the London Meeting via Harbury hoping one of the two evening down workings would be a Class 68. Neither was, but the attached is the only good bit of my homeward journey.

Table 6 is an offering from David Adams, coming south from Birmingham Moor Street with Class 68 traction, for a new FT to Solihull. David's comments are:- Returned home on the 1312 Snow Hill today and for the first time recorded a speed in the 90's before the Solihull stop.

Table 6						
Train				1312 M St-M'bone		
Date				Friday 20.03.15		
Loco				82303 / 68011		
Load				7/273/276		
Position/GPS				3/7 Y		
Miles	m	c	Location	m	s	Speed
0	128	67	Birmingham M St	0	00	30*
0.74	128	08	Bordesley	1	44	45/61/rbt
1.73	127	09	Small Heath	2	48	51*
				X	over	60*
2.78	126	05	Tyseley	3	53	62
3.7	125	11	Acocks Green	4	41	76
4.71	124	10	Olton	5	24	88/91
6.54	122	24	Solihull	7	24	

David did not mention as to how good the braking was but the loco appeared to be under power passing Olton, with two minutes from there to the stop at Solihull being quite good.

Table 7 is a joint offering from John Rishton and R. Price, on a late running HST Cross Country service from Burton-on-Trent to Birmingham New Street. Their comments are:- A very good run for an old'un. Unfortunately as it was not the planned service back to Birmingham New St, neither of us were GPS 'armed'. Not as good as the current Voyager record time for the section but a very welcome improvement on the previous best for the traction. A rare unchecked run into Birmingham New St, possibly as the service was running late and arrived into New St was in the path of the following Cross Country service. There may have been slightly excessive speeds in the Water Orton area and also entering the platform at New Street but still a very good example of driving skills with one and a quarter minutes gained on the schedule. Johns comments on the fairly marginal gain on the schedule despite the excellent running and unchecked entry, suggests that the schedule is maybe optimistic for the level of delay which is normally encountered entering Birmingham New Street.

Table 7							
Day/Date				Friday 15th May 2015			
Train				13 06 Edin-Plymouth			
Locos				43303 + 43367			
Load				9/376/390 11.6 hp/tonne			
Weather				Dry			
Rec				J Rishton&R Price			
Pos/GPS				3/9 Gps No			
miles	m	c	Location	WTT	m	s	ave
0.00	10	66	Burton-on-Trent	0	0	00	30 late
1.42	12	20	Branston Jn		2	00	42.6
3.87	14	56	Barton Station Rd		3	42	86.5
5.45	16	22	Wichnor Jn	5	4	34	109.3
9.38	20	17	Elford Loop		6	36	116
11.85	22	55	Haselour Water T'r		7	48	123.5
12.88	23	57	Tamworth	9	8	18	123.6
14.76	25	47	Wilnecote	[1]	9	13	123
16.94	27	62	M42		10	16	124.6
18.67	29	40	Kingsbury Jn	13	11	06	124.6
20.45	31	22	Church Lane		12	01	116.5
22.56	34	52	Water Orton	15.5	13	15	102.7
24.91	37	00	Castle Bromwich	[1]	14	57	82.9
26.40	38	39	Bromford Bridge		15	57	89.4
27.58	39	54	Aston-Stetchford Rý		16	54	74.5
28.51	40	48	Saltley psb		18	07	45.9
28.62	40	57	Landor St Jn	21	18	17	39.8
29.21	41	24	Grand Jn		19	13	37.9
29.51	41	48	Proof House Jn	23	19	47	31.8
30.21	42	25	Birmingham N St	26	22	17	16.8

Table 8 has another offering from John between Wolverhampton and Stafford. A fine performance from the Voyager unit and the driver. John comments:- An average speed of 84mph between two stops some 15 miles apart with both a restricted start and finish is not bad. Especially so since the SPAD incident involving a Class 47 running light engine at Trent Valley Jn a couple of years back. Since then drivers have been instructed to treat a green aspect shortly after passing under the M6 as a double yellow, in effect providing three cautionary signals prior to a possible red protecting the junction. As a result this was my first run in two years where we were still under power passing under the motorway bridge. Possibly a late start spurred the driver on. I wais I had been able to stay with the train to Manchester but had other demands on my time that day.

Table 8						
Day/Date				Tue 4th Nov 2014		
Train				0700 Bristol-Man Picc.		
Motive Power				221.134		
Load (tons)				283/290 = 12.9hp/ton		
Weather				dry		
Rec. Pos. GPS				J Rishton 1/5 Stopwatch		
Miles	mm	cc	location	WTT	mm:s	average
0.00	12	76	Wolverhampton	0	00:00	6L
0.43	13	31	Wolverhampton N'h Jn	1.5	01:14	20.9
1.61	14	45	Bushbury junction	2.5	02:31	55.1
3.58	17	32	M54		04:01	78.8
7.38	21	16	A5		06:03	112.1
9.57	23	31	Penkridge		07:06	125.1
12.67	26	39	M6		08:35	125.4
14.82	133	05	Wolverhampton Road	9.5	10:07	84.1
15.29	133	43	Stafford	11	10:56	34.6

Table 9 is a short snippet from Pinhoe to Feniton with a pair of Class 159 units recorded by John Heaton. John comments:- The section is a relatively new one of course but this was a determined effort to make up some of the late start caused by a late down train, probably the cumulative effect of a 5mph tsr west of Yeovil Jn.

Table 9									
Loco				159xxx+159102					
Vehicles/tare/gross tonnes				6					
Train				10.25 Exeter S. D. to Waterloo					
Date				22/2/14					
Rec/Pos/GPS?				J. Heaton 4/6 Y					
Dec. Mls	M.	Chns	Timing Point	Sch.	Min.	Sec.	M.P.H.	Ave.	
0.00	168	41	Pinhoe d.	0	0	0	10½L		
1.82	166	55	Broadclyst		2	9	81	50.9	
3.26	165	20	Crannaford		3	12	83	82.1	
5.49	163	02	Whimble		4	47	85/86½	84.3	
9.21	159	24	Feniton a.	8½	8	14		64.8	

Table 10 is an even shorter snippet from John Heaton, this time from Edinburgh Park to Haymarket. The Class 334 units may not be the fastest current EMUs in acceleration terms but they do offer a superior standard of comfort to most of the other Scottish EMUs. The late start from Edinburgh Park gave the driver an incentive to run hard and brake late. Haymarket has the advantage of a 90mph limit extending to the start of the platform, which allows drivers who know how to use the braking system effectively to achieve excellent times in from the last timing point.

Table 10									
Units				334037+3340xx					
Load				6/249/255					
Train				0940 Helensburgh C-Edinburgh*					
Date				19/3/15					
Recorder/Pos./GPS?				J. Heaton 3/6 Y					
Miles	M.	Ch	Timing Point	Sch.	Min.	Sec.	M.P.H.	Avge	
0.00	42	31	Edinburgh Park d.	0	0	0	3½L		
1.35	43	59	Saughton Jct UB			1	36	74/83 50.6	
2.56	44	76	Haymarket W. Jct	2½	2	30	82	80.8	
3.64	46	02	HAYMARKET a.	4	3	52		47.2	

* started Dalmuir 10.05 due to ohle problems

Finally a rare Table 11, with an offering from Michael Burrow on a line that does not feature on the FT listings. This is the East Midland service from Derby to Crewe, normally the preserve of Class 153 units, but on holiday, or local events, can be host to a Class 222 Meridian unit. The driver consistently bettered the schedule and achieved a possibly relatively rare mile a minute run from Blythe Bridge to Uttoxeter. The return leg was not quite so fast due to lower speeds at Hockley and Loxley lane Level Crossings. The line chart suggests that the limits change from 70mph to 50mph at both level crossings.

Once again my thanks to all those who have contributed runs over the last few months. Hopefully the summer months will see an increase in new FT's to go with the longer days. As always submissions are acceptable electronically, preferably in Word Excel, or MS Works formats. For those without access to a computer, paper copies are welcome, with my postal address included on the inside cover of Milepost.

Table 11										
Date		Fri 3rd April 2015						Fri 3rd April 2015		
Train		14 07 Crewe-Derby						12 42 Derby-Crewe		
Unit		22103: 4/xxx/xxx						22103:4/xxx/xxx		
Recorder		M J Burrow						M J Burrow		
Weather		Dry/Clear						Damp		
Dist	Location	Sch	m	s	Speed		Sch	m	s	Speed
0.00	Blythe Bridge	0	0	00		Uttoxeter	0	0	00	
1.67	Cresswell LC		1	52	70/73	Hockley LC		1	17	45/66
5.01	Leigh LC		4	39	72	Loxley Lane LC		2	54	50*
6.72	Mp 12		6	04	74	Bramshall LC		3	45	50*
8.15	Bramshall LC		7	17	62*	Mp 12		5	05	72
8.85	Loxley Lane LC		7	58	60/72	Leigh LC		6	35	67/72
10.47	Hockley LC		9	26	45	Cresswell LC		9	24	70
11.06	Uttoxeter	12	10	38		Blythe Bridge	14	11	44	

Looe provides relief

Malcolm Simister

'You're not going to time this are you?' my wife asked incredulously, 'this' being the Class 153 Super Sprinter working the 09.09 Looe to Liskeard service. She just didn't understand. While I still thrill to an HST, Pendolino or Meridian accelerating above two miles a minute, in my mellowing years I enjoy relief from the modern world and gain increasing pleasure from timing slower trains on routes rarely mentioned in Milepost. I am not alone for if you search the RPS database you will find at least one eminent member who has also timed on the Looe branch. And we are, after all, the Railway Performance Society, not the Fast Express Performance Society.

Table 1: First Great Western 09.09 Looe - Liskeard				
Date:		Tue 9 Sep 2014		
Formation:		Class 153 railcar		
Weight/power:		153369		
Timed with:		41 tons tare/ 213 kW		
Recorder		GPS (DigiHUD)		
		Malcolm Simister		
Dist	Location	WTT	Actual	Speeds
miles		m	m:s	mph
0.00	Looe	0	0.00	RT
1.15	Terras LC stop		2.50	32 max
			2.56	24 max
2.10	Sandplace	5½	5.33	20/24
3.48	Causeland	9½	9.09	17/25
4.79	St Keyne Wishing Well Halt	13	12.32	20/38
6.03	Lodge Farm LC			7
6.40	Coombe No. 1 GF	17	16.32	
		20	18.53	
6.40	Coombe Junction		19.15	
	Safe working stop		1m 7s	
6.55	Coombe Junction Halt	20½	21.15	
	(Reverse)	23½	22.54	
0.15	Coombe Junction		0.41	21
1.06	Main line overbridge		2.42	26
2.05	Liskeard	7½	5.18	3E

On this occasion I had told my wife how she would have plenty of time to appreciate the scenic beauty of the East Looe River alongside the Looe branch as the train's speed rarely betters a trundle and about its idiosyncratic operation, including request stops, a reversal at Coombe Junction and turning full circle up to the branch platform perpendicular to the main line at Liskeard. So she came along for the ride and thoroughly enjoyed it.

A further idiosyncrasy is that distances on the branch are measured from Looe and Milepost ¼ is opposite the platform, located idyllically overlooking the confluence of the East and West Looe Rivers and only a little above sea level, usually.

So are Down trains those going towards London, so far away in time and space?

Only just over a mile after starting from Looe, the half-full Class 153 in Table 1 made a mandatory stop for Terras level crossing. Then it barely slowed from its 24 mph maximum speed for the Sandplace (lovely name) request stop that no one requested, made a bit more of an effort in slowing to 17 mph for the Causeland unrequested request stop, but was back to a token 20 mph again for St Keyne Wishing Well Halt (unrequested again and another lovely name). (Apart from this one, was the only other 'Wishing Well Halt' the one at Upwey, near Weymouth, now closed? The current Upwey used to be called Upwey Junction). Continuing, No. 153369 slowed right down for Lodge Farm level crossing, a TSR I think, before the safe working stop at Coombe No.1 ground frame, made another stop after Coombe Junction (to operate the points?) and finally crawled into Coombe Junction Halt, being one of only two services in each direction, Mondays to Saturdays, to actually stop there. Reversing direction, 153369 passed through Coombe Junction again and now had to work a little harder on the steep climb up to Liskeard, passing under the former Great Western main line in doing so, and arrived three minutes early because no requests were made for the request stops.

Table 2: First Great Western 18.06 Liskeard - Looe				
Date:		Tue 9 Sep 2014		
Formation:		Class 153 railcar 153369		
Weight/power:		41 tons tare/ 213 kW		
Timed with:		GPS (DigiHUD)		
Recorder		Malcolm Simister		
Dist	Location	WTT	Actual	Speeds
<u>miles</u>		m	m:s	mph
0.00	Liskeard	0	0.00	RT
0.99	Main line overbridge		2.58	22/26
1.90	Coombe Junction		5.13	11
1.91	Coombe (reverse)		<u>5.27</u>	
			6.18	
1.92	Coombe No. 1 GF	7	<u>6.47</u>	
		10	8.19	
2.29	Lodge Farm LC		10.06	5 min/36
				15
3.53	St Keyne Wishing Well Halt	14	13.05	min/27
				16
4.85	Causeland	17½	16.21	min/25
6.22	Sandplace	21	19.42	23
7.27	Terras LC stop		<u>22.14</u>	28 max
			22.21	
				27
8.35	Looe	30	25.42	max/4E

Later that day I returned to Looe in No. 153369 again (Table 2) and the run was much the same as in the opposite direction except there was no stop at Coombe Junction Halt, the train stopping a few yards short of the platform. However, a further idiosyncrasy of the line surfaced, literally, due to a very high tide. At Terras the road approaches the railway crossing on a causeway which was under water, not unusual I gathered as the river there is tidal, but what was unusual was water welling up through the ballast at Looe station. The crew were concerned, mostly because this was their last run of the day (but not 153369's) and they wanted to start back quickly to Liskeard in case water covered the line as well as the road at Terras and prevented them signing off.

So even in this day of 'i' this and instant that there is still at least one place on the modern railway that retains its character and charm from another, slower, delightful age. As a holidaymaker I really appreciated the relief from the hectic world that the Looe branch provides.

AN APPEAL

The announcement that an additional magazine is being produced, due to an increased volume of material on hand, seems to have coincided with a subsequent low volume of material received! To enable us to maintain the broad cross-section of articles, we are always looking for contributions from readers. It has been suggested that we review performance on main lines that no longer exist. Examples include the Great Central, Waverley Route, Perth to Kinnaber Junction etc. If you are able to help in this project, or any other area, please contact me

David Ashley - Editor

Midland Main Line : Sheffield-Leeds/York

Noel Proudlock

In 1970 I became Section Leader of the group responsible for passenger service planning on the NE/SW (Cross-Country today) and Midland Main Line services in the Eastern Region and local services in the Sheffield, Doncaster and Lincoln areas. Both these main line services were inter-regional so requiring a debating forum to bring together the usually

Table 1a						
Run no		1			2	
Date		29/11/1961			28/5/1962	
Loco		46157			D120	
Load		11/332			10/343	
Train		4.45 PM Bradford- Bristol			10.15 Bradford- Paignton	
Recorder		N.Proudlock			N.Proudlock	
M C		[sch]	m s	mph	[sch]	m s mph
196 01*	Leeds City		0 00			0 00
195 53	Leeds City Jn		1 45	20		1 25 14
195 24	Leeds E.S. Jn		2 45	27		2 35 35
194 38	Hunslet Goods Jn		4 45*	42		4 25 50
193 16	Wakefield Road					
192 50	Stourton JN		6 40	48		5 55 60
190 00	Woodlesford		9 39 *	58		8 17 71
188 48	Methley Sidings		11 02	59		9 29 71
187 37	Methley Junction		12 45	25*		11 15 20*
186 34	Altofts & W'wood		15 02	30		13 01 43
186 00	Altofts Junction	[13]	15 47	38	[13]	13 35 47/sigs
185 11	Normanton	[15]	17 20	20	[15]	16 05 10
184 56	Goose Hill Junction		18 30	24		17 33 20
183 19*	Snydale		22 03	25*		20 20 20/27
181 14	Walton	[2R]	25 43	44	[2R]	23 35 45
178 28	Royston Junction		29 47	45/25*		28 17 33*/38*
177 27	Royston		32 15	25		30 20 30*
176 38	Carlton Main		33 53	43		31 45 48
175 08*	Cudworth	[35]	35 45	45	[35]	33 30 35*
173 61	Storrs Mill		37 35	43/45		35 13 63
172 47	Houghton Main					
171 28	Darfield		41 25	33*		38 35 33*
169 06*	Wath on Dearne		46 08	35		43 25 28*
167 73	Wath Rd Jn		49 05	20*	[53]	46 00 27*
167 18	Swinton Junction					
166 75	Swinton Town		51 20	30		47 50 25*
165 76	Kilnhurst		53 22	37		50 10 48
164 40	Aldwarke Jn					
163 78	Parkgate		56 17	48/42		52 27 55/45
162 01	Rotherham Mas	[63]	60 40		[62]	55 32 38
162 01			0 00			
161 77						
163 74						
163 43	Holmes Junction		1 45	33		56 15 40
161 59	Wincobank STN Jn		4 48	48		58 29 55
161 27	Brightside		5 18	50		58 53 63
159 34	Attercliffe Road		7 45	48		60 43 63/58
159 06	Nunnery M.L Jn		8 07	42		61 10 33
158 40	Sheffield Midland	[9]	9 50		[70]	63 15

NB In all the schedules 'box' recovery time is shown 2R etc

In the station lists at those entries marked* when the adjacent time is also marked* it was taken at the alternative site.
M C
196 01 Leeds Station-mileage at the STOP BLOCKS. Midland (North) station
194 38 Hunslet Station Jn at 194 01
190 00 Woodlesford-Sig Box at 189 72
183 19 Snydale-later 'hut' at 183 33
175 08 Cudworth Station Jn S Box at 175 03
169 06 Wath-North Signal Box at 169 34
165 76 Kilnhurst-South Signal Box at 165 53

incompatible regional fixations. These groups had two elements, a Management Group comprising the Regional operations and passenger managers and, after they were appointed, the Service Group Managers, together with a Service Planning Committee to translate the Management Group decisions into a workable timetable. Over the years I was much involved with these committees for Cross Country and later Trans-Pennine and East Coast Main Line services.

Table 2a Down						
Run no		1			2	
Date		4/7/1960			27/11/1961	
Loco		46132			D123	
Load		7/231			6/200	
Train		3.15 pm London-Bradford			3.15 pm London-Bradford	
Recorder		N.Proudlock			N.Proudlock	
M C		[sch]	m s	mph	[sch]	m s mph
158 40	Sheffield Midland		0 00			0 00
159 06	Nunnery M.L. Jn		2 00	25		1 33 31
159 34	Attercliffe Road		2 42	38		2 00 53
161 27	Brightside		5 08	54/56		4 01 63
161 59	Wincobank STN Jn		5 32	57		4 24 63
163 43	Holmes Jn		7 29	55/30		6 35 30
163 77						
161 77						
162 01	Rotherham Mas	[9]	8 33		[10]	7 45
162 01			0 00			0 00
163 78	Parkgate		3 45	48		3 30 46/51
165 76	Kilnhurst		5 53	60		6 42 25*/48
166 75	Swinton Town		7 32	30*/27		8 15 50/26*
167 73	Wath Rd Jn	[10]	9 20	27	[10]	10 10 30*
168 06	Wath on Dearne		12 07	30		12 30 30
171 28	Darfield		16 30	38*/40		17 42 25*
173 61	Storrs Mill		19 45	50		22 40 35
175 08	Cudworth		21 45	40/36		24 39 43
176 38	Carlton Main		24 07	33		25 50 47
177 27	Royston		25 45	39		28 20 25*
178 28	Royston Junction		28 10	30/20		30 45 27*
181 14	Walton		33 15	47		34 30 60
183 19	Snydale		36 35	36		36 45 30*
184 56	Goose Hill Junction		38 44	40/35		39 21 40/30
185 11	Normanton	[44]	39 30	33	[44]	40 15 22
186 00	Altofts Junction	[46]	41 05	30	[46]	42 30 25/30
186 34	Altofts & W'wood		41 55	31		43 15 43
187 37	Methley Junction		43 50	36		44 55 35*
188 48	Methley Sidings	[2R]	45 35	44	[2R]	46 49 44/sigs
190 00	Woodlesford		47 30	47/42		51 30 10
192 50	Stourton Jn		51 12	44/47		54 40 60/sigs
194 38	Hunslet Goods JN		53 25	33		56 50 10
195 24	Leeds E.S. Jn		56 20	25*20		60 25 20*30
195 53	Leeds City Jn		57 25	20		61 25 30/25
196 01	Leeds	[62]	58 50		[61]	62 50

At the end of regular steam haulage, 'express' journeys between Sheffield and Leeds took up to 70 minutes as a result of uninhibited mining during and after the war and subsequently distinct apathy about making improvements, the line suffering badly from part management by the Eastern and North Eastern Regions but, until 1958, operation by the London Midland Region as a 'penetrating' line. So the introduction of diesel locomotives did not make much difference. In the log tables Runs 1 and 2 up and down in Tables 1a and 2a illustrate the end of steam and mid-sixties diesel performance. It was dire!

Table 1b up							
Run no		3			4		
Date		7/4/1972			8/7/1977		
Loco		1102			46016		
Load		7/239			6/200		
Train		Special			14.40 Leeds-Plymouth		
Recorder		N.Proudlock			N.Proudlock		
M C		[sch]	m s	mph	[sch]	m s	mph
			From South			From South	
196 01*	Leeds City		0 00			0 00	
195 53	Leeds City Jn		1 53	15/10*		1 35	15/10*
195 24	Leeds E.S. Jn		2 45	32		2 48	30
194 38	Hunslet Goods Jn		4 02	45/41	[2R]	4 16	40
193 16	Wakefield Road					6 33	20*38
192 50	Stourton JN		6 06	65/75		7 20	50
190 00	Woodlesford		8 25	60		9 50	65/20*
188 48	Methley Sidings		9 48	65/60		12 20	58
187 37	Methley Junction		10 57	60		13 31	62
186 00	Altofts Junction	[13.5]	12 29	60/30	[15.5]	14 47	71
185 11	Normanton	[14.5]	14 40	15	[16.5]	15 39	45
184 56	Goose Hill Junction		15 47	40/47		16 14	49
183 19*	Snydale		17 23	63		17 37	68/71
181 14	Walton	[2R]	20 51	71/5*/30		19 27	73
178 28	Royston Junction		24 48	40*/50*		22 48	40*/63
177 27	Royston		26 12	60		23 42	70
176 38	Carlton Main		27 05	71/60*			
175 08*	Cudworth	[20]	28 28	68/60*	[26]	25 37*	75/64*
173 61	Storrs Mill		30 43	80/40*			
172 47	Houghton Main					27 50	70/60*
171 28	Darfield	[2R]			[2R]	29 02	65
169 06*	Wath on Dearne		34 40	69/40*		30 53*	78
167 73	Wath Rd Jn	[34]	36 02	65	[33.5]	31 55	68
167 18	Swinton Junction		36 47	53*			
166 75	Swinton Town		38 10	68			
165 76	Kilnhurst					33 32	82
164 40	Aldwarke Jn				[36]	34 35	83
163 78	Parkgate		39 42	79			
162 01	Rotherham Mas	[40.5]	41 42	30	[38.5]	37 07	27
161 77							
163 74							
163 43	Holmes Junction		42 35	35	[2R]	37 58	36
161 59	Wincobank STN Jn		44 33	64	[44.5]	39 57	69/71
161 27	Brightside	[5.5 R]	44 53	65/40*		40 17	72
159 34	Attercliffe Road		47 47	30*/sigs	[2R]	41 58	60/55
159 06	Nunnery M.L Jn		49 10	10/25/sigs		42 26	42
158 40	Sheffield Midland	[54]	51 45		[50]	44 16	

Table 2b down							
Run no		3			4		
Date		7/4/1972			5/2/1973		
Loco		1102			D64		
Load		7/239			8/280		
Train		special			8.45 am Cardiff-Leeds		
Recorder		N.Proudlock			N.Proudlock		
M C		[sch]	m s	mph	[sch]	m s	mph
158 40	Sheffield Midland		0 00			0 00	
159 06	Nunnery M.L .Jn		1 40	38		1 30	35
159 34	Attercliffe Road		2 07	48		1 55	42
161 27	Brightside		3 49	83		3 42	70
161 59	Wincobank STN Jn		4 08	80		4 02	70
163 43	Holmes Jn		6 15	30*/35		6 10	30/25
163 77							
161 77							
162 01	Rotherham Mas	[8]	7 00	35	[8]	7 10	28
163 78	Parkgate		9 17	68/72		9 13	72/65
165 76*	Kilnhurst		10 42*	82		11 00	62/65/sigs
166 75	Swinton Town						
167 18	Swinton Junction	[14.5]	12 17	45*/47		12 57	20/30
167 73	Wath Rd Jct	[16]	13 05	58	[14]	13 57	52
169 06*	Wath on Dearne		14 26	40*		15 10	68/71
171 28	Darfield	[2R]	17 15	57/20*	[2R]	17 07	75
172 47	Houghton Main		18 33	67/80		18 04	80
175 08*	Cudworth	[24.5]	21 20	35	[23]	19 57 *	81/74
176 38	Carlton Main		22 56	60		21 10	70
177 27 *	Royston		23 38*	62		21 56	72
178 28	Royston Junction	[2R]	25 02	*30/50	[2R]	22 45	72
181 14	Walton		28 52	58/38*		25 50	42*/70
183 19*	Snydale		31 00	72		27 45	71
184 56	Goose Hill Junction		32 20	63/55	[34]	28 55	61
185 11	Normanton	[38]	32 57	40	[35]	29 22	60
186 00	Altofts Junction	[39]	41 45	*/15		30 12	61/60*
187 37	Methley Junction		43 48	65		31 35	70
188 48	Methley Sidings		44 50	74/78		32 31	75
190 00	Woodlesford		46 04	65/62		33 42	70/68
192 50	Stourton Jn	[4R]	48 25	75/55	[2R]	36 10	60
193 16	Wakefield Road					36 46	50/30*
194 38	Hunslet Goods Jn		50 44	58/ 45		38 55	40
195 24	Leeds E.S. Jn		52 30	25		40 20	35
195 53	Leeds City Jn		53 55	15/10*		41 10	15*
196 01	Leeds	[54]	55 58		[51]	43 00	

Table 1c - up							
Run no		5			6		
Date		3/6/1976			27/12/1973		
Loco		45131			45118		
Load		4/137			9/312		
Train		08.21 Leeds-Poole			09.16 Leeds-London		
Recorder		N.Proudlock			N.Proudlock		
M C		[sch]	m s	mph	[sch]	m s	mph
196 01*	Leeds City		0 00			0 00	
195 53	Leeds City Jn		1 30	15		2 00	15
195 24	Leeds E.S. Jn		2 27	35		2 55	33
194 38	Hunslet Goods Jn		3 39	44		4 09	40
193 16	Wakefield Road		5 48	51*/20		6 48	20*/35
192 50	Stourton Jn		6 38	52/65		7 42	55

M C		[sch]	m s	mph	[sch]	m s	mph
190 00	Woodlesford		9 10	63/68		10 26	60/74
188 48	Methley Sidings		10 20	74		11 35	74
187 37	Methley Junction		11 22	64		12 35	61
186 00	Altofts Junction	[13]	12 41	71	[13]	14 00	63
185 11	Normanton	[14]	13 34	45	[14]	14 55	45
184 56	Goose Hill Junction		14 09	50		15 32	44
183 19*	Snydale		15 30	70		17 02	63
181 14	Walton		17 24	68	[1R]	19 05	75
178 28	Royston Junction		20 23	50*/65		21 45	60
177 27	Royston		21 13	71		22 35	71
176 38	Carlton Main					23 23	68
175 08*	Cudworth	[23.5]	23 16*	69	[24]	24 38*	71
173 61	Storrs Mill						
172 47	Houghton Main		25 13	81		26 32	81
171 28	Darfield	[2R]	26 08	80	[2R]	27 27	82
169 06*	Wath on Dearne		27 52*	75		29 10*	73
167 73	Wath Rd Jn	[31]	28 51	70	[32]	30 12	71
167 18	Swinton Junction					30 47	71
166 75	Swinton Town						
165 76	Kilnhurst		30 29	75		31 49	78
164 40	Aldwarke Jn		31 36	80			
163 78	Parkgate					33 17	82
162 01	Rotherham Mas	[35.5]	34 26			35 32	
162 01			0 00			0 00	
161 77							
163 74							
163 43	Holmes Junction		1 22	27		1 50	30
161 59	Wincobank Stn Jn	[4]	3 31	70	[3R]	4 02	62
161 27	Brightside		3 50	72		4 25	63
159 34	Attercliffe Road	[4R]	5 37	55		6 17	50
159 06	Nunnery M.L Jn		6 05	40		6 48	35
158 40	Sheffield Midland	[11.5]	8 18		[12]	8 59	

Table 2c down							
Run no		5			6		
Date		15/8/1973			3/6/1976		
Loco		D17			47151		
Load		4/132			8/262		
Train		11.25 Poole-Leeds			7.30 am Swansea-Leeds		
Recorder		N.Proudlock			N.Proudlock		
M C		[sch]	m s	mph	[sch]	m s	mph
158 40	Sheffield Midland		0 00			0 00	
159 06	Nunnery M.L .Jn		1 12	45		1 15	33
159 34	Attercliffe Road		1 37	52		1 50	45
161 27	Brightside		3 20	72/65		3 33	72
161 59	Wincobank South Jn		3 41	75	[4]	3 53	72
163 43	Holmes Jn		5 25	30		5 42	20
163 77							
161 77							
162 01	Rotherham Mas	[8]	6 18		[7.5]	6 58	
162 01			0 00			0 00	
163 78	Parkgate		2 36	78			
164 40	Aldwarke Jn				[3.5]	3 12	79
165 76	Kilnhurst		4 07	78		4 16	82
166 75	Swinton Town		5 37	47*			
167 73	Wath Rd Jct	[6]	6 20	63		5 50	72
169 06*	Wath on Dearne		7 27*	75		6 50*	75
171 28	Darfield	[2R]	9 13	75	[2R]	8 33	82
172 47	Houghton Main		10 10	80		9 27	83

M C		[sch]	m s	mph	[sch]	m s	mph
175 08*	Cudworth	[13]	12 09*	80/71	[14]	11 24*	71
176 38	Carlton Main		13 40	50*			
177 27	Royston	[1R]	14 40	65		13 22	72
178 28	Royston Junction		15 31	72		14 10	72
181 14	Walton		18 19	40*/74		16 32	71
183 19*	Snydale		20 17	68		18 35	62
184 56	Goose Hill Junction		21 32	62		19 54	59
185 11	Normanton	[23]	21 58	64	[23]	20 22	59
186 00	Altofts Junction	[24]	22 45	70	[24]	21 12	63
187 37	Methley Junction		23 54	78		22 34	68
188 48	Methley Sidings		24 47	76		23 33	74
190 00	Woodlesford	[3R]	25 55	75	[4R]	24 46	70
192 50	Stourton JN		28 27	60		27 20	62
193 16	Wakefield Road		29 09	20*		28 00	40/20*
194 38	Hunslet Goods Jn		31 16	50/45		30 32	48/40
195 24	Leeds E.S. Jn		32 30	35		31 57	30
195 53	Leeds City Jn		33 35	20/15		33 42	sig stop
196 01	Leeds	[39]	35 05		[42.5]	35 12	

Table 1d up				M C		[sch]	m s	mph
Run no	7			177 27	Royston		40 15	70
Date	10/8/1978			176 38	Carlton Main			
Loco	43096/98			175 08*	Cudworth	[37]	44 02*	30*/65
Load	7/242			173 61	Storrs Mill			
Train	Special			172 47	Houghton Main		46 40	50*/65
Recorder	N.Proudlock			171 28	Darfield		47 38	78
M C		[sch]	m s	mph	169 06*		49 20	81
196 01*	Leeds City				167 73	Wath on Dearne		
195 53	Leeds City Jn				167 18	Wath Rd Jn	[45]	50 17
195 24	Leeds E.S. Jn				167 18	Swinton Junction		
194 38	Hunslet Goods Jn				166 75	Swinton Town		
193 16	Wakefield Road				165 76	Kilnhurst		51 52
192 50	Stourton JN				164 40	Aldwarke Jn	[48]	52 55
190 00	Woodlesford				163 78	Parkgate		83
188 48	Methley Sidings				162 01	Rotherham Mas	[51]	56 02
187 37	Methley Junction				162 01			25*
186 34	Altofts & W'wood		From York		161 77			
186 00	Altofts Junction	[26]	31 02	40	163 74			
185 11	Normanton	[27]	32 10	51	163 43	Holmes Junction		57 17
184 56	Goose Hill Junction		32 42	53	161 59	Wincobank STN Jn	[54]	59 26
183 19*	Snydale		34 04	73	161 27	Brightside		59 46
181 14	Walton		35 57	71	159 34	Attercliffe Road		61 45
178 28	Royston Junction		39 25	30*/68	159 06	Nunnery M.L JN		62 42
					158 40	Sheffield Midland	[62]	64 55

Chief Civil Engineer Arthur Dean had been appointed North Eastern Region General Manager and had formulated major new routing strategies based on the principle that in the West Riding passenger operation would be concentrated on the GN Lines, freight on the L&Y lines and the Midland lines would be restricted to local passenger and freight use, if not closed altogether. As the Midland lines had the easiest grades and the least curvature this did not bode well for passenger journey time improvements, nor the movement of very heavy freight loads. In this connection Arthur Dean pressed ahead with the construction of Healey Mills new marshalling yard but stopped any further work on the new Stourton (South Leeds) marshalling yard. West Yorkshire-Scotland freight traffic would go via Preston not by the Settle-Carlisle. Today of course, Healey Mills is a woebegone derelict site, Stourton is a thriving container terminal and through freight is again on the Settle-Carlisle following very heavy investment.

In one of his Railway Magazine articles John Heaton described a cab journey on a container train bound for Stourton and commented how on the last part of the run with interrupted running for the Moorthorpe curve, gradients from Bolton-on-Deerne and South Kirby and the slow crawl from Hare Park to Turners Lane he missed having the easy and far quicker Wath Road to Goose Hill direct line. Lastly, on the passenger front, after years of tortuous running by East Coast express trains on the GN line to Bradford Exchange/Interchange, the electrification of the Midland lines north of Leeds saw them transferred to Bradford Forster Square which the Dean plan envisaged closed.

The idea of having only one station in Leeds was first broached in 1955 and took twelve years to achieve. Along the way the costs were slashed by £1 million to leave a broadly inadequate layout and station facilities only corrected at the major rebuild some thirty years later. A poor quality 20 mph freight connection existed between the S&K at Moorthorpe and the GN at South Kirby and to reach Leeds City the tortuous 25 mph Geldard Road curve down to the LNW viaduct was built. In line with the GM's grand strategy these allowed trains from Sheffield to transfer from the Midland line to the S&K line, additionally imposing use of the 20 mph fast line to slow line connections at Swinton Junction. Add a stop at Wakefield Westgate and little journey time improvement was achieved.

That, then was the position in 1970. The NE/SW Management Group had some objectives one of which was to achieve a Newcastle to Bristol time of 5½ hours so proposals to reduce journey time needed to be presented. Also at this time a Joint Liaison Group with the National Coal Board was created to consider future mining plans and their anticipated impact on line speeds. Happily, I was the operating department representative on this committee and quickly formed an excellent relationship with the BRB HR Mining Engineer. Mining plans were presented for all proposed workings which would impinge on the railway and assessments made of the extent and rate of subsidence which might result. Depth of the seam below ground and its thickness were the major elements from which to determine this and, using my experience as a performance recorder and the techniques which all RPS members utilise, I put time loss values to each one. Depending on duration and severity additional running time or recovery time could be inserted in the timetable. Figure 3 is a typical example of the kind of plan presented.

The railway had a right to block any mining which would adversely affect its operations or structures and then compensate the NCB to the value of the profit lost by sterilising that coal. Money was not available to prevent most mining and since, by this time, most mining was in deep seams up to 2,500 feet down, necessary speed restrictions could be as high as 40 or even 60 mph. Once I had information to enable effects on the surface to be clearly identified with which panel of work from which colliery was responsible, I soon realised that several of the items in the weekly notice on lines within my patch shown as 'subsidence' were at sites where coal extraction was complete. Some of the problem arose from the practice in steam days of using locomotive ashes as ballast to keep safe levels for slow speed running during active subsidence and subsequently not undertaking reballasting work with stone. There was some spotlight on the Leeds-Barnsley-Sheffield service at that time and such a 'subsidence' TSR at Methley Junction was the first I tackled. The necessary work was quickly done and the speed restriction was taken off.

The plans being presented at the Liaison Group showed that few would affect the Goose Hill-Wath Road section but some severe subsidence from thick seams relatively near the surface would affect the S&K line and be far too expensive to buy out. If the Midland Main Line could be made fit for its easily obtained potential line speeds, I estimated substantial acceleration could be achieved and so, through the NE/SW Committees (by briefing the COM and CPM and myself attending) suggested up to 20 minutes might be saved between Leeds and Sheffield. This was seized on and implementation in May 1972, was required. Through the Eastern Region Management Committee the Chief Civil Engineer was directed

to bring the line up to standard. This was not quite completed by May 1972, but sufficiently to start running that way.

To establish that the route was ready a trial train was run on the 7th April 1972 (Runs 3 Up & Down in the tables) personally accompanied by Frank Burge, the Chief Operating Manager at the time and Chief Civil Engineers staff with ride meters. Inspector Charlie Wallace was in the cab to instruct the driver to run in excess of published line speed. Several TSRs remained where ongoing work would be completed by the start of the new timetable on 1st May 1972. Figure 1 sets out the improved speeds on the Midland line whilst Figure 2 details the places where work was not completed on time.

Two trains each way were introduced on the Midland Main Line, 12.31 Leeds-Birmingham and 16.31 Leeds-Cardiff on the up and 07.50 Derby-Leeds and 08.45 Cardiff-Leeds on the down. I went out to review operations on day one and, as often happens with new timetable services the three trains I was able to accompany did not do too well. As shown in Figure 2 some unwelcome TSRs remained and signalmen were not used to the timetable. The 07.50 Derby-Leeds suffered a signal delay at Royston and took 52½ minutes from Rotherham to Leeds arriving 12 minutes late and the non-stop 08.45 Cardiff-Leeds had a near stop at Dearne Valley Colliery Sidings for the driver to transfer from the locomotive to the train for an urgent toilet break, losing six minutes. Whilst waiting for this train at Sheffield I had to ask the signalman at the platform box to pass a message to the announcer to stop saying it would call at Wakefield. This was done. Being on this train I could not travel on the 12.31 Leeds-Birmingham but was on the 16.31 Leeds-Cardiff which ran via Wakefield Westgate because the guard lacked route knowledge via Cudworth. I made several more runs to monitor progress and the accuracy of the running times in readiness for the full transfer to the route including services via Wakefield and from York via Castleford in May 1973. Matters improved greatly such that on 5 February 1973 the 08.45 Cardiff-Leeds made the Sheffield-Leeds run in 43 minutes exactly, arriving 3¾ minutes early including a signal check at Swinton Junction. This is Run 4 in the down line table.

In planning for the 1973 timetable it was noticed that some trains between Leeds and Sheffield would have short formations because restaurant car sections were detached and attached at Sheffield, and the Poole train split or joined at Sheffield for York and Leeds. To obtain the best possible journey time these trains were put on 220 ton timings giving a net 34 minute schedule for 34 miles up to Rotherham and 33 minutes down. On such a train with a Class 45 locomotive on four coaches on the Leeds portion of the Poole service I recorded an almost even time run from Leeds to Rotherham in 34 mins 26 secs. Run 5 in the up direction table, followed by 8 mins 18 secs to Sheffield, potentially a 40¾ minutes for a nonstop run. It really wouldn't have taken much to have reliable even time runs between Leeds and Sheffield. Present day speeds between Rotherham and Holmes Junction might have been enough, saving about two minutes. To put this in perspective, at this time Leeds to York was 27 minutes for 25½ miles and the 'Deltic+8' timing to Doncaster (pass) 29 miles in net 30 minutes.

Very successful testing of the prototype HST up to 143 mph took place in 1973 paving the way for approval of a build for the ECML and Paddington-Bristol/Cardiff routes followed by the West of England extension build, a small ECML extension build and lastly NE/SW. The Eastern Region HST steering group began planning for this in a less than practical way by calling for estimates to have 125 mph running over the whole NE/SW route in the Eastern Region.

Something more realistic soon emerged and, having some Derby HST performance print outs and also bearing in mind the Midland route was very easily graded for an HST, I made some broad time estimates. These were 35 minutes from Leeds to Sheffield, and 45 minutes from York to Sheffield, assuming line speed was 115 mph, subject to some lower restrictions

and full MAS signalling being installed. Estimates for this were prepared and discussed at a meeting of regional Chief Officers organised and chaired by the Chief Planning Manager who would, of course, have to provide the finance from his annually-allocated limited budget. The Chief Civil Engineer, perhaps still having in mind Arthur Dean's grand plan, was clearly opposed to such development of the Midland line and was aware of mining plans at Houghton Main Colliery which would affect the Midland Main Line over some considerable time in three thick seams at differing depths. He made much of this, telling the group that this subsidence would be under a major bridge over the River Dearne and would amount to perhaps thirteen feet-quite unmanageable. He inferred the seams would be worked at the same time which, of course, they would not, but no one at the meeting could really challenge him and the plans were rejected. He said he could make significant improvements to the Moorthorpe link, between Rotherham and Holmes Junction and raise the line speed on the S&K between Moorthorpe and Dearne Junction to 100 mph. So the Midland line was doomed. Passenger services reverted to the S&K route in May 1983 so, apart from trial trains and deliveries between Derby and York, HSTs never traversed the line. Run 7 in the up line table is a return York-Darlington trial set which I was able to accompany back as far as Sheffield. Freight traffic remains between Oakenshaw and Cudworth but, as Bill Hemstock noted, the rest was without any train service by 1987 and was lifted. Just 12 route miles were saved.

Also during this period the National Coal Board had announced their plan to develop the Selby coalfield. The impact this might have on the ECML north of Selby was reviewed and both parties sought a strategy to avoid sterilisation of coal reserves making extraction more difficult and avoid BR having to spend large amounts to preserve ECML running times so recently and very significantly reduced by the introduction of HSTs.

So the Selby avoiding line from Templehirst to a new junction with the Sheffield/Leeds to York line at Colton Jn was the eventual solution and was ready for opening in October 1983. The junction at Colton was planned with the prospect of HSTs on NE/SW services also passing at 125 mph and so a superb junction permitting 125 mph running in all directions was provided. However someone spotted that the NE/SW trains could use nearly 30 miles of 125 mph railway to reach Sheffield via and serving Doncaster in a time as good as by the Midland and S&K routes and this was adopted from May 1984 so the 125 mph junction never had timetabled use at that speed to and from the Sheffield direction. It does see 100 mph passage when Trans-Pennine Class 185s run on the Normanton lines which, with 70 mph leads now in place at Church Fenton, they can do without time penalty. Just one example of how the long lead time to implement an excellent decision can so easily be overtaken by events and other equally sound decisions.

So today in the public timetable York-Sheffield with a Wakefield stop needs 41 minutes, not much better than the best diesel loco-hauled runs in the mid-seventies via Cudworth and after some considerable expenditure all the way from South Kirby Junction to outside Sheffield, much of which would have benefitted the Midland route as much as the S&K route

Figure 1

Maximum permitted speeds determined for introduction with the May 1972 timetable and the location of lower speed restrictions.

Leeds and Normanton 75 mph		
	UP/mph	DOWN/mph
From Leeds station	15 10	10 15
Engine Shed Junction	30	30
Engine Shed Junction-Hunslet Gds Junction	40	40
Hunslet Goods Jn-Waterloo C.S	60	60
Methley Junction(187 40-187 35)	60	60

Normanton and Cudworth 70 mph		
Normanton (185 30-184 70)	50	
Goose Hill Jn (184 70-184 23)		60*5
Royston Jn (180 20-178 40)	60*1	
Cudworth and Chesterfield 80 mph		
Houghton Colliery Sidings	70*2	70*4
Wath Road Jn (168 03-167 73)	70	70
Swinton Jn	60	50
Rotherham Mas-Holmes Jn	25	25
Sheffield North-Holmes Jn	?	70*3
Sheffield North Jn	20 to P8 15 to P6 10 others	20 exp P162 10 others
Sheffield-Chesterfield-No change.		

speed restrictions required for signal braking distance shortfall.

*1 Distant for DM21 auto and Royston Jn up Main distant-CCE OK for 80

*2 Houghton Colliery up Main distant-173 ½ -172 ¾ -CCE OK FOR 80

*3 Sheffield North-Holmes Jn-until stage 2 there can be 80

*4 Cudworth Stn Down Main distant- from 174 ¼ CCE OK for 80

*5 Goose Hill Down Main distant-CCE-from 183 ½ CCE OK for 70

And also Rule 39A will be imposed on No 19 Down Main Home signal as it can show a single yellow and is then underbraked

Figure 2			
On 1 st May 1972 as mentioned earlier ,some work remained to be done and the following TSRs were in place, items marked x were anticipated to remain for a time, the others were expected to be taken off.			
UP	Miles and Chains distance	mph	Reason for restriction
Oakenshaw South-Royston	x 180 70-180 31 to be taken at 40 mph	20 20	Relaying Subsidence (to be taken at 40 mph)
Royston Jn-Carlton Main	x 179 40-179 27 178 40-178 14	30	Condition of track
Cudworth North	176 37-176 17	60	Condition of track
Cudworth-Houghton Main	x 175 03-174 30	60	Subsidence
Dearne Valley-Wath North	x 171 40-171 00	20	
Wath North-Wath Road Jn	169 10-168 64	40	relaying
Swinton Jn-Wath Road Jn	167 15-167 00		Condition of track
DOWN			
Swinton Jn-Wath Road Jn	167 12-167 76	20	Ballast Cleaning and relaying
Wath Road Jn-Wath North	168 39-169 17	40	Condition of track
Wath Road Jn-Deerne Valley	169 17-169 41	40	Ballast Cleaning and relaying
Houghton Main-Cudworth	x 171 00-171 40	20	Subsidence
Cudworth-Carlton	x 174 30-175 03 176 17-176 37	60 60	Subsidence Condition of track
Carlton-Oakenshaw	178 14-178 40	30	Condition of track
Royston Jn-Oakenshaw	x 179 27-179 40 x 180 34-180 70	40	Chevet slip Subsidence (to be taken at 40 mph)

By May 1973 for the start of the new timetable nearly all the above had been cleared but the Chevet slip still affected the down line at 40 mph and its stabilisation was not a straightforward task so it was regarded as long term. The condition of the track at Swinton Junction needed a 40 mph TSR on the up main quickly followed by 20 mph up and down main for ballast cleaning and relaying which lasted until August. Also in June 1972 the trackwork at Hunslet South Junction had deteriorated such that a 40 mph condition of track TSR was imposed. This was reduced to 30 mph on 5th February 1973 and to 20 mph on 17th February 1973. The trackwork in question was a ladder across the main lines involving diamonds and slips and so the Chief Civil Engineer was not prepared to make a like-for-like renewal. The operators had little leverage because such replacement was not necessary and a simplified layout would meet requirements better. This required substantial resignalling which the Signals Engineer declared he had neither design nor installation staff to implement. This impasse lasted the next 10 years until the Leeds to Methley Junction resignalling was completed after the main line trains had again been taken away. How the Civil Engineer kept such worn out P&C going for so long is perhaps best not thought about.

Figure 3

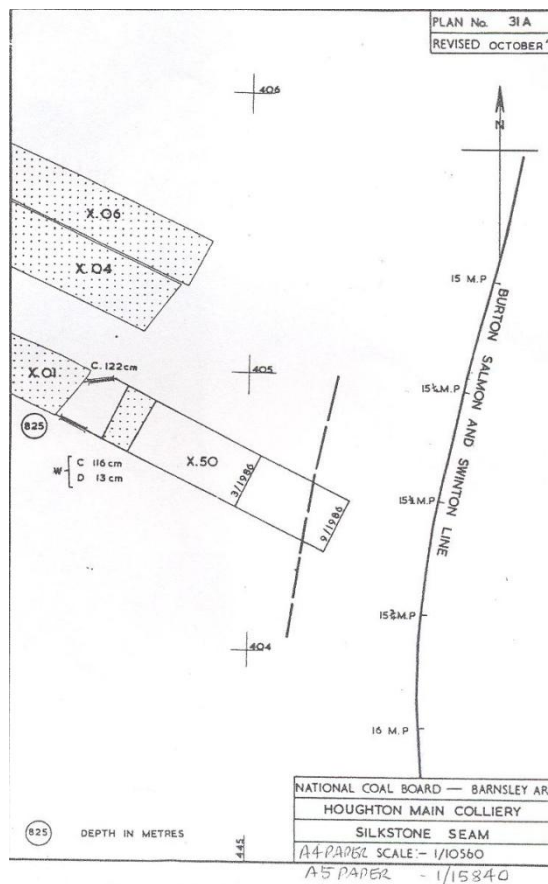


Figure 3 is a mining plan typical of those presented at the Liaison Group. This is a particularly simple one and shows X50 as a panel of coal extraction just impinging on the railway pillar, shown by a dashed line, near where Goldthorpe station now stands. The dotted areas are where mining has been completed and the dates are estimates of how extraction is expected to proceed. The depth of the seam is shown as 825 metres, 2,707 feet, and so small an incursion at such a depth would cause minimal effect on the surface, possibly requiring a 60 mph speed restriction or perhaps none at all. At the rate of progress shown had the panel been planned to pass under the whole railway pillar, as was commonly the case, any speed restriction would have lasted for 16 months. The panel is 220 yards wide but the effect on the surface would appear as a saucer shaped depression needing a restriction over perhaps half a mile.

THE HAWORTH EXPRESS

Derek Wilson

Twice a year the Keighley & Worth Valley Light Railway organise a Steam Gala and once per year a Diesel Gala. Arrangements for visiting locomotives from other preserved railways are made well in advance of the events, although recently the non-availability of 5029 Nunney Castle led to a quickly arranged substitute in the form of 7812 Erlstoke Manor.

For those unfamiliar with the line, a brief description may help. The preserved railway runs from its own ex-GNR station at Keighley which has a single line connection to the main Aire Valley electrified track just north of the main Keighley station.

The start from Keighley is at 320 feet above sea level and is on a tight curve on a 1 in 58 gradient. The track then climbs continuously for the 4¾ miles to the terminus at Oxenhope which is 660 feet above sea level. It is therefore usual practice to have steam locomotives pointing chimney first up the hill.

Because it operates under a Light Railway Order the maximum line speed is 25 mph, however as will be seen from the logs, this is not always strictly observed, especially as with the driver of the two Class 37s, who with 3,500 horsepower at his disposal overcooked it by a considerable amount!

To run a non-stop service requires certain criteria to be met. Firstly, the driver leaving Keighley must know that the train leaving Oxenhope has departed so that the signalman at Damens Junction box, where there is a passing loop, will have the single line token for the top end of the line ready. Secondly, the level crossing gates at Damens and Oakworth must be closed to road traffic and, thirdly, station staff at Keighley must make passengers aware that this service does not stop at intermediate stations. Also, it helps that the fireman collects the token from the signalman, not as in one recent incident where he dropped it and was seen running red faced down the track to retrieve it to loud noises from disappointed non-stop passengers.

Occasionally trains run the whole length of the line non-stop, so I have included some of these in the logs. The logs I have selected are neither the best nor worst, but represent average performances. It should also be noted there seems to be a lack of ex-Southern and London & North Eastern locomotives, perhaps due in the latter case to the relatively few locomotives preserved, although visitors to the line in the past have included Nos. 60009, 60103 and 60532. I have only included one diesel run as the line mainly promotes itself as a Heritage Steam Railway.

The conclusions I draw from the logs are as follows

- The speed and timekeeping depend mainly not on the size of the locomotive, but on the experience and enthusiasm of the locomotive crew
- Without the fitting of speedometers, keeping to the line speed limit is difficult with a steam locomotive, especially if a late start is made
- Even, as in the case of the diesel fitted with a speedometer, an overenthusiastic driver can exceed the line limit.
-

Table 1 Ex-Great Western Locomotives	3802	4953 Pitchford Hall	7822 Foxcote Manor						
Type	2-8-0	4-6-0	4-6-0						
Load	6	6	6						
Tare Tons	205	201	202						
Gross Tons	220	215	217						
Mile	sch	m s	mph	sch	m s	mph	sch	m s	mph
0.00 Keighley	0	0.00	23	0	0.00	*	0	0.00	23
1.19 IngrowWest		5.03	24		4.06	*		4.50	21
1.85 Damens		6.44	25		5.30	20		6.02	16
2.11 Damens Jet.	8	7.33	25	9	6.15	21	8	7.35	19
2.69 Oakworth		9.08	*		8.02			9.43	*
3.51 Haworth	15	11.30			9.57		15	11.59	
4.71 Oxenhope				25	12.52				
Nett Time		11.15			12.50			11.55	
Date		12/10/2007			17.2.2007			11.10.2013	
* Exceeded Line limit									

Table 2 Ex-London Midland Locomotives	41312 piloted by 41241	44422	45212 piloted by 80002						
Type	2-6-2T	0-6-0	4-6-0 + 2-6-4T						
Load	6	6	6						
Tare Tons	209	200	227						
Gross Tons	225	210	240						
Mile	sch	m s	mph	sch	m s	mph	sch	m s	mph
0.00 Keighley	0	0.00	22	0	0.00	21	0	0.00	*
1.19 IngrowWest		4.54	*		5.16	22		4.15	*
1.85 Damens		6.34	17		7.10	15		5.38	15
2.11 Damens Jet.	9	7.39	22	9	8.11	ss40s/18	10	6.35	25
2.69 Oakworth		9.25	*		11.32	22/tsr10		8.06	*
3.51 Haworth	20	11.23			15.02	21	15	10.01	
4.71 Oxenhope				28	18.50				
Nett Time		11.20			16.00			10	
Date		16/02/2008			30/09/1995			19/02/2005	
* Exceeded Line limit									

Table 3 Ex-LNER Locomotives	62005	62005 piloted by 41241				
Type	2-6-2	2-6-0+2-6-2T				
Load	6	8				
Tare Tons	268	210				
Gross Tons	275	220				
mile	sch	m s	mph	sch	m s	mph
0.00 Keighley	0	0.00	19	0	0.00	*
1.19 IngrowWest		5.44	16		3.26	*
1.85 Damens		8.06	13		4.48	21
2.11 Damens Jet.	6	9.15	14	6	5.34	17/22
2.69 Oakworth		11.44	15		7.14	*
3.51 Haworth		25.07	19		9.05	*
4.71 Oxenhope	20	19.37		20	11.35	
Nett Time		19.35			11.30	
Date		12/10/2003			12/10/2003	
* Exceeded Line limit						

Table 4- Ex-British Railway locomotives	70013 Oliver Cromwell			75078 piloted by 80002			76079 piloted by 41241		
Type	4-6-2			4-6-0+2-6-4T			2-6-0+2-6-2T		
Load	6			6			6		
Tare Tons	203			197			202		
Gross Tons	210			210			210		
Mile	sch	m s	mph	sch	m s	mph	sch	m s	mph
0.00 Keighley	0	0.00	19	0	0.00	27	0	0.00	*
1.19 IngrowWest		7.50	15		4.12	*/20		4.21	*
1.85 Damens		10.26	13		6.02	ss1m26s		5.48	14
2.11 Damens Jet.	8	11.50	14	8	9.30	26	8	6.54	17
2.69 Oakworth		14.40	19		10.59	*		8.50	25/16
3.51 Haworth	14	18.41		14	12.46			11.15	*
4.71 Oxenhope							17	15.01	
Nett Time	18.40			10.45			15.00		
Date	13/02/2009			12/10/1996			10/10/2004		
* Exceeded Line limit									

Table 5 English Electric 1,750hp Diesel Loco	37612 piloted by 37604		
Type	Co-Co		
Load	6		
Tare Tons	213		
Gross Tons	228		
mile	sch	m s	mph
0.00 Keighley	0	0.00	*
1.19 IngrowWest		2.40	17
1.85 Damens		4.37	22/5
2.11 Damens Jet.	8	5.50	19
2.69 Oakworth		7.24	*
3.51 Haworth	14	9.38	
Nett Time	9.35		
Date	31/07/1999		
* Exceeded Line limit			

Colin Graham

Readers browsing journeys around Glasgow in the RPS archive may have noticed the runs recorded by Colin Graham behind steam in the 1960s, particularly A4s from Glasgow Buchanan Street to Stirling.

Sandy Smeaton, who knows him, says:

What Colin has given us is an amazing volume and variety of steam and diesel working. I've known Colin now for about 20 or so years. Now having seen his logs I have discovered that our paths crossed frequently unknowingly in the 60s when chasing steam. For example, each time we returned from Glasgow on the 5.30pm I never knew that he was at the window of the first coach with his stopwatch. Colin is about 73 now and as well as timing he is an accomplished photographer although he has never had anything published - yet. I hope this will be corrected before too long as he has some gems taken in the Motherwell area where his family stayed in his younger days, hence the 5.43pm commute from Central. They then moved to Dunblane which lead to a different commute on the 5.30pm. For both commutes he had a season ticket and made full use of it at the weekends for both timing and

photography.

Perhaps there were areas that he didn't explore too much (e.g. the south west and north of Dundee), but we all suffered from lack of funds in those days and few achieved what they would have wished.

His timing method was to take times at posts and stations, not rail joints, recording at each quarter post, although a few of his runs are summaries taking passing times at stations only, but these are few. The watch he used was only accurate to a quarter of a second that at higher speeds will cause accuracy problems which I discovered on one of the fast Caprotti runs down from Gleneagles to Perth, but I need to spend some more time on these.

Sandy says that Colin stopped train timing when he found that trains were running uphill faster than they were running downhill!

Here, Sandy examines some of Colin's runs south from Glasgow.

The Last Suburban Steam in the Clyde Valley

Sandy Smeaton

194 logs taken on the 5.43pm Glasgow Central to Symington between 1st May '59 and 17th March '61, the last two years before dieselisation, are now on the RPS database. These were timed by Colin Graham commuting home to Motherwell after he realised just how hard the (usual) Fairburn tank had to work, not just up the hill to Motherwell from the Clyde Viaduct, but right from the start out of Central's Platform 1.

The train in Table 1 was a seven coach suburban set ⁽¹⁾ of 203 tons tare. Assuming a loading of 75%, the gross load for this high density stock was about 235 tons.

The schedule allowed 20 minutes for the 12.9 miles to Motherwell, except for the 1960 summer timetable period when it was relaxed to 21 minutes after the introduction of a stop at Uddingston for the preceding 5.35pm to Lanark. Despite the Lanark train continuing to run with this additional stop, the 5.43pm reverted to the 20 minute schedule in the winter '60/'61 period. Between the 5.35 and 5.43 departures was sandwiched the 5.39pm to Stonehouse which took the Hamilton line at Newton. Only eight of the 194 runs were free of signal checks or pw slacks. Getting out of Glasgow Central with a clear road was no easier then than it is now.

	Sch	Average Speed (mph)
CENTRAL	0	~
Eglington Steet	3	19.5
Rutherglen Jn	7	45.2
NEWTON	11	39.7
UDDINGSTON CEN	15	27.9
MOTHERWELL	20	52.8
MOTHERWELL	21*	44

*Summer 1960 only

The average speeds demanded by the schedule are shown in Table 1. The 11 minutes allowed to Newton were standard for nearly all trains out of Central at that time. The relatively generous four minutes on to Uddingston would probably be dictated by the near permanent Newton slack for mining subsidence. However, within the overall 20 minute schedule, only five minutes were

allowed from Uddingston to the Motherwell stop, requiring an impossible average of 52.8 mph up a gradient which varied from 1 in 115 to 178. Even the extended 21 minute schedule demanded an average of 44 mph. The Class 4 engines therefore were required to be worked hard from the start to gain some time in hand, if possible, before Uddingston because *none* of the trains timed achieved the scheduled five minutes from Uddingston to Motherwell. After Motherwell the 5.43 became an all stations stopper.

The line gradients are well known to most but a brief description will not go amiss. The initial four undulating miles from Central to Rutherglen Junction pose no real challenge. The line then rises at 1 in 163 for 1¼ miles to just after Cambuslang continuing up at 1 in 236 and 1 in 110, each section for about a ¼ mile, to Newton which sits in the middle of a mostly level 1 mile plateau. There is then a fall to the River Clyde viaduct for a mile at 1 in 108/280. The viaduct marks the start of the continuous climb through Uddingston to Motherwell. The first two miles are at 1 in 135 followed by a mile at 1 in 115. The final 1¾ miles to Motherwell vary between 1 in 132 and 178 with an easing to 1 in 2727 for about a half mile at MP90, the old Motherwell Colliery, now Logan's Road LC ⁽²⁾.

The modernisation of Glasgow Central's signalling to colour light and the closure of the original east bridge over the Clyde became effective from February 1961. Prior to this date the 5.43pm was routed over the original bridge to join the up main at Gushetfaulds Junction, but the slight route deviation to the new bridge had no effect on running times. The Newton subsidence slack, officially 20 mph, was in force until 7th August 1960, but it seems to have been negotiated at anything from 10 to 45 mph, so its effect on running time was variable, to say the least.

Table 2 provides a summary of running times and punctuality grouped according to the five timetable periods from winter '58 to winter '60. Note that in those days BR summers were a fleeting three months and winters lasted for nine! The summary shows reasonable timekeeping for the first three periods, deteriorating for the last two. How much effect the Glasgow Central re-signalling work had on punctuality is unknown.

Timetable Period	No. of runs	Sch	Average	Fastest	Slowest	No. of runs RT	% of runs RT
Winter 15.9.58 to 14.6.59	22	20	20m 5s	18m 22s	27m 16s	16	73
Summer 15.6 to 13.9.59	14	20	19m 57s	17m 59s	21m 19s	8	57
Winter 14.9.59 to 12.6.60	68	20	20m 55s	18m 13s	24m 31s	23	34
Summer 13.6 to 11.9.60	30	21	22m 9s	19m 53s	27m 25s	9	30
Winter 12.9.60 to 11.6.61	60	20	23m 13s	18m 4s	35m 10s	6	10

During the winter '58/'59 period, No. 42216 was delayed by two dead stands for signals on 5th June taking an untypical 27m 16s, skewing the average time. If this trip is omitted, the average time improves to 19m 45s. The same engine achieved the fastest start to stop time for the period, 18m 22s.

The summer '59 timetable period produced the improved average time of 19m 57s, with 42216 again achieving the fastest time of 17m 59s.

The '59/'60 winter period average time deteriorated to 20m 55s. This period was clearly divided between September to late April, during which signal checks were more frequent, and late April to June, when they were much less, the former's average being 21m 32s (7 of 46 runs on time) and the latter, 19m 36s (16 of 22 runs on time).

The schedule during the 1960 summer period was increased to 21 minutes as explained above. The average time increased to 22m 9s. On 31st Aug 42128 had a clear road and took only 19m 53s, the best time recorded during the period. No. 42217 had no luck on 22nd June, signal stops causing the slowest time of 27m 25s.

Time-keeping deteriorated further during the winter '60/'61 period and the average time increased to 23m 13s. On the second last day of the period the driver of 42239 made the

best of a clear road to stop at Motherwell in 18m 4s. Dense fog on 28th November resulted in a time of 35m 10s. No doubt the crew of 42239 had a trying time sighting hopelessly inadequate semaphore signals. Only two of the runs are recorded as having been impeded by fog, which seems untypical of the area in those pre-smokeless days.

The actual departure times were not recorded, but Colin's recollection is that significant lateness was rare.

Details of 6 runs are shown in Tables 3, 4 and 5 below. The vast majority of the runs were performed by the Fairburn tanks 42216, 42217 and 42239, all of Carstairs shed⁽³⁾, assisted by seven other sisters. The occasional appearances by the smaller BR standard classes provide interesting performance comparisons. Black 5s made only five appearances but their runs were badly checked.

The best performances and overall times occurred in the '59 May to July period but Colin did not start timing in detail until 22 July '59 so the runs selected are after this date.

Table 3												
Run No.			1				2			3		
Date:			26.8.59				11.4.60			27.4.60		
Locomotive:			42216				80106			76071		
Load:			7 coaches/ 203 tons tare/ 235 tons gross									
M	Ch	LOCATION	Sch	Mn	Sc	Spds	Mn	Sc	Spds	Mn	Sc	Spds
102	27	CENTRAL	0	0	00	~	0	00	~	0	00	~
101	29	EGLINTON ST	3	2	49	Sigs	2	54	33 Sigs	2	46	39
100	20	Polmadie		4	25	47	4	54	36	4	25	45
99	14	RUTHERGLEN		5	44	~	6	28	20/Pws	5	48	54
98	31	Rutherglen Jn	7	6	33	57	8	05	33½	6	44	53
97	60	MP		7	10	58	9	04	37	7	25	53
97	22	CAMBUSLANG		7	39	57	9	44	42	7	56	52
96	40	MP		8	28	58	10	30	45 §	8	51	53
95	56	NEWTON #	11	9	40	27	12	07	10 Pws	10	12	Sigs 37
94	60	MP		11	42	46	14	06	39	11	34	54
93	67	UDDINGSTON	15	12	49	54	15	14	52	12	36	55
93	40	MP		13	09	53	15	35	52	12	56	55
93	20	"		13	25	53	15	54	50	13	14	53
93	0	"		13	43	53	16	12	52	13	31	52½
92	60	(Fallside)		14	00	53	16	29	50	13	49	50
92	40	MP		14	17	53	16	47	51½	14	06	50
92	20	"		14	35	52	17	05	49	14	24	50
92	0	"		~	~	~	17	23	51	14	42	48½
91	60	(Douglas Park)		15	09	51½	17	41	48	15	02	48
91	40	MP		15	27	52	17	59	48	15	21	47½
91	20	"		15	45	50	18	18	49	15	40	46
91	0	"		~	~	~	18	36	48½	16	00	45
90	60	Orbiston Viad S		16	23	48	18	55	47	16	20	44½
90	40	MP		16	40	51	19	14	48	~	~	46½
90	20	"		~	~	~	19	34	46 Sigs	16	59	48
89	35	MOTHERWELL	21	19	06	~	21	00	~	18	20	~
		# Pws 20							§ at MP96¾			

On Run 1, 42216 with a relatively clear road, took only 19m 6s overall and held speed above 50 mph on the climb from Uddingston only falling to 48 mph gradually by Orbiston Viaduct. Exceeding 50 mph on the climb required about 1,200 edbhp, a high figure for a Class 4.

The more modern No. 80106 on Run 2 kept the 21 minute timing exactly, despite two signal checks and two slacks, but didn't quite match 42216's performance, falling below 50 mph by MP92¾. 80002 made one appearance on 14 August '59 taking 21m 14s after one check and

the Newton pws, but fell from 47 mph at Uddingston to 42 mph at MP90¾. 80086 worked the 5.43pm from the 7th to the 18th November '60, but did not get one clear run, suffering checks at or after Uddingston.

Table 4												
Run No.			4				5			6		
Date:			15.8.60				30.8.60			15.3.61		
Locomotive:			42217				77009			42239		
Load:			7 coaches/ 203 tons tare/ 235 tons gross									
M	Ch	LOCATION	Sch	Mn	Sc	Spds	Mn	Sc	Spds	Mn	Sc	Spds
102	27	CENTRAL	0	0	00	~	0	00	~	0	00	~
101	29	EGLINTON ST	3	3	03	34	3	00	35	2	56	37
100	20	Polmadie		4	49	42	4	45	44½	4	41	41½
99	14	RUTHERGLEN		6	10	52	6	14	45	6	02	48
98	31	Rutherglen Jn	7	7	05	55	7	14	47	6	58	53
97	60	MP		7	46	52	8	02	44	7	39	53
97	22	CAMBUSLANG		8	18	52	8	40	43	8	12	51½
96	40	MP		9	47	Sigs 20	9	48	41	9	08	51
95	56	NEWTON	11	11	52	~	11	12	28	10	06	49
94	60	MP		14	22	Sigs 42	13	01	39	11	15	54
93	67	UDDINGSTON	15	15	29	50	14	14	49/Sigs	12	10	60
93	40	MP		15	51	52	14	38	44½	12	31	58
93	20	"		16	08	52	14	58	43	12	47	56½
93	00	"		16	25	53	15	19	43	13	03	56½
92	60	(Fallside)		16	43	53	15	41	41½	13	21	51
92	40	MP		16	59	54	16	02	42	13	38	53
92	20	"		17	16	54	16	25	40½	13	56	48½
92	00	"		17	33	54	16	47	40	14	14	50
91	60	(Douglas Park)		17	49	54	17	11	38	14	32	50
91	40	MP		18	06	53	17	36	36	14	51	47½
91	20	"		18	23	53	18	01	36	15	11	45
91	00	"		18	41	51½	18	27	33½	15	32	44½
90	60	Orbiston Viad S		18	58	52	18	54	34	15	51	47
90	40	MP		19	15	52	19	18	36½	16	11	44
90	20	"		19	33	50	19	44	36	16	31	47
89	35	MOTHERWELL	*20	20	50	~	21	27	~	18	04	~

The Standard 4 No. 76071 appeared on 27 April '60 and sister No. 76097 on 27 January '61. The former produced a fine climb (Run No.3) for an engine of its size taking only 18m 20s overall, passing Uddingston at 55 mph and falling gradually to 44½ mph at Orbiston Viaduct. This required a power output of about 1,000 edbhp for short periods. 76097 appears not to have suffered any check but passed Uddingston at only 38½ mph and then climbed steadily at 37 mph taking 26m 32s overall.

Run 4 shows another example of a fine climb from 42217 which accelerated past Uddingston at 50 mph after a check to reach a maximum of 54 at MP92½ falling only to 52 at Orbiston Viaduct, one of the best sustained climbs to Motherwell.

Run 5 shows the sole run by a BR Standard Class 3 which luckily had a near clear road. A slight cheque at Uddingston meant MP93½ was passed at 44½ mph and at Orbiston Viaduct speed had fallen to 33½. This required an initial output of about 700 edbhp, but power was falling off to nearer 600 at MP91. However it was a good showing for a Class 3.

Run 6 shows a rare unchecked run by 42239, passing Uddingston at 60 mph and falling to a minimum of 44 before shutting off. The overall time was an excellent 18m 4s demonstrating that the 20 minute schedule could be kept comfortably with no checks, but the time from passing Uddingston to Motherwell was 5m 54s, almost a minute longer than allowed. Even

on the fastest of all the timed runs, 17m 59s achieved by 42216 on 21st July '59, the five minute allowance was exceeded by two seconds. Whether the weary commuters congratulated the crew at Motherwell is not recorded.

Table 5												
Run No.			7				8			9		
Date:			1.6.60				3.6.60			6.3.61		
Locomotive:			42177				42177			42239		
Load:			7 coaches/ 203 tons tare/ 235 tons gross									
M	Ch	LOCATION	Sch	Mn	Sc	Spds	Mn	Sc	Spds	Mn	Sc	Spds
102	27	CENTRAL	0	0	00	~	0	00	~	0	00	~
101	29	EGLINTON ST	3	2	36	38/ #	3	14	34½	3	31	34
100	20	Polmadie		4	58	32	5	05	40	5	19	42
99	14	RUTHERGLEN		6	38	44	6	27	53	6	44	47½
98	31	Rutherglen Jn	7	7	38	51	7	19	59	7	41	52
97	60	MP		8	22	49½	7	57	56½	8	24	51
97	22	CAMBUSLANG		8	53	50½	8	28	56	8	57	50
96	40	MP		9	49	52	9	19	53	9	54	52
95	56	NEWTON	11	10	51	Pws 40	10	20	Pws 32½	10	52	48
94	60	MP		12	12	49	11	55	44	12	03	54
93	67	UDDINGSTON	15	13	12	56	13	00	54	12	57	61
93	40	MP		13	31	57	13	19	56	13	19	59
93	20	"		13	47	58	13	36	53	13	35	55½
93	00	"		14	03	57	13	53	55½	13	51	57
92	60	(Fallside)		14	19	54½	14	10	52	14	08	54
92	40	MP		14	35	56	14	26	54½	14	23	56½
92	20	"		14	52	55½	14	43	53	14	40	55
92	00	"		15	08	53	15	01	51½	14	57	53
91	60	(Douglas Park)		15	25	53	15	18	51½	15	14	53
91	40	MP		15	42	53	15	35	53	15	32	51
91	20	"		15	59	53	15	54	52½	15	50	51½
91	00	"		16	17	52½	16	12	48½	16	09	47½
90	60	Orbiston Viad S		16	35	50	16	31	48½	16	28	47½
90	40	MP		16	52	51	~	~	sigs	~	~	46
90	20	"		17	13	45/sigs	17	07	49	17	08	47½
89	35	MOTHERWELL	20	18	34	~	18	27	~	18	39	~
				#	Sigs stop							

Runs 7 and 8 were timed on consecutive occasions and on the first, 42177 produced the equal fastest time of 5m 22s from Uddingston to Motherwell for the winter '59/'60 period (42216 matched it on 25 April '60). Uphill acceleration after Uddingston produced a maximum of 58 mph at MP93¼ stopping at Motherwell in 18m 34s. Two days later the initial delays were less and the engine consequently was not worked as hard, nevertheless, the maximum after Uddingston was 56 mph and the time to stop at Motherwell was 18m 27s.

No. 42217 had a clear road on Run 9 and, with power about 1,000 edbhp after Uddingston, reached Motherwell in 18m 39s, about 1½ minutes within the schedule.

The 5.43 went over to diesel operation after March '61, but in 1962 there was a temporary re-arrangement of the Lanark services and the 7.58am Carstairs to Glasgow reverted to steam from 30th May to 29th June. Colin managed to time 16 runs from Motherwell into Central and three of these, shown in Table 6, with 42239, demonstrate that the Fairburn tanks, like their predecessors, were capable of running up to 75 mph. The load was seven suburban coaches.

Table 6												
Run			10				11			12		
Date:			5.6.62				7.6.62			12.6.62		
Train:			7.58am Carstairs - Glasgow									
Locomotive:			42239									
Load:			7 coaches/203 tons tare/235 tons gross									
M	Ch	LOCATION	Sch	Mn	Sc	Spds	Mn	Sc	Spds	Mn	Sc	Spds
89	35	MOTHERWELL	0	0	00	~	0	00	~	0	00	~
91	00	MP		2	37	59	2	41	54½	2	43	58/62
91	40	"		3	07	60/59	3	11	60	3	12	61
92	40	"		4	08	62	4	16	Sigs 49	4	07	65½/68
93	64	UDDINGSTON	6½	5	56	~	7	19	~	6	03	~
95	00	MP		2	17	44	2	33	36	2	22	41
95	56	NEWTON	4	3	10	57	3	34	50	3	19	53
96	40	MP		4	01	62	4	33	~	4	12	~
97	22	CAMBUSLANG		4	44	68	5	15	65	4	56	67
97	60	MP		5	09	72	5	41	71/75	5	20	72
98	28	Rutherglen Jn	8	5	38	75/76½	6	11	73½	5	49	78
99	15	RUTHERGLEN		6	29	Sigs 54	6	52	67	6	28	71
100	20	Polmadie		8	00	38/42	8	16	53	7	31	60/ #
101	29	EGLINTON ST	12	9	37	36	10	37	30	12	16	20
102	27	CENTRAL	15	12	25	~	13	30	~	15	04	~
										#		Sigs stop

Between Motherwell and the Uddingston stop speed was usually limited to about 60 mph, but was allowed to reach 68 on Run 12. However, improbable as it may seem, at least 75 was reached on all three runs between Cambuslang and Rutherglen. There had been a 50 mph PSR on the down line before Cambuslang Goods box (west of the station), but this was lifted around the time of dieselisation and full advantage was taken on the three runs shown. Indeed 78 mph was achieved on Run 9 at Rutherglen Junction. Unfortunately the driver was rewarded by the signalman with a dead stand before getting into Central.

Remarkably little ⁽⁴⁾ is written about Fairburn's development of Stanier's 2-6-4Ts. It seems that they have suffered from being the sole engine he built before his unfortunate early demise in 1945 and is a subject no-one has yet devoted a volume to. However as Colin Graham's logs demonstrate they were extremely useful engines, capable of producing about 1,200 edbhp, albeit for short periods, and running at 75mph.

Notes:-

- 1 The set was formed of two brake seconds, three seconds and two composites.
- 2 The 1947 Railway Magazine (and Ian Allan reprint) gradient profiles show a short level section at Motherwell Colliery and not the 1 in 2727 shown on the LMS and Network Rail profiles, possibly for reasons of convenience. 1 in 2727, after all, is not a significant gradient.
- 3 'BR Steam loco sheds & allocations' by R. Griffiths gives 42217 re-allocated to Chester from Carstairs in February '60, but the engine was still working in Scotland after this date.
- 4 'Britain's fastest tanks' by J.F Clay in the Summer '86 edition of 'Wyvern'.

'Pony trucks to the fore' by A.J. Powell in July '58 Trains Illustrated.

'Under 10 CME's' Vol 2 by E.A. Langridge.

O.S. Nock's two logs in 'Scottish Railway's' of 42198 and 42199 on the Larbert – Edinburgh Princes Street service.

Steam's Rearguard Action—the Britannias

William Alcock.

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The world of faith and belief in service, loyalty and discipline, wrote Sir Solly Zuckermann was the very antithesis of the world in which science thrives. That was the world which had grown in the Victorian era, characterised by the virtues of hard work, self-reliance, duty and responsibility, and built on the material foundation of the industrial revolution powered by the steam engine. When however, together with the theory of evolution and the introduction of electricity, society began to move forward into new modes of thought and to let go those Victorian values, the steam engine began to lose its assured place. As the twentieth century advanced the writing was appearing increasingly on the wall. World War II extended its lease of life, but when that was over the old order was yielding to the new.

Viewed in this broad historic retrospect the immediate post-war years, and the upheaval of the nationalisation of the railways were a peculiarly difficult period in which to make important policy decisions. It was not a simple case of technical choices alone, for there were also major changes in the mood and mind of society which bore heavily on operating steam; not far round the corner too there were fresh problems soon to be thrown up of jobs for women and a growing antipathy to atmospheric pollution. On technical considerations alone there was certainly a case to be made for steam for the foreseeable future; but the impending advent of the transistor and digital computers would be passing the advantage more and more to diesel and electric traction. However the team in charge, led by R.A Riddles and E.S Cox, probably got it right by initially opting for steam as long as it had a place to fulfil, and setting out a programme for twelve standard steam types. It was judged that the best policy was to go for high availability and ease of maintenance, instead of thermal efficiency. In pursuit of this policy the guiding principles were the maximisation of steaming capacity, simplicity, and accessibility for servicing and maintenance. A prominent feature of this design policy was the provision of only two cylinders for the Britannia pacifics, while 6 foot 2 inch driving wheels bespoke the search for maximum operational utility. It was also decided to fit roller bearings selectively, together with self-cleaning smoke-boxes, rocking grates, and self-cleaning ashpans. In addition a very considerable programme of detailed research was set in hand to improve the draughting and steaming of boilers, and to search out the maximum performance of which a steam engine of given dimensions was capable. This was really the first time that "steam locomotive science" had been systematically tackled in Britain, and a quantitative foundation for future design firmly laid.

The Britannias were the first standard locomotives to be constructed, their stark aesthetic appearance vividly reflecting the above design policy. The choice of only two cylinders, for a Pacific be it noted, was a radical feature, but the selection of 6 foot 2 inch wheels as standard for express duties was formal recognition of what had already been demonstrated by the Bulleid Pacifics and the Gresley V2 2-6-2's. The protrusion of the regulator rod and other miscellanea externally added to the gaunt appearance, and gave the engines a utilitarian look quite in keeping with the austere times. In short the Britannias were intended to be, and in practice were, no-nonsense machines.

I first met Britannia, then unnamed, at Willesden Junction on a cold January Sunday in 1951, when it made its first arrival in London on a parcels train; it was brought up from Crewe by Chief Inspector Drury, whose acquaintance I had made during the 1948 locomotive exchanges in Devon. It was named on 30 January 1951 by the then Minister of Transport, Alfred Barnes at Marylebone station. There was a mixed reception to its utilitarian

appearance, and surprise at its single blast-pipe, although it became clear later that this aspect had been thoroughly researched. Someone with vision had ordained that the first fifteen engines were to go to the Great Eastern Section of the Eastern Region ; this was inspirational, for this was one of the few areas where the locomotive was welcome and where indeed Pacifics had never been before. It was not long before Cecil.J .Allen was extolling their virtues on his old stamping ground. He wrote that on his very first trip behind a Britannia out of Liverpool Street on one of the newly accelerated Norwich 2 hour 10 minute expresses he had the fastest start out of London by this route that he had ever timed or heard of. By Romford , he wrote, No:70001, Lord Hurcomb was up to 64mph and, after reaching 65 at the foot of Brentwood Bank, the august gentleman swarmed up this stiff ramp at the almost incredible minimum of 50m.p.h (Trains Illustrated Sept 1951). To experienced railway performance connoisseurs the arrival of the Britannias in East Anglia was analagous to the "bomb in the playground" caused by Dr. Karl Barth's new theology in religious circles. Performances between Liverpool Street and Norwich rose to a new and altogether higher order, and this was becoming well established when, suddenly, there was a major set-back. On 21 October No: 70004 William Shakespeare, the engine that had been so resplendently exhibited in the Festival of Britain on the South Bank narrowly missed disaster at Headcorn on the up Golden Arrow when there was serious slippage between the driving wheels and their axles. In fact there had been earlier rumblings of this problem during the summer-- for example 70004 Iron Duke had had a less serious similar episode in July. In October however, the nettle had to be firmly grasped, and all the Britannias were withdrawn and a detailed investigation put in hand.

It might seem strange that at so late a stage in steam locomotive history such a fundamental thing should happen: it turned out that a few of the more recent London Midland Class 5 4-6-0's which had been fitted with roller bearings had also had the trouble, and this significant design change around axles and bearings proved to be a principal contributory factor. Detailed modifications successfully rectified the problem apart from one or two slight recurrences, and there were no more serious incidents of this type. However, it was my bad luck that when at last I got an opportunity to sample Britannia performance in November 1951 the contretemps had not reached my ears and to my surprise I discovered when I arrived at Liverpool Street that there was a B1 at the head of the 0930 to Norwich!. Moreover, it never rains but it pours— that morning there was a derailment at Chelmsford, with the result that we took 98 minutes to Ipswich rather than the 78 booked and no less than 110 on my return. Certainly the value of the Britannias was highlighted--and the remarks of the enginemen were unprintable! I never got to Norwich at all!! Not until May 1952 did I at last get my first Britannia run: Derby Day was a day's holiday at the Royal Naval College, Greenwich, and I made full use of this by taking a day return trip to Norwich, going down on the 0930, and returning on the 1445. It turned out that I had the same engine, No:70005 John Milton both ways, driven by Driver Tuttle of Stratford and his cheerful fireman. Our loads were 311/325 tons to Norwich, and 231/240 on the return. Going down I got the hoped for minimum of 50 at the summit of Brentwood bank although final signal delays made us 4 late into Ipswich.. On the continuation to Norwich we made an excellent start, but then ran into the signals of the preceding 0830, B1 hauled, which was evidently having trouble. However, although we turned up 10 minutes late in Norwich, I had seen enough of Britannia performance to be well satisfied.

After a very pleasant couple of hours in the City of Norwich, I found myself enjoying the hospitality of Driver Tuttle and his Fireman in the cab of John Milton, now standing at the head of the the 1445. This proved to be a most pleasant prelude to a punctual return to Liverpool Street by this enthusiastic crew, who were so evidently proud of their engines. Seven years later I was able to repeat this return trip, this time on the footplate— of which more anon.

On the Western Region I had two Britannia experiences, both out of Paddington, one to Plymouth and one to South Wales. The first was on the fast 1530 to Plymouth, which with the 1730 had a 4 ½ hour timing with stops at Taunton and Exeter. It also had reductions in load with the Weymouth slip at Westbury, and the detachment of the Torquay portion at Exeter. The Britannia was No:70018, Flying Dutchman and the load out of Paddington 354 tons tare/370 gross, reduced at Heywood Road Junction (Westbury) to 326/335, and at Exeter to a featherweight 193/210. Judging by contemporary levels of Britannia performance out of Liverpool Street Flying Dutchman should have been able to make this timing, especially with the trifling load after Exeter. I am sorry to say that time was lost on all stages, even on the 75 minute timing from Exeter to Plymouth, over which incredibly a further minute was dropped. There were no really serious delays; it was all very inexplicable. We arrived in North Road 14 minutes late.

That Western Region crews could handle Britannias better than this was demonstrated effectively to me when, unusually, I found myself on the 1555 from Paddington to Cardiff, incidentally experiencing for the first time the animated interior of a South Wales train! The engine was No. 70028 Royal Star of Canton shed, and the load a very crowded 385 tons tare, fully 410 gross. The crew of Royal Star did much better than the crew of Flying Dutchman passing Reading in 5 minutes less -- and this despite a dead stand for signals as early in the run as Acton! Speed was also well maintained in the higher sixties along the Thames Valley to Didcot which was passed at 73. Then however we began to sight distances which brought us down to the fifties, first at Wantage Road, then again at Shrivenham, and finally twice in succession before Little Somerford and Hullavington. In this way we eventually took 110m33s to Badminton-- but as the schedule was a generous 109 minutes we had only lost a minute; had we not made that excellent start we should assuredly have been late here. Thereafter there were no fireworks (one thinks of the pre-war occasion when the driver of a Castle threaded the Severn Tunnel at a clear 90 m.p.h!-RM October 1935); but we emerged on the Welsh shore on this brilliant August evening of 1953 still on time, and after the Newport stop arrived in Cardiff 5 minutes early. Evidently the crew of this particular Britannia had no problem.

During the later 1950's I did not find myself behind Britannias much, perhaps because most of my travelling was Anglo-Scottish, where I did not encounter them. However contemporary published runs continued to give evidence of their considerable abilities, and two such runs which greatly impressed me were on the West Coast main line. The first, timed by W.Knight, was on the down Comet in 1955 behind No: 70031 Byron, with a load of 11 coaches of 400 tons gross.(RM,November,1955). What is really impressive about this run is that with no out-of-course delays to that point, Rugby was cleared in the then really excellent time of 76m 14s: in my experience, the Duchesses at the head of the Royal and Midday Scots with their 80 minute timing to the Rugby stop had their work cut out to achieve this, and in my own experience never did! Admittedly the loads were usually heavier- but not always! On Byron's run, the 145.9 miles to Stoke-on-Trent were completed, inclusive of a final signal stop, in a meritorious 142m 50s. Schedule was 146 minutes. Another run of great merit at this period was timed from the footplate by the veteran Ronald Nelson, on the up Irish Mail. This time the load was a hefty 15 coach train of 481 tons tare and fully 500 gross: the Britannia concerned was 70045 Lord Rowallan, and the run was published in Nelson's book "Locomotive Performance", in 1979. The crew were Driver Bill Williams and Fireman M. Kenley of Holyhead, who evidently put all their experience and strength into it, the engine responding nobly. Despite all out of course delays they left both Crewe and Rugby on time, and then ran into a severe signal check to 10 mph approaching Roade which destroyed their momentum for the lengthy climb to Tring. However, they got over the top at 52%, and with a maximum of 76 at Wembley passed milepost 1 in 84m 18s; here, as so often, they were brought down to a crawl by signals, but even then they stopped in Euston in 89m17s, a bare 1¼ minutes over their working time- but actually on time by the public timetable! This was a first class exposition of Britannia stamina.

My own final experience with the Britannias came in April 1958 when I was given a footplate pass by the kindness of the then Motive Power Superintendent, Edwin Trask, who, incidentally lived to the ripe old age of 97. By this date the schedule of the fastest trains between Liverpool Street and Norwich had come down to the even two hours divided into 73 minutes for the 68.7 miles to the Ipswich stop, and 44 minutes for the 46.3 miles on to Norwich. As Cecil Allen kept on reminding people, these schedules over the undulating gradient profile of the Great Eastern route were equally meritorious to anything over the much flatter main-line between Paddington and Bristol with, perhaps, the exception of The Bristolian. There is no doubt that my footplate ride down to Norwich on the footplate of 70012 John of Gaunt was one of the most determined runs I ever timed. This was perhaps small wonder with a locomotive team headed up by Richard Hardy at Stratford, and backed up by Norman Harvey at Norwich.

On arrival at Liverpool Street in mid-afternoon to catch the 1530 Broadsman, I was met at the barrier by Inspector Theobald who lost no time in informing me that I had not chosen the best day for my trip! There were no less than four out-of-course slacks, three of which were before Ipswich and the fourth over a bridge at Haughley. The inference was that we should be lucky to keep time. But it soon transpired that the crew, Driver Smith and Fireman Reynolds of Stratford, had quite different ideas! What is more, our locomotive seemed able to produce steam at whatever rate was demanded- and with full regulator for most of the course and cut-off never less than 20% the demand was pretty terrific! Some boiler! We had 9 coaches, 310/330 tons. The moment we had the Right Away we were OFF-just like the Boat Race!

By Stratford on full regulator and 20% we were in full cry and already half a minute ahead. Indeed we had crossed the 60 line when steam had to be shut off between Ilford and Seven Kings for the first slack. Recovering rapidly from this on full regulator and 25% "John of Gaunt attained a full 65 mph at which we struck the foot of Brentwood Bank. Up through Brentwood station we roared at a full 55 and went over the top at just over 50. At this point both boiler pressure and steam chest pressure (there did not seem to be any drop between the two) had fallen from 240 lbs/sq.inch at the bottom of the bank to just over 200 at the top, but this made little difference to our progress, nor it seemed to the crew who certainly had the bit between their teeth. As we descended through Ingatestone speed was still rising, and Inspector Theobald shouted to ask me what we were doing! At that moment we had just crossed the 80 line and were beginning to bear down on Chelmsford, with its curve and slack. Theobald muttered in a loud stage whisper that we would all get locked up- but by that time Smith was braking carefully, and we went steadily through the station in 33m 27s.

Two miles later we encountered the second slack right down to 20m.p.h at New Hall, but full regulator and 20% had us back up to 72 past Hatfield Peverel, 76 through Witham, and up to 80 before having to shut off for the third slack before Kelvedon. For recovery up the short rise at 1 in157 to Stanway Smith used 30% which, once over this small summit, carried us up to 0 maximum of 76 before shutting the regulator for the slack to 40 round the bend at Colchester.

Here things were looking a bit tight as the last slack was still telling, for we were at last one minute late. But a vigorous finish lifting us to 69 up the rising grades to Ardleigh, and a final 76 down to the River Stour at Manningtree saw us into Ipswich in 71 m 58s, a minute early. From the tender water gauge it appeared that we had used 2100 gallons since Liverpool Street roughly 30 miles per gallon. Certainly, the pace had been hot throughout.

Resuming our journey on time at 1646, we accelerated out past East Suffolk Junction and then had to brake for our fourth and last out-of-course slack -- the severe 5 mph slowing over the Gipping river bridge near Bramford. This rather spoiled our ascent of the rising

grades to Stowmarket with the final steepening beyond to 1 in 131 approaching Haughley. Nevertheless we had recovered to no less than 71 through Stowmarket. and topped Haughley at 65, to which point we had lost two minutes. It is possible that although Smith clearly had his sights on a punctual arrival at Norwich, he felt he had better hold in a little following Theobald's reactions before Chelmsford. Even so we did the next 26.8 miles to Swainsthorpe in 20 minutes 12 seconds with peak speeds of 85 at Diss and 88 at Flordon! That Smith however was right to press on as hard as he could was well illustrated by the result. Even at this hectic pace across the East Anglian countryside we only got into Norwich with ONE SECOND to spare!! In my view Smith would have been right to hit up over 90 at Flordon, which I have not the slightest doubt he could have achieved easily! However we had arrived in Norwich Thorpe on time to the second, four extra slacks notwithstanding, and I felt I had witnessed some of the best driving and firing I had ever seen. I had also witnessed the spirit which stirs the blood.

It was very pleasant having arrived in Norwich for my brief fifteen minute visit, to find that the shedmaster, Norman Harvey had taken the trouble to come out and meet me. It was a pleasure, nay, an inspiration, to meet this veteran experienced locomotive man. What a pleasant gentleman he was full of pride in his men and his engines; he had, moreover turned out 70013, Oliver Cromwell, gleaming at every point, to take me home. Like me Norman lamented the demise of steam, but took comfort in the thought that, like Charles II, it would take an unconscionably long time dying!! Indeed, on that day, it still had ten years to go - and of course Oliver Cromwell is with us yet.

For the return trip Driver Pear and Fireman Edwards were in charge, Inspector Theobald of course coming too. The slower 2 hour 10 minutes of the 5.45p.m guaranteed that the return trip would be more sedate, which, I suspect, was more to the liking of Inspector Theobald! In this direction the timing to Ipswich was 51 minutes, 7 minutes slower than on the down journey.

This of course made things much easier, but Pear took care to get through Bramford in 43m58s for the 43.8 miles, thus pre-empting the delay due to the bridge repair, and getting us into Ipswich 2 minutes ahead of time. From here to Liverpool Street, as ever on inward journeys to London in the rush hour, we had to pick our way forward between double yellows, especially after Chelmsford. There was a brief final flourish when Pear let go down Brentwood bank to touch 79m.p.h! - but there was still a slack on the up road approaching Ilford, and we did well to pull to a halt in Liverpool Street just on time by the station clock. Actually I made the overall time 78m 19s which was one and a quarter minutes late-- but no matter. The return trip had been a well conducted operation.

It is hard now to realize that even this later trip was more than fifty years ago- why is it that when I write this article, it only happened yesterday!! But in the long perspective of the many years, I can say that the Britannias were (to use a modern word) vibrant machines. In the hands of men with real enthusiasm and spirit, determined to run to time whatever the odds, they were first class steeds with wonderful boilers and a sturdy and a free-running motion. I personally found no fault with their riding. They were a credit to those who conceived them. If, as might have happened, the changeover to diesel and electric power had been a little more measured and a little more orderly, they and their kind might have given useful service for considerably longer than they did. In the Britannias, and other standard classes, the age of steam had made one last effort to perpetuate itself before yielding to the new age. It was a worthy and gallant rearguard action.

Belgium - Autumn 2013 - More Travails

David Lloyd Roberts

I had 10 days holiday with my wife Margaret in Belgium in October 2013. We could not book our holiday early because Margaret had been inveigled to cox a crew of oar-persons across the English Channel. Until this event was successfully completed we were unable to finalise anything; there needed to be a window of opportunity of calm weather to take a small rowing boat over the channel.

We ended up in a commercial hotel in Liege. This was right opposite and 50 metres from the main station in Liege, Liege Guillemins. The hotel was good and not overpriced. The breakfasts were a bit boring and it was better value in the station buffet.

From the railway point of view, of course, I was very nicely positioned. Normally we would have chosen a country hotel in a pretty part of the Ardennes. The Ardennes, however, are on the doorstep of Liege. As I mentioned in my 2012 article, being of a certain age, I can travel anywhere in Belgium for a day return of €6. Margaret has to pay more, so the longer journeys are done at weekends when it is half price for her.

On the Saturday we again turned our attention to a trip to the coast. Daylight was an issue in October - the last safe daylight train would have been the 15:42 from Oostende. This, however, was not to be on this Saturday.

Diversions were in place, this time between Gent and Brugge. The diversionary route was via Deinze and Lichtervelde. Leaving the Brussels-Ostend main line, the train headed south on the line to Kortrijk. This is dead straight and level, and has had, for a long time, a line speed of 160 km/h. We took this route as far as Deinze, and then turned right over a presumed 60 km/h turnout on to the line to De Panne. Tim Calow did an article on this line in memory of Martin Tasker in Milepost some years ago. It had, since the days of the 62xx diesels, a line speed of 120 km/h. At Lichtervelde, 47 km from Gent, the line joins the route from Kortrijk to Brugge. The diversion is somewhat in the shape of a letter 'U'. Line speed over the junction was 30 km/h. To Brugge from Lichtervelde is 22 km with a line speed again of 120 km/h.

In Belgium line speed is shown by a white on green inverted triangle with a figure, in this case 12, representing 120 km/h. We then joined the main line for the remaining 23 km to Ostend. Gradients throughout must be negligible, as the countryside is entirely flat and somewhat boring.

The Runs

IC A is the most important internal service in Belgium. Before the high speed line was built from Liege to Aachen IC A ran every two hours to Cologne, and on the opposite hour to Eupen. All trains now run to Eupen. Eupen is in a small area of German-speaking Belgium. We caught the 0715 Eupen which comprised No. 1802, a 5,000 kw loco. The load was the usual 545 tons tare rising to 590 tons gross from Brussels. We were on time from Liege. We did well over the high speed line from Liege to Leuven, speed peaking at 202 km/h. There is a slow approach to Leuven, where the current changes from 25,000 volts AC to 3,000 volts DC. We kept time on to Brussels and did not suffer any delays through the tunnels. (Run 1).

We continued over the 1933 bypass line between Brussels and Ghent. The old route ran via Denderleeuw. We diverted that way in 2012. This year we followed the normal route - the likely reason for the earlier diversion became clear. The bypass line is being quadrupled

between Brussels and about KP 18, where a spur to the old line goes off, to come back at KP 24.

The progress along this line was predictable, but line speed has been reduced to 120 km/h over the section being quadrupled. We arrived at Gent to enter a platform giving access to the Kortrijk line, so the entry to the station was accordingly slower.

Upon leaving Gent, and onto the Kortrijk line we accelerated to 158 km/h before slowing to take the line to Lichtervelde, the turnout being taken at 53 km/h. We then proceeded at just below line speed to the junction at Lichtervelde. We took the junction to the Brugge line at 29 km/h and accelerated to 109 km/h before a booked stop at Turhout. It was not booked going back. Similar running persisted to Brugge - we clearly arrived there early as a 7½ minute stop ensued. A normal high speed run took us to Oostende without getting near to the line limit of 160 km/h. Time was kept.

Ours was clearly the only hourly service between Oostende and Brugge. I had intended to come back on the 1542 which was now retimed to 1513. The Oostende-Antwerp service presumably started from Gent, and the Oostende - Kortrijk from Bruxelles.

After a good fish lunch in Oostende we repaired to the station via some tantalising kiosks selling fresh fish and temptingly fish soup in plastic cups.

We boarded the train in good time and I got a corner-facing seat on the offside rail. Kilometre posts are on both sides of the line in Belgium.

The train did not leave and the screens went blank. There was an announcement, but only in Flemish. I smelt the usual rat. My nose is quite sensitive on these occasions.

We were told to detrain, and then retrain. The lady opposite spoke good English, and said that there was an incident between Oostende and Brugge. No estimate was given as to the departure time. Eventually the 1513 became 1613 and we left after a very few further announcements at 1633. The train was, of course, very crowded, as we had a double load of passengers. (Run 2).

The trouble was that a white van had crashed on a level crossing, reared up and damaged catenary, and this had to be inspected. It will be seen that another 25 minutes were lost as we stopped and cautiously passed the scene of the trouble.

The train comprised No. 1836 pushing the once-usual 12 car consist - the loco usually pushed ex-Oostende, and pulls ex-Eupen on this service.

The diversion was yet to come. We left Brugge 108 minutes late or 48 minutes late, take your pick. We were lucky in the circumstances to get a clear road around the diversion. There was a good maximum before Gent. The run over the bypass line shows clearly the 160 km/h sections. There was a restricted approach to Bruxelles and we did get signal checks this time in the tunnels.

Beyond Bruxelles I had to use a stopwatch as the GPS wasn't working. Unsurprisingly, daylight failed at about KP 67. Clearly this would not have happened if the train had been anything like on time. It can be seen that we reached the full 200 km/h at KP 61. I have also shown adjacent Run 3 which is the run on our initial arrival into Liege on the 1142 Ostend to Eupen, to show a full comparison.

I hope readers will enjoy this article as an introduction into Belgian railways. They are interesting and accessible with a good variety of traction. Some lines are EMU with loco hauled trains in the peaks. These trains, of course, do not run at weekends.

Table 1				miles	km	Timing Point	Sch.	m	s	km/h			
Run	1			0.00	3	82	Bruxelles N	0	00.0				
Date	Sat 5-10-13			1.09	2	73	Congres	1	47.0				
Train	0715 Eupen-Oostende			1.99	1	83	Bruxelles Cen	3	21.0				
Loco	1802			0.00	1	83	Bruxelles Cen	0	00.0				
Load formation	12,552/590			1.13	0	70	Kapelererk	1	08.0				
Recorder	D Lloyd Roberts			1.83	0	00	Bruxelles Midi	3	55.0				
Position/ GPS	7/13 Y			0.00	0	00	Bruxelles Midi	0	00.0				
miles	km	Timing Point	Sch.	m	s	km/h							
							2.00	2	00	pk 2	2	08.0	76
0.00	99	70	LIEGE	0	00.0	T	4.00	4	00	pk 4	3	42.0	77
0.70	99	00	kp 99	2	20.0	43	5.00	5	00	pk 5	4	29.0	76
2.70	97	00	pk 97	4	25.0	79	8.00	8	00	pk 8	6	11.0	120
3.70	96	00	pk 96	5	06.0	90/86	10.00	10	00	pk 10	7	12.0	118/119
4.70	95	00	pk 95	5	48.0	87/97	12.00	12	00	pk 12	8	13.0	118
5.20	94	50	Ans	6	29.0		14.00	14	00	pk 14	9	14.0	118
7.03	94	00	pk 94	7	24.0		15.00	15	00	pk 15	9	45.0	117
9.03	92	00	pk 92	8	20.0	127	16.00	16	00	pk 16	10	16.0	117
12.03	89	00	pk 89	9	35.0	160	18.00	18	00	pk 18	11	17.0	117
15.63	85	40	ss	10	46.0	193	20.00	20	00	pk 20	12	12.0	139
16.03	85	00	pk 85	10	54.0	194	22.00	22	00	pk 22	12	59.0	154
19.03	82	00	pk 82	11	49.0	196/193	24.00	24	00	pk 24	13	45.0	157
22.03	79	00	pk 79	12	44.0	194/197	27.00	27	00	pk 27	14	56.0	146/134
26.03	75	00	pk 75	13	58.0	192	30.00	30	00	pk 30	16	16.0	135/136
29.03	72	00	pk 72	14	54.0	191	35.00	35	00	pk 35	18	25.0	135/133
31.03	70	00	pk 70	15	31.0	193/194	39.00	39	00	pk 39	20	13.0	135
34.03	67	00	pk 67	16	27.0	193/196	40.00	40	00	pk 40	20	39.0	136
38.03	63	00	pk 63	17	41.0	193	45.00	45	00	pk 45	22	46.0	149/158
38.72	62	31	ss	17	56.0	196/193	50.00	50	00	pk 50	25	48.0	38sigs
41.68	59	35	pk59	18	55.0	195	51.96	51	96	GENT	31.0	28	27.0
44.03	57	00	pk57	19	31.0	198	0.00			GENT	0	00.0	/119
46.03	55	00	pk 55	20	09.0	192/190/202	23.79	23	79	Aarsele	15	07.0	117
51.03	50	00	pk 50	21	42.0	195	30.09	30	09	Tielt	18	22.0	118/116
55.03	46	00	pk46	22	56.0	186	33.00	33	00	pk 33	20	05.0	120
56.03	45	00	pk45	23	15.0	178	36.00	36	00	pk 36	21	37.0	116
58.03	43	00	pk43	23	55.0	176	39.00	39	00	pk 39	23	10.0	118
61.03	40	00	pk40	24	55.0	180	42.00	42	00	pk 42	24	42.0	118/114
62.03	39	00	pk39	25	15.0	175	44.00	44	00	pk 44	25	44.0	118/119
69.03	32	00	pk32	28	59.0	62	47.33	47	33	Lichtervelde	27	25.0	53/29psr
72.30	28	73	Leuven	35.0	32	03.0	47.33	22	97				/109
0.00	28	73	Leuven	0.0	0	00.0	51.98	18	32	Torhout	32	10.0	
1.73	27	00	pk 27	2	16.0		51.98	18	32	Torhout	0	00.0	/122
2.73	26	00	kp 26	2	48.0	124	60.30	10	00	kp 10	5	05.0	118//119
4.59	24	14	Herent	3	29.0	155/161	65.30	5	00	kp 5	7	40.0	115
7.60	21	13	Veltem	4	37.0	158/163	67.30	3	00	kp 3	8	44.0	109
10.99	17	74	Erps	5	53.0	157/155	70.30	0	00	Brugge	12	56.0	
13.99	14	74	Kortenber	7	03.0	158/155	0.00	92	12	Brugge	0	00.0	
16.79	11	94	Nossegem	8	05.0	156/161	2.88	95	00	pk 95	2	33.0	115
19.39	9	34	Zaventern	8	57.0	160				Varsenare	4	34.0	153/155
21.42	7	31	Diegem	9	46.0	126/141	9.32	101	44	Jabbeke	5	11.0	151
23.53	5	20	Haren	10	33.0	116	13.88	106	00	pk 106	7	02.0	155
26.32	2	41	Schaerbeek	12	08.0		16.88	109	00	pk 109	8	16.0	138
26.73	2	00	pk 2	13	02.0	sigs	21.81	113	93	OOSTENDE	14.0	13	41.0
27.73	1	00	pk 1	14	49.0	60/65							
28.73	0	00	Bruxelles N	17.0	16	27.0							

Since writing this article, I spent time in Belgium in 2014. This was largely due to my wife and I having free Eurostar tickets as a result of an earlier debacle when returning from Germany in April 2014.

Table 2										
Run			2				3			
Date			Sat 5-10-13				M 30-Sep-13			
Train: Oostende-Eupen			1513				1142			
Loco			1836				1855			
Load formation			12,552/560				12,552/575			
Recorder			D Lloyd Roberts				D Lloyd Roberts			
Position/ GPS			7/13 Y to Bruxelles				3/13 Y			
miles	km	Timing Point	Sch.	m	s	km/h	Sch.	m	s	mph
0.00	113	93 OOSTENDE		0	00.0					
0.93	113	00 pk 113		2	45.0	72				
4.93	109	00 pk 109		4	51.0	125				
7.93	106	00 pk 106		6	05.0	159/ss 3m10s				
12.49	101	44 Jabbeke		13	40.0	/69				
		Varsenare		16	57.0					
16.93	97	00 pk 97		28	34.0	10/ss 1m48s				
18.93	95	00 pk 95		36	02.0	52				
21.81	92	12 Brugge	14.0	39	20.0					
0.00	0	00 Brugge		0	00.0	46L				
3.00	3	00 kp 3		4	00.0	108/122				
5.00	5	00 kp 5		4	59.0	120				
9.56	9	56 Zedelgem		7	16.0	119/121				
18.32	18	32 Torhout		11	25.0	101				
22.97	47	33 Lichtervelde		17	02.0	29psr				
27.30	43	00 pk 43		20	19.0	119/123				
28.30	42	00 pk 42		20	48.0	120/121				
31.30	39	00 pk 39		22	19.0	117				
34.30	36	00 pk 36		23	55.0	116/108/117				
37.30	33	00 pk 33		25	25.0	112/117				
40.21	30	09 Tielt		27	08.0	113/125				
46.51	23	79 Aarsele		30	20.0	117/118				
54.99	15	31 Deinze		35	08.0	78				
60.30	10	00 pk 10		38	10.0	146/155				
63.20	7	10 De Pinte		39	15.0	147				
65.30	5	00 pk 5		40	06.0	159				
70.30	0	00 GENT		44	41.0	35L				
0.00	51	96 GENT		0	00.0					
2.96	49	00 pk 49		3	38.0	112				
6.96	45	00 pk 45		5	19.0	158				
11.96	40	00 pk 40		7	21.0	138/141				
16.96	35	00 pk 35		9	36.0	136/141				
21.96	30	00 pk 30		11	46.0	140/141				
24.96	27	00 pk 27		13	07.0	138				
27.96	24	00 pk 24		14	14.0	159/160				
29.96	22	00 pk 22		14	59.0	158/160				
31.96	20	00 pk 20		15	45.0	159				
33.96	18	00 pk 18		16	40.0	115				
35.96	16	00 pk 16		17	42.0	119				
36.96	15	00 pk 15		18	12.0	119/120				
41.96	10	00 pk 10		20	44.0	118				
43.96	8	00 pk 8		21	44.0	120				
45.96	6	00 pk 6		22	45.0	117				
51.96	0	00 Bruxelles Midi	31.0	29	59.0					
0.00	0	00 Bruxelles Midi		0	00.0			0	00.0	
0.70	0	70 Kapellekerk		3	28.0	/ss1m04		2	02.0	50
1.83	1	83 Bruxelles Cen		7	30.0		3.0	3	37.0	
0.00	1	83 Bruxelles Cen		0	00.0			0	00.0	
0.90	2	73 Congres		1	25.0			1	37.0	
1.99	3	82 Bruxelles N		3	25.0		4.0	3	30.0	
0.00	0	00 Bruxelles N		0	00.0			0	00.0	
2.41	2	41 Shaerbeek		2	36.0	68/48		3	38.0	56/31

miles	km	Timing Point	Sch.	m	s	km/h	Sch.	m	s	km/h
5.20	5	20	Haren	4	09.0	120	5	59.0		
7.31	7	31	Diegem	5	01.0	143	6	54.0	132	
9.34	9	34	Zaventern	5	47.0	160	7	42.0	160	
11.94	11	94	Nossgem	6	42.0	157/160	8	39.0	159/157	
14.74	14	74	Kortenberg	7	42.0	160	9	40.0	161/162	
17.74	17	74	Erps	8	57.0	158/159	10	55.0	158/161	
21.13	21	13	Veltem	10	12.0	159/157	12	08.0	158/151	
24.14	24	14	Herent	11	21.0	150/151	13	16.0	153	
26.00	26	00	kp 26	12	01.0	151				
27.00	27	00	pk 27	12	24.0	148	14	18.0	150	
28.73	28	73	Leuven	14	49.0		17.0	16	42.0	
0.00	28	73	Leuven	0	00.0		0	00.0		
3.27	32	00	pk32	2	32.0	73/69	2	29.0	69/53NS	
10.27	39	00	pk39	7	03.0	126				
11.27	40	00	pk40	7	28.0	161				
14.27	43	00	pk43	8	33.0	172	8	16.0	173	
16.27	45	00	pk45	9	10.0	195/198	8	55.0	188/203	
21.27	50	00	pk 50	10	42.0	196/202/188				
23.27	52	00	pk 52				11	04.0	195	
26.27	55	00	pk 55				11	59.0	199	
27.27	56	00	pk 56	12	34.0	196				
28.27	57	00	pk57	12	53.0	190	12	36.0	195/188	
32.27	61	00	pk 61	14	06.0	200	13	50.0	193/173NS	
34.27	63	00	pk 64	15	03.0	195				
38.27	67	00	pk 67	16	16.0	197	15	52.0	181	
41.27	70	00	pk 70				16	48.0	196	
42.27	71	00	pk 71				17	06.0	199	
46.27	75	00	pk 75				18	19.0	200	
50.27	79	00	pk 79				19	32.0		
53.27	82	00	pk 82				20	27.0	179/176NS	
56.67	85	40	ss	21	41.0		21	30.0	169	
60.27	89	00	pk 89				22	37.0	199	
63.27	92	00	pk 92 new				23	38.0	153	
64.60	92	00	pk 92 old				24	31.0	129	
67.10	94	50	Ans	25	50.0		25	27.0	127	
67.60	95	00	pk 95				26	26.0	65	
69.60	97	00	pk 97				28	17.0	69	
70.60	98	00	pk 98				29	17.0	62	
71.60	99	00	pk 99				30	12.0	65	
72.30	99	70	LIEGE	35.0	32	08.0	35.0	32	01.0	

In September/October 2014, IC A was differently worked. Some trains are still one loco and 12 single-deck carriages passed for 200km/h. One set was 11 vehicles. These are probably the trains to seek out.

Some single decks sets are powered at both ends by a Class 18 or 19. Some services, particularly in the rush hours, are formed of 10 double deck M6 stock marked and advertised for 200 km/h. These sets have a powered loco front and rear. They were rumoured to be temporarily restricted to 170km/h. Certainly, I timed one train in September 2014 that kept the schedule and did not exceed 170km/h.

Finally the Belgium timetables were completely recast at the December 2014 timetable change. Many services have been altered and slowed to improve reliability. Where have we heard that before?

Main Line Steam - Irish Style

Frank Price

Those who have been suffering withdrawal symptoms with the recent virtual ban on UK main line steam following the suspension of operations by West Coast Railways might like to take note of a very successful weekend of steam in Ireland. Organised by the Railway Preservation Society of Ireland, there is a long-established tradition of running an extended tour in early May. Having last sampled one of these in 1980 (the South Kerry railtour to Tralee – anyone remember that?) it was high time to do another. So it was that a bright and sunny 9 May saw a goodly contingent of mainland steam fans join the home team for the 'South Munster' railtour to the South West of Ireland at Dublin's Connolly station.

We departed on time behind GNR(I) 4-4-0 No. 85 'Merlin' and the RPSI rake of five Cravens coaches, just repainted in blue and white in Inchicore works. Together with a rather scruffy generator van, the well-filled train totalled around 200 tons. A slow run round the houses to Island Bridge junction saw us join the GS&WR main line just west of Heuston station and make good progress towards Cork with some very free running by the 4-4-0 - 69 mph at Templemore, 72 mph on the falling gradients past Thurles, 74 mph at Kilmallock, and 73 mph on the descent to Mallow. I was under the impression that steam was limited to 60 mph so asked the train manager about this and received the wonderful reply that, 'It depends who you ask.' Apparently it is 60 mph north of the border but rather more fluid in the south, as events were to prove. After passing through Mallow and descending the steep gradient (1 in 60 at its steepest) through the tunnel down into Cork we took the line round the back of the station and pressed on to Midleton for 85's first visit to this recently reopened (2008) stretch of the former Cork and Youghal line. Dublin and South Eastern Railway 2-6-0 No. 461 then took us back to Cork, coming to rest under the impressive overall roof of Kent station.

The following morning saw us visit the Cobh branch, with 85 leading and 461 bringing us back. We were held short of Kent station to allow for a clear run through Platform 5 and to attack the steep climb, 1 in 70 from the platform end into the tunnel. 461 made steady if slow progress up the hill, with a minimum speed of just over 10 mph. It was a similar story later on in the day on the climb from Killarney, culminating in three miles of 1 in 106, where in wet conditions speed was down to less than 10 mph at the top of the climb. A combination of the slow running, awaiting paths on the single track sections and stopping for a blow up made us two hours late back into Cork but no-one really seemed to mind.

For the return to Dublin the following morning 85 was again in charge and as was to be expected made a much more confident climb out of Cork, attaining 53 mph at MP 152 at the top of the climb. Through Mallow at 59 mph and after an enforced stop following activation of a hot box detector, we were 20 minutes late away from the water stop at Charleville.

There then followed a simply stunning piece of running to Thurles. Part of this is summarised in the table below. To run at 75 mph behind a 1932 4-4-0 in 2015 is quite remarkable, possibly even wizard (sorry). As the table shows, we were only just outside even time despite the first 15 miles of the route being against the collar. There were some very happy timers on the train. No. 85 showed that this effort was no flash in the pan by continuing after the Thurles stop to a signal stop short of Portlaoise in 35 mins 39 secs for the 35.0 miles with a maximum of 75 mph at MP 69. Subsequent running to Dublin was checked by service trains and we had quite a long wait to be crossed over the suburban services into the Enterprise platforms at Connolly.

For the final part of the tour we again had No. 85, this time on its former stamping ground of the Dublin - Belfast main line, and with the RPSI green rake of six Mk2s as the stock.

CHARLEVILLE-THURLES												
Train				09-40 Cork-Dublin special		miles	m	c	Actual		mph	
Date				11.5.15		24.19	105	00	MP105	24 31	62	
Loco				GNR(I) 85		25.19	104	00	MP104	25 29	65	
Load				6 180-200		26.19	103	00	MP103	26 22	68	
Position GPS				3/6 Y		27.19	102	00	MP102	27 14	71	
	miles	m	c		Actual	mph						
	0.00	129	16	CHARLEVILLE	0 00		28.19	101	00	MP101	28 06	70
	9.71	119	40	MP119.5	11 21	69	29.19	99	40	MP 99 ½	29 21	70
	10.19	119	00	MP119	11 47	69	30.19	99	00	MP 99	29 47	69
	11.19	118	00	MP118	12 39	66	31.19	98	00	MP 98	30 41	66
	11.95	117	20	MP117 ¼	13 18	70	32.19	97	00	MP 97	31 35	68
	12.47	116	60	MP116 ¾	13 44	73/74.8	33.19	96	00	MP 96	32 28	71
	13.47	115	60	MP115 ¾	14 32	72	34.19	95	00	MP 95	33 16	71
	14.47	114	60	MP114 ¾	15 22	72	35.19	94	00	MP 94	34 09	69
	15.19	114	00	MP114	16 00	72	36.19	93	00	MP 93	35 02	69
	16.19	113	00	MP113	16 51	68	37.19	92	00	MP 92	35 54	67
	17.19	112	00	MP112	17 44	68	38.19	91	00	MP 91	36 50	63
	18.19	111	00	MP111	18 36	70	39.19	90	00	MP 90	37 45	67
	19.19	110	00	MP110	19 29	63	40.19	89	00	MP 89	38 39	68 br
	20.19	109	00	MP109	20 30	59	41.19	88	00	MP 88	39 37	57
	21.19	108	00	MP108	21 30	60	42.19	87	00	MP 87	41 16	26
	22.19	107	00	MP107	22 29	61	42.72	86	39	THURLES	43 00	0

Departure was on time at 1908 and we ran to a stop just south of the bridge at Drogheda, where we had to wait for a southbound Enterprise working to pass over the now singled bridge over the river Boyne, before proceeding to Dundalk. The 10 miles between MPs 40 and 50 were covered at an average of 72 mph. After crossing the border arrival at Belfast was a few minutes early. So ended an extremely enjoyable tour. Over 500 miles of steam, some superb running with a possible fastest time entry and a continual supply of Guinness in the bar car. What more could one ask for?

A Recorder's Guide to the SNCF – the price of progress

Alan Varley

When scanning some old notebooks recently for inclusion in the RPS archives I was struck by just how bad main-line punctuality could be in Britain in the 1970s, particularly on the ECML and, even more so, the WCML. This situation was largely corrected by BR in the 1980s, and apart from hiccups caused by infrastructure problems the punctuality figures I have recorded in recent years on my (admittedly sporadic) visits to the UK have mostly been better than those I have noted in France. And readers may remember that a couple of years ago I wrote about the "Crisis on the Côte d'Azur", an article in which I tried to analyze the reasons for the appalling punctuality record of the Nice-Marseille regional services.

Juxtaposing these two observations – poor punctuality in the 1970s in Britain, poor punctuality today in south-eastern France – led me to look back through my French runs of the early 70s to check whether things have always been that bad down here. Memory suggested not, and of course my "Crisis" article was prompted by the impression that the situation had taken a decided turn for the worse. But memory can be unreliable, so I put it to the test of the actual figures. Table 1 summarizes my runs between Nice and Marseille and vice-versa over the six years 1969-1974 inclusive, and Table 2 shows the statistics for 2009-2014.

As well as punctuality I have noted some characteristics of the trains and their timings for

comparison between the two periods. One element not noted for the 1970s is the motive power: almost all the trains concerned were headed by 5,000 HP BBs of the 252XX series. In just 2 cases one of the smaller 255XX locos was in charge – once substituting *en route* following a failure.

Table 1 1969-1974

Punctuality		Overall schedule		Load	
RT	29	Under 145 mins	26	Under 8 coaches	1
½ to 4½ late	23	145 to 153	8	8-14	37
5 to 9½	8	154 to 160	22	Over 14	42
10 to 14½	5	Over 160	21		
15 and over	15				

My runs are perhaps not fully representative of the performance of the route during these years. In 1970-71 I was making quite regular overnight trips to the north-east of France, generally timing a night train from Nice to Marseille on the outward journey, and these make up the bulk of my up runs during this period. On the return journey I was not always so assiduous in timing in the very early morning! At the faster end of the performance scale I never timed the 1st-class-only “Mistral”, though I had a number of runs on the mid-day Nice-Paris train which had similar timings and load. Its down equivalent, though, was generally combined with a Pau-Nice train east of Marseille and ran to slower timings – another source of imbalance between the up and down workings I observed.

Table 2 2009-2014

Punctuality		Overall schedule		Load	
RT	50	Under 145 mins	10	Under 8 coaches	61
½ to 4½	56	145 to 153	103	8-14	13
5 to 9½	36	154 to 160	75	Over 14	0
10 to 14½	12	Over 160	3	MUE	1
15 and over	37			TGV	116

Before analyzing the punctuality figures it is worth looking at the differences in train formations and timings in the two periods. In the 1970s over half the trains I timed were formed of more than 14 coaches. This figure was slightly biased by the large number of overnight trains I used, but day trains too could top 800 tonnes, and the fastest services were normally 500-tonne 12-coach formations. Today there are still 800-tonne trains on the Riviera – but they are twin TGV rakes. The vast majority of loco-hauled trains comprise only 7 coaches: the regional express shuttles between Nice and Marseille are 7-coach push-pull trains, often truncated because of a vehicle failure, while the Nice-Bordeaux workings are formed of one, or more rarely two, 7-coach Corail sets. Hence the fact that in the last six years 61 of my 74 loco-and-coaches journeys have been with trains of 5, 6 or 7 coaches, while in the 1970s only 1 train out of 80 had less than 8 vehicles.

The other major change concerns overall timings. In the 1970s these spanned a much wider range. Running times took account of the greater variety in train weights and rolling-stock speed limits, recovery times were not yet standardized, and a number of trains, including some of the heaviest, made up to 8 intermediate stops. The 2009-2014 series has no train making more than 7 stops, and in the 2015 timetable there is still less variety: 4 or 5 stops for TGVs and the Bordeaux trains, 6 for the Nice-Marseille shuttles. So in the 1970s a number of trains had schedules in excess of 2h 40m for the Nice-Marseille journey – in fact 21 of the 77 trains for which I noted an actual or equivalent overall schedule, a figure again partly influenced by the large number of slow overnight trains I used. But at the other end of the scale 26 trains were timed in less than 2h 25 – another figure influenced by my choice, this time of interesting services to record.

Today timings are determined not so much by the characteristics of a particular train as by the fact that all expresses, whether TGVs or push-pull shuttles, have to fit into the pathing windows available at each end of the line between the local services around Nice and Marseille, which are far denser today than they were forty years ago. The result has been a

compression of the range of timings, which is understandable, but also a clear overall slowing, which is more difficult to justify. In Table 2 only 10 trains out of 191 had schedules under 2h 25m, and in fact these were all in 2009. Currently (2015) the fastest booked Nice-Marseille or vice-versa time is 2h 34m, though the Paris TGVs, which do not call at Marseille, have timings equivalent to about 2h 30 mins up, 2h 33 mins down. (The sub-145m timings in 2009 were all equivalent times for Paris TGVs). So up line timings vary between 2h 30 mins equivalent (with 4 intermediate stops) and 2h 40 (6 stops), while in the down direction the range is narrower, between 2h 33 (equivalent) and 2h 38.

Some objective factors partly explain today's slower timings. At the end of 2010 work began to install a third running line between Antibes and Cagnes in the eastern part of the line and between Marseille and Aubagne at the other end. This resulted in schedules being extended by about 4 minutes over each of the sections concerned. At the Nice end the work was completed early in 2014 but the extended running times remained, justified anew at the end of the year by installation of a diversion around work for a large underbridge on what may one day be the site of a new multi-modal interchange station just outside Nice, at St-Augustin. This involves a 30 km/h restriction, treated as a PSR. At the Marseille end too work is virtually complete and some (but not all) the extra time has been removed from the Toulon-Marseille schedules, but with no reduction in overall journey times. And in the summer of 2011 the viaduct over the Siagne river west of Cannes showed alarming signs of weakness. A 40 km/h TSR (briefly 10), was imposed, and this has since been transformed into a PSR as replacement of the bridge will not take place before 2019 (unless, presumably, it collapses in the meantime). This adds 2 minutes to running times.

It is not only when running that today's trains are slower – they need more time in stations too. TGVs have 3-4 minute station stops, so four stops can add up to 14 minutes, partly offset by the fact that differential speed limits represent an advantage of about two minutes for TGVs. So perhaps overall a TGV with 4 or 5 stops booked from Marseille to Nice in 2h 34 minutes is equivalent to a 2h 20m timing forty years ago – but in the 1974 timetable there were 3 down trains and 4 up booked in this time or better.

So today timings are slower, which should help time recovery, but the operating environment is more difficult on account of congestion at each end of the line. What then is the result in terms of punctuality? As the tables show, there is not a great deal of difference. True punctuality was slightly better in the 1970s, with 36% of trains RT and 65% under 5 late, against 26 and 55.5% for the recent period. But in terms of serious unpunctuality the figures appear very similar: 25% at 10 late and over in both cases. However when one looks at delays imported from outside the local area a different picture emerges. In the 1970s, of the 15 trains that were 15 late or over only 3 started their journeys in Nice or Marseille; the other 12 came from further afield and were already late in Marseille. In the 2000s it was still the down trains that were in the majority among the seriously late cases, but not to the same extent – 23 down trains (of which 5 were in fact origin Marseille) and 14 up trains were 15 late or over. So in recent years over 14% of trains starting from Nice were 15 late or over by Marseille, as against about 7% in the 1970s.

One important feature of the present situation is the coexistence of TGVs and loco-hauled trains. My split of about 60% TGV, 40% loco-and-coaches, broadly reflects the overall division. And clearly the loco-hauled services are less reliable. Of my 74 runs in this category, 44.5% were on time or less than 5 late (two-thirds of the 1970s figure), and 30% were ten late or over. Of the 17 trains (23%) that were 15 late or over, 6 were trains (from Bordeaux) already late in Marseille; in other words 11 trains (15% of the loco-hauled total) were 15 late or more because of locally-generated problems – a far higher figure than in the 1970s, and one that seems to reflect the increasing failure-rate of the formerly highly-reliable BB 222XX series, particularly in association with the regional Corail sets in push-pull configuration with driving trailers.

The samples are too small and too dissimilar to permit detailed conclusions, but a definite

trend emerges: despite slower schedules absolute punctuality was better forty years ago, and despite more sophisticated equipment severe delays, mostly due to technical incidents, are more frequent today. Only 75% of trains arriving within ten minutes of their booked time is not a good result - and 2 hours 34 minutes for a journey of 224 kilometres seems really very slow in 2015!

On the other side of France is another route that is slower today than some years ago, though for different reasons. This is the Paris-Bordeaux line, using the southern branch of the LGV-Atlantique and the classic infrastructure from Monts onwards. Substantial stretches of the latter had been passed for 200 and even 220 km/h running when the LGV opened in 1990, and the headline timing for non-stop trains to Bordeaux was 2h 58 minutes. A log of one of these trains appeared in *Milepost* 11¾ in January 1991. Quite soon, however, extra recovery time was inserted and the fastest schedules expanded to 3h 5m. In recent years the line has suffered from TGV-planning-blight: the classic infrastructure will inevitably be down-graded when the LGV is extended to Bordeaux, and in addition the quite numerous junctions between the new line and the existing metals have given rise to extensive engineering works and TSRs. So Paris-Bordeaux timings are 20 minutes longer than in 1990, and this situation will presumably last until the Tours-Bordeaux LGV opens in just over two years' time.

Frank Collins and I have both made journeys over this line this year, and Table 3 sums up our experiences, in comparison with my non-stop run made in 1990. The recent runs were both probably booked to leave Bordeaux via the Nantes line, with a 60 km/h connection to the Paris route at La Grave. Run 1 in fact used the normal routing but made a very slow exit despite its late start. The schedule presumably allows for a lot of engineering work that was in fact concentrated towards the far end of the run, and at first only very timid use was made of the high-speed sections – 170s before and after Libourne and after Coutras, 182 at Chalais and Montmoreau. There were 150 slacks at Libourne, Coutras (where the limit in 1990 was 220) and Montmoreau, and at Livernan tunnel we braked to 90 (130 PSR in 1990). After Angoulême the driver was a little more ambitious, with 188 at Luxé and 205 at Epanvilliers, followed by a definite TSR to 90 through Poitiers. The classic high-speed stretch that follows is now interrupted by a 150 slack at Châtellerault (formerly 180), and 160 at Port de Piles (200); we did 197/146*/203/155, and finally, after the summit at Ste-Maure we approached the full line limit with a maximum of 218. We then had to brake hard for a switch to the wrong line for the junction at Monts and the southern end of the LGV where extensive engineering work was under way, perhaps complicated by signals as we twice came down to 30 rather than the 40 TSR limit. After a final check out of Vouvray tunnel we had a clear road and made full use of it with steady 300 km/h cruising and an approach on the limits to Paris, but this effort came too late and we were still 3 late on arrival.

Frank Collins' train (run 2) also left Bordeaux late, and via the Nantes line, so despite a faster start it was 3 minutes behind mine at St-Sulpice – but accelerating well to post a 180 max on this stretch. At Libourne, however, it made an emergency stop, drew forward to the signal, restarted under caution, and continued to Angoulême without exceeding 160. Presumably the speeds thereafter represent what is currently possible on the line: in fact they were 206 before Luxé and 208 at Epanvilliers, separated by 142 at Salles, then 101 Poitiers, high 190s to 155 Châtellerault, 180 and 184 either side of another slack, perhaps a TSR, to 150 before Dangé, and then, after 157 at Port de Piles, a final 215. The southern end of the LGV was taken wrong line as on my run, but without the TSRs. Run 2 was then behind a Tours-Paris train stopping at Vendôme so suffered a couple of slight checks on the LGV and a brief signal stop approaching Paris.

These runs are in sharp contrast with run 3, and show that the Bordeaux line has already suffered a decline quite apart from the engineering work motivated by the building of the new LGV. Run 3 reached 193 before Libourne, 212 at Coutras, 206 before Luxé and 214 near

Table 3 Bordeaux-Paris Montparnasse

Run 1 0945 Hendaye-Paris, Su 25.01.15,TGV-A, sets 301/325, 24/888/940, AV 16/24 Fine & cold								
Run 2 1245 Hendaye-Paris, F 08.05.15, TGV-A sets 332/xxx, FGC 5/24								
Run 3 1602 Bordeaux-Paris, T 9.10.90, TGV-A set 324, 12/444/460, AV 10/12, fine.								
PK	Dist		m s	ave	m s	ave	m s	ave
583.84	00.00	Bordeaux St-J	Run 1	5.5 L	Run 2	7.5 L	Run 3	RT
579.95	03.89	Cenon	05 21				03 39	
574.62	09.22	Bassens	07 59	121.4			05 57½	138.5
568.38	15.46	La Grave	10 22	157.1	12 27 ½		08 17½	160.5
<u>561.59</u>	22.25	St-Sulpice	12 47	168.6	15 56	119.0	10 28½	187.1
547.09	36.85	Libourne	18 15	160.2	21 35	Sig	15 53½	161.7
					- 33 57	stop		
539.43	44.51	St-Denis	21 07	160.3	40 07 ½		18 30	176.2
531.11	52.83	Coutras	24 16½	158.1	43 16 ½	158.5	21 00	199.7
521.69	62.25	Les Eglisottes	27 45	162.6	46 52	157.4	23 40½	211.3
513.92	70.02	St-Aigulin	30 43½	156.7	49 49 ½	157.6	25 56½	205.7
499.97	83.97	Chalais	35 55	161.2	55 14	154.8	30 07½	200.1
483.47	100.47	Montmoreau	42 00½	162.5	61 31	157.6	36 23½	157.8
474.18	109.76	Livernan Tunn S	46 03	137.9	65 26	142.3	40 37	131.9
463.51	120.43	Mouthiers	51 13	123.9	70 31 ½	125.7	45 04½	143.6
449.38	134.56	Angoulême	56 59½	146.8	76 03 ½	153.2	50 36	153.4
435.83	148.11	Vars	62 33½	146.0	81 41 ½	144.3	56 11	145.6
420.30	163.64	Luxé	68 00	171.2	86 54 ½	178.6	61 21	180.3
411.88	172.06	Salles	70 52	176.2	90 02 ½	161.2	64 32	158.7
402.11	181.83	Ruffec	74 49	148.4	93 50	154.6	68 32	146.6
388.04	195.90	St-Saviol	79 44½	171.4	98 43 ½	172.6	72 47½	198.2
378.96	204.98	Epanvilliers	82 28	199.9	101 25 ½	201.8	75 22½	210.9
365.17	218.77	Anché-Voulon	86 37	199.4	105 28 ½	204.3	79 35	196.6
355.98	227.96	Vivonne	89 42	178.8	108 36	176.5	82 41	177.9
343.85	240.09	Ligugé	94 29½	151.9	113 12 ½	157.9	87 26	153.3
336.56	247.38	Poitiers	97 55½	127.4	116 31	132.9	90 57	124.4
326.08	257.86	Futuroscope	102 27½	138.7	120 46 ½	147.7	94 52½	160.2
311.74	272.20	Naintré	107 00	189.4	125 10 ½	195.5	99 23½	190.5
303.51	280.43	Chatellerault	109 48	176.4	127 58 ½	175.8	102 01½	187.5
289.29	294.65	Dangé	114 35½	178.1	133 09 ½	164.4	106 20	198.0
281.11	302.83	Port de Piles	117 31	167.8	136 05	167.8	108 49	197.6
269.66	314.28	Ste-Maure	121 34½	169.3	140 01 ½	174.3	112 24½	191.3
258.19	325.75	Villeperdue	125 12	189.8	143 35 ½	193.0	115 56½	194.8
<u>249.16</u>	334.78	Monts	127 58	195.8	146 22	195.2	118 29½	212.5
218.79	349.95	Larçay Tunn W	141 42	75.4	152 14 ½	154.9	122 59.6	202.2
212.27	356.47	Vouvray Tunn W	146 28	82.1	154 45	156.0	125 07.8	187.5
188.21	380.53	Poste St-Cyr	153 50.7	195.7	160 39 ½	244.3	130 30.0	268.8
178.67	390.07	Poste St-Amand	155 47.2	294.8	162 38	289.8	132 27.3	292.8
162.06	406.68	Vendôme	159 11.6	292.5	166 17 ½	272.4	135 53.4	290.1
149.98	418.76	CAI	161 38.6	295.8	169 05	259.6	138 21.6	293.4
<u>138.20</u>	430.54	Poste Droué	164 02.2	295.3	171 44	266.7	140 45.6	294.5
130.43	438.36	Poste Courtalain	165 38.1	293.6	173 25	278.7	142 24.2	285.5
114.05	454.74	Poste Dangeau	168 55.4	298.9	176 51 ½	272.4	145 46.7	291.2
92.30	476.49	Poste Rouvray	173 17.5	297.7	181 22 ½	288.9	150 14.5	292.4
<u>67.50</u>	501.29	Poste St-Léger	178 16.2	298.2	186 29	291.3	155 20.5	291.8
44.61	524.12	Poste St-Arnault	182 52.6	297.4	191 17 ½	284.9	160 04.0	289.9
36.18	532.55	CAI	184 35.5	294.9	193 12	265.0	161 53.4	277.4
23.59	545.14	Villejust Tunn W	187 32.8	255.6	196 23 ½	236.7	165 19.7	219.7
14.18	554.55	Massy Tunn E	190 13	211.7	199 10	202.2	168 20.9	186.9
02.05	566.68	Ouest Ceinture	195 33½	136.2	S stop		174 54½	111.0
00.70	568.03	Paris M'p'nasse	198 20	3 L	209 38	19 L	178 42	1 L

Epanvilliers. In fact there was no great hurry as there were no TSRs programmed; maxima were well within limits and after good accelerations we generally coasted to intermediate restrictions. After Poitiers we ran at around 190 to 178 through Châtellerault, 203/179 up to

Ste-Maure and a final 214 at Monts. With mid-290 cruising on the LGV we had time in hand approaching Paris and again coasted down through the various limits, only to suffer a signal check costing 2 minutes outside Montparnasse – where we stopped behind another set, so my final distance was near PK 0.8.

Creation of the LGV network in France has been a remarkable achievement, a quantum leap in performance terms that is unprecedented in railway history, as 300/320 km/h has replaced 150/160 as the standard maximum speed for express trains. But this progress has come at a price, both in financial terms, as the *Cour des Comptes* (the French Audit Office) has frequently pointed out when highlighting the regular failure of LGV schemes to achieve their promised return on investment, and in terms of neglect and disruption suffered by other parts of the network. The decline in both scheduled speeds and punctuality beyond Marseille, and the blunting of performance on the Bordeaux line, both bear witness to this.

Table 4 Paris-Avignon TGV

Run 4 1249 Paris-Nice, Su 07.12.14, 20/780/825, TGV 224/707, AV 14/20, light overcast								
Run 5 1329 Paris-Toulon, Sat 28.07.01, 20/766/810, TGV 508/533, AV 3/20, fine								
PK	Dist		m	s	ave	m	s	ave
0.30	0.00	Paris Gare de Lyon	00	00		00	00	
<u>9.35</u>	9.05	LGV zero	08	10		06	46	
10.43	19.48	Villecresnes T Sth	13	1.6	128.8	11	2.2	146.6
21.05	30.10	PRCI Chevry	15	59.6	214.8	14	7.4	206.4
<u>39.41</u>	48.46	Crisenoy OB [17.10]	20	10.7	263.2	18	18	263.8
49.23	80.59	PRS Marolles	26	46.2	292.5	24	59.8	287.9
71.50	102.86	PRS Cuy	31	19.2	293.7	29	32.4	294.1
92.78	124.14	PRS Vaumort	35	38.6	295.3	33	56.1	290.5
117.09	148.45	PRS Vergigny	40	43.2	287.3	39	2.2	285.9
139.62	170.98	PRS Tonnerre	45	18.1	295.0	43	37.6	294.5
162.11	193.47	PRS Pasilly	49	58.0	289.3	48	15.1	291.8
182.09	213.45	PRS Toutry	54	01.5	295.4	52	20.3	293.3
202.37	233.73	PRS Arcenay	58	13.0	290.3	56	32.3	289.7
225.81	257.17	PRS Vianges	63	29.7	266.4	61	51.3	264.5
247.41	278.77	PRS Sully	67	51.0	297.6	66	18.1	291.5
273.80	305.16	Le Creusot	73	41.7	270.9	72	14.6	266.5
292.97	324.33	PRS Vaux	78	01.3	265.8	76	38.2	261.8
313.58	344.94	PRS Cluny	82	40.7	265.6	81	21.8	261.6
333.98	365.34	Macon TGV	87	20.5	262.5	86	4.3	260.0
361.13	392.49	PRS Cesseins	92	55.4	291.8	91	45.6	286.4
389.11	420.47	PR Miribel	98	36.3	295.5	97	29.7	292.7
409.71	441.07	St-Exupéry	103	00	281.2	102	08	266.5
429.28	460.64	PRS St-Georges	107	06.6	285.7	106	11.2	289.7
454.65	486.01	PRS Lapeyrouse	112	24.9	286.9	111	33.1	283.7
476.28	507.64	PRCI Claveyson	116	48.8	295.1	116	01.9	289.7
495.46	526.82	Valence TGV	120	39.0	299.9	119	55.6	295.5
516.71	548.07	SEI Upie	124	57.0	296.5	124	15.6	294.2
541.47	572.83	SEI Bonlieu	130	05.5	288.9	129	23.3	289.7
567.77	599.13	CAI Lagarde	135	20.2	300.9	134	44.1	295.1
595.25	626.61	SEI Piolenc	140	48.4	301.4	140	19.3	295.1
616.18	647.54	SEI Roquemaure	145	11.1	286.8	144	37.4	291.9
625.16	<u>656.52</u>	Avignon TGV	<u>148</u>	<u>21</u>	170.2	<u>148</u>	<u>05</u>	155.7

Table 4 sounds a more positive note. It is becoming very rare, either in France or in Britain, to record runs today that are faster than performances achieved with similar motive power over the same infrastructure fifteen or twenty years ago. But last December I recorded a run from Paris to Avignon TGV that was only 15 seconds outside the fastest time I recorded back in 2001, despite the loss of over a minute to a TSR at the start.

Run 5, which has already appeared in *Milepost* (January 2002), was made in the early weeks after the opening of the LGV-Méditerranée, when operation was to say the least

chaotic. The train, formed of two TGV-Réseaux sets, left Paris almost 9 minutes late but arrived in Avignon exactly RT, perhaps with a slight easing over the final stages. The units were tending to cruise in the mid-290s rather than a full 300 but this cruising rate was well sustained and slowings for slacks over summits were generally well handled. At the end of the run speed was eased before Roquemaure and the stop was relatively slow – for an arrival ten seconds ahead of time.

The recent run was also made with a double set, this time two double-deck units, 224 with the same output as the TGV-R, and the more modern and slightly more powerful 707. A signalling problem delayed departures from Paris and the Nice train left 10.5 minutes late, but 6 minutes behind the preceding TGV for Grenoble – so there was some hope of a clear road. Like the 2001 run this one started from one of the short platforms of the Gare de Lyon but immediately lost time on account of a TSR to 80 through Maisons-Alfort, and then ran very slowly through the neutral section in Limeil tunnel, with a minimum of 80. The neutral was perhaps not operational in 2001 as speed remained in the 150s here, and the gap between the two trains widened to exactly 2 minutes at the start of the true high-speed section south of Villecresnes tunnel. From then onwards the recent run slowly made up the deficit. The extra power of set 707 seems to have made little difference as uphill speeds were comparable – 264, 244 and 228 over the three summits between Le Creusot and Macon in 2014, 257, 257 and 245 in 2001; 240 over Primarette summit in 2014 as against 250 in 2001. In fact over the speed-limited summits – Primarette and Tartaiguilles, for example – speeds in 2014 were slower than in 2001, perhaps a reflection of the “modern” attitude to restrictions. The recent run gained time between Miribel and St-Exupéry on account of an easing of the PSR at the top of the descent to the Rhône crossing, now 270 rather than 220, and taken at a good 264 as against 207 in 2001. But the 2014 run then suffered a slight check at St-Exupéry, braking to 242 – we had probably just caught the Grenoble train as it turned off the LGV. So it was chiefly through higher speeds that run 4 gained time: downhill maxima against electric braking were over 305 on several occasions, and the cruising rate was around 301-2 – witness the average of 301 km/h for over 50 km after Bonlieu. There was apparently another slight check approaching Avignon as speed was down to 256 by Roquemaure where an unchecked run can still be at full line speed. But the final approach was quite smart and almost ten minutes were regained. Net time would be about 146¾ minutes for a net average of 268.4 km/h. A stimulating performance in this day and age.

Finally a postscript concerning on-line train information. SNCF has recently modified its systems, providing easier, unified, access through the “snCF.com” site. The home page offers access to “SNCF Direct” (unfortunately this choice is not available if you opt for the English-language version), which provides so-called “real-time” timetables and traffic information. There are 3 sections: “Rechercher un trajet”, effectively a journey planner suggesting schedules between two points; “Rechercher un train”, where entering a train number and date will display a page with scheduled times and lateness (with explanations) at all calling points; and “Rechercher un horaire en gare”, where entry of the station name will display information on forthcoming arrivals and departures (selected separately). With “Rechercher un train” it is possible to obtain retrospective information back to the previous day, but for stations this is no longer possible (formerly with ‘Infolignes’ one could look back through the current day). Some trains on both the “train” and “stations” pages are accompanied by a coloured icon, and clicking on this will show the position of the train on a map (a facility formerly available only through a separate URL). Map quality is excellent but the up-dating of train positions is far from ‘real-time’ and tends to freeze after a while. Rather than following an individual train in fits and starts it can be more interesting to zoom out for an overall picture of relative train positions. The site still suffers from the defects of previous on-line CIS in France: information is not always updated promptly, and lateness is rounded to the nearest 5 minutes. Globally, though, this seems to be an improvement on what was offered by ‘Infolignes’ and ‘Garesenmouvement’.

LETTERS

Dear Dave,

I read Sandy Smeaton's account about 68002 over Beattock with great interest. He summarises the best climbs no doubt behind their respective predecessors in either direction over Beattock. One run worth mentioning was timed behind by M.Oakley on 55006 during a ECML diversion following the Penmanshiel tunnel collapse in 1979 in the down direction. Load was 10/335/355 and a superb ascent to Beattock summit ensured with a minimum of 65 mph at Mp 49. The corresponding edhp/rhp figures from Mp 46-49 the former passed in 41mins 32secs at 66mph to Mp 49 at 44mins 17secs, work out at around 2,840/3,030 someway in excess of what would be expected from a locomotive which has a nominal 3,300 bhp rating. This was published in the 1981 Bradford & Barton booklet on the class by A.Guppy and M.Oakley and on at least one other occasion by the latter in one of his Diesel & Electric Group articles.

Kind Regards

Andrew

Dear David

Sandy Smeaton's "coasting" experience, and his recalling of two instances of trains coasting after power failure prompts me to write of three similar events on trains that I was timing. Full logs are in the database for anyone who wishes to see full detail - the DMU one is in the "commuter" summary section under "up DMUs" 7-March-80.

On 3rd August 1965, Class 40 D272 was making very good time hauling 0740 Birmingham-Newcastle – it shut down at Wiske Moor and coasted forward. In the event, impetus proved insufficient to reach Darlington and the driver stopped just short of DSI signal south of Croft loop, so that assistance could get behind the signal. That assistance was A1 4-6-2 60124 – "Kenilworth" which worked to Newcastle with some vigour, with the dead diesel and the two Darlington sleeping cars taken daily to Newcastle by this service – the load was 487 tons tare.

On 18th September 1977, Class 46 – 46012 – also making very good time on the 1020 Penzance-Leeds, lost all its lubricating oil in a puff of grey smoke at Whiteball summit and coasted forward downhill at up to 80mph before making a perfect stop in Taunton station. Assistance took 45 minutes to arrive, in the shape of 47377.

The third event was on 7th March 1980 on a journey home from work. The 1635 Scarborough-Leeds, formed of Derby lightweight power car 50619 with a driving trailer, which had fitters attention at York, and left with both engines working. At a signal stop before Chaloners Whin, the left one stopped, but was restarted only to stop again passing Church Fenton. Climbing the bank to Micklefield on one engine brought us down to 28mph, but onto Crossgates reasonable speed was regained. Passing Crossgates, the right hand engine also stopped, so the driver buzzed the guard and when he came, said "we'll get into Leeds if the signals are off" With no engines running, air was not being pumped into the reservoir so only one significant brake application could be made. The road was clear and we ran into Leeds in 6m40s from Crossgates. I didn't wait to see how quickly the then quite-dead unit was cleared from the now-blocked platform.

Yours

Noel Proudlock

NEWS

For the Record: Class 319s in the North West

Day/Date			Thursday 9th April 2015				Monday 30th March 2015			
Train			13:16 Lime St. to Manch. Air.				1216 Liv-Man Aiprt			
Motive Power			156.486				319.363			
Load (tons)			75/80 = 7.1 hp/ton				140/145 = 9.9 hp/ton			
Weather			dry				dry			
Rec. Pos. GPS			J Rishton -2/2 - Stopwatch				J Rishton -3/4 - S/w			
Miles	mm	cc	location	WTT	mm:s	avge	mm:s	s	avge	
0.00	0	02	Liverpool Lime Street	0	00:00	P1 0.0	00:00	T P2	0.0	
1.36	1	31	Edge Hill	3.5	03:38	rbt 22.5	03:34		22.9	
1.69	1	57	Edge Hill PSB	4	04:10	37.1	04:06		37.1	
1.95	1	78	Bootle branch junction	4.5	04:39	32.3	04:33		34.7	
2.34	2	29	Wavertree Technology Park	5	05:37	24.2	05:25		27.0	
0.00				0	00:00	1L 0.0	00:00	T P2	0.0	
0.31	2	54	Olive Mount	1	00:54	25.0	00:52		25.9	
1.22	3	47	Broad Green		01:53	56.5	01:40	rbt!	68.3	
2.81	5	14	Roby		03:16	68.1	02:56		75.4	
3.34	5	56	Huyton		03:42	73.4	03:19		82.8	
3.56	5	74	Huyton junction	3.5	03:52	75.4	03:28		83.5	
4.58	6	75	M57		04:41	75.7	04:10		88.4	
5.29	7	52	Whiston		05:16	72.9	04:39		88.2	
6.56	8	74	Rainhill	6.5	06:20	71.5	05:31		87.9	
8.36	10	58	Lea Green		07:52	70.4	06:50		82.1	
9.51	11	70	St. Helens Junction	9.5	09:38	39.1	08:40		37.6	
0.00				0	00:00	1L 0.0	00:00	T P2	0.0	
1.34	13	17	OB		01:57	41.2	01:40		48.2	
2.38	14	20	Sankey junction		02:57	62.4	02:27		79.7	
2.84	14	58	Earlestown	3.5	03:24	61.3	02:49		75.2	
3.06	14	75	Earlestown east junction		03:37	60.8	03:00		72.1	
3.89	15	61	Newton-le-Willows	5	05:04	34.3	04:35		31.5	
0.00				0	00:00	1L 0.0	00:00	T P2	0.0	
0.46	16	18	M56		01:02	26.7	02:01	(a)	13.7	
0.99	16	60	Parkside junction	2.5	01:40	50.2	02:39		50.2	
3.15	18	73	Kenyon junction		03:38	65.9	04:23		74.8	
5.04	20	64	Glazebury		05:05	78.2	05:44		84.0	
6.91	22	54	Astley	7	06:43	68.7	08:00	(a)	49.5	
9.14	24	72	M62		08:41	68.1	09:54		70.4	
10.02	25	63	M60		09:24	73.6	10:38		72.0	
10.80	26	45	Patricroft		10:00	78.0	11:16		73.8	
11.77	27	44	Eccles	11	10:48	72.7	12:05		71.3	
12.80	28	46	Weaste	[2] (1)	11:52	57.9	12:55		74.1	
			signal stand		14:18 to 17:40	(d)	15:52 to 17:45	(b)		
14.69	30	36	Ordsall Lane	17	18:24	17.4	18:39		19.8	
			signal stand		19:37 to 23:06	(d)				
15.23	189	67	Castlefields junction	18	23:40	(d) 6.2	19:56		25.3	
15.36	189	57	Deansgate	18.5	24:31	(d) 9.2	20:18		21.3	
15.72	189	28	Manchester Oxford Road	20	26:03	p3 14.1	21:40	P4	15.8	

- (a) Delayed by late running 10:08 Edinburgh - Manchester Airport ahead
- (b) Delayed by 11:44 Blackpool North - Manchester Airport ahead
- (d) Delayed by 11:20 Barrow-in-Furness - Manchester Airport ahead

Day/Date				Thursday 9th April 2015				Th 9th April 2015			
Train				14:40 Manch. Air. to Lime St.				1040 Man Airt-Liv			
Motive Power				156.486				319.362			
Load (tons)				75/80 = 7.1 hp/ton				140/145 = 9.9 hp/ton			
Weather				dry				dry			
Rec. Pos. GPS				J Rishton -1/2 - Stopwatch				J Rishton -3/4 - S/w			
Miles	mm	cc	location	WTT	mm:s	s	avge	mm:s	s	avge	
0.00	189	28	Manchester Oxford Road	0	00:00	1L P2	0.0	00:00	2L P2	0.0	
0.36	189	57	Deansgate	1 (1)	01:03		20.6	01:30	(f)	14.4	
0.49	189	67	Castlefields junction	2.5	01:23		23.4	02:05	(f)	13.4	
1.03	30	36	Ordsall Lane	3.5	02:27		30.4	03:19		26.3	
2.31	29	14	Seedley	-	04:09		45.2	04:57		47.0	
3.95	27	43	Eccles	7	05:35		68.7	06:16		74.7	
4.92	26	45	Patricroft		06:24		71.2	07:05		71.3	
5.70	25	63	M60		07:01		75.9	07:43		73.8	
6.58	24	72	M62		07:44		73.7	08:25		75.4	
8.81	22	54	Astley	11.5	09:39		69.8	10:26		66.4	
10.68	20	64	Glazebury		11:22		65.3	11:53		77.4	
12.57	18	73	Kenyon junction		12:54		74.0	13:16		81.9	
14.73	16	60	Parkside junction	16.5	15:08		58.0	15:11		67.6	
15.26	16	18	M56		15:47		48.9	15:46		54.5	
15.72	15	61	Newton-le-Willows	18	16:50		26.3	16:58		23.0	
0.00				0	00:00	1E	0.0	00:00	T	0.0	
0.83	14	75	Earlestown east junction		01:26		34.8	01:30		33.2	
1.04	14	58	Earlestown	1.5	01:41		50.4	01:45		50.4	
1.51	14	20	Sankey junction		02:10		58.3	02:10		67.6	
2.55	13	17	Broad Lane		03:09		63.5	03:02		72.1	
3.89	11	70	St. Helens Junction	4.5	05:03		42.3	04:53		43.5	
0.00				0	00:00	T	0.0	00:00	T	0.0	
0.91	10	77	New Street		01:40		32.8	01:27		37.7	
1.15	10	58	Lea Green		01:58		48.0	01:40		66.4	
1.88	10	01	St. Helens Linkway		02:50		50.6	02:18		69.2	
2.97	8	72	Rainhill	4	03:56		59.5	03:09		76.9	
4.22	7	52	Whiston		04:59		71.4	04:01		86.5	
5.95	5	74	Huyton junction	6.5	06:21		75.5	05:11		89.0	
6.17	5	56	Huyton	(0.5)	06:32		75.6	05:20		88.0	
6.70	5	14	Roby		06:58		73.3	05:41		90.9	
7.41	4	37	Court Hey Avenue		07:34		71.0	06:15		75.1	
8.29	3	47	Broad Green		08:19		70.4	07:03	(g)	66.0	
9.14	2	60	Olive Mount junction - Mill Lane	9.5	09:23		47.8	08:33	(g)	34.0	
9.51	2	29	Wavertree Technology Park	10.5	10:11		27.7	09:41	(g)	19.6	
0.00				0	00:00	T	0.0	00:00	2L	0.0	
0.39	1	78	Bootle branch junction	1	00:57		24.6	00:58		24.2	
0.65	1	57	Edge Hill power signal box	1.5	01:30		28.4	01:34		26.0	
0.98	1	31	Edge Hill	2 [2] <1>	02:18		24.8	02:22		24.8	
2.34	0	02	Liverpool Lime Street	9.5	06:47	P2	18.2	06:32	P1	19.6	
(f)	Delayed by 09:55 Liverpool Lime Street - Manchester Oxford Road conflicting at Castlefield Junction										
(g)	Delayed by late running 10:51 Warrington Bank Quay - Liverpool Lime Street										

PRESTON TO LANCASTER

Chris Taylor.

With the advent of Loco hauled trains on the Cumbrian Coast Line one train a day reaches Preston from Carlisle via Whitehaven. It returns as the 1004 Preston to Barrow-in-Furness and so it was an opportunity to sample the class 37's again. The contract with DRS for the two loco hauled sets is initially for 2 years and on my journey the trains were driven by DRS crews but Northern are to take over the driving as soon as sufficient of their drivers are trained.

The line between Preston and Lancaster is undulating with an initial climb out of Preston at a maximum of 1:101 whilst coming south from Lancaster there is a climb of 1:80 as far as the old site of Lancaster No 1 signal box.

DATE:	Wed 3 June 2015			Tue 9 June 2015						
TRAIN:	1004 Preston-Barrow			0831 Man Ox Rd-Barrow						
LOCO:	37606			156489						
COACHES/WEIGHT:	4c + 37402			2c 76½/80 7.1 hp						
RECORDER/ POSITION/GPS	C.M.Taylor 4/6 Y			C M Taylor 1/2 Y						
miles	m	c	location	wt	m	s	mph	m	s	mph
0.00	0	0	PRESTON	0	0	00	2 late	0	00	time
0.51	0	41	Fylde Jn		1	22	36	1	11	34
1.33	1	26	Oxheys		2	43	46	2	23	52
4.00	4	0	MP		5	35	65	4	48	75/74
4.74	4	59	Barton		6	12	69	5	24	75
7.45	7	36	Brock		8	23	79	7	34	75
9.75	9	60	Garstang		10	07	79	9	25	74
15.25	15	20	Bay Horse		14	15	80	13	50	74
16.68	16	54	Galgate		15	18	80	14	58	75/72
17.80	17	64	Oubeck		16	07	82	15	54	74
19.75	19	60	MP		18	19	33 tsr	17	39	60
20.00	20	0	MP		18	50	16 sigs/35	17	57	64
20.98	20	78	LANCASTER	20	21	08		19	36	

I have included the weight of 37402 in the weight of the train as far as I know it was only providing ETH to the air conditioned coaches, the train was full. The start from Preston was a little restrained as we departed from platform 6 and had to observe the 35 mph restriction to gain the down fast line but then the acceleration was respectable but a little restrained to

DATE:	Thur 7th May, 2015						
TRAIN:	1512 Carlisle-Preston						
LOCO:	156498						
COACHES/WEIGHT:	2c 76½/81 7.0 hp						
RECORDER/ POSITION	C.M.Taylor 1/2 Y						
miles	m	c	location	wt	m	s	mph
0.00	20	78	LANCASTER	0	0	0	time
0.98	20	00	MP		1	45	44
1.98	19	00	MP		2	52	62
4.30	16	54	Galgate		4	51	72
5.73	15	20	Bay Horse		6	3	74
7.98	13	00	MP		7	53	74/76
11.23	9	60	Garstang		10	33	75
13.53	7	36	Brock		12	22	74
16.23	4	60	Barton		14	34	76
19.65	1	26	Oxheys		17	15	73
	0	33	Fylde Jn		18	12	31
20.98	0	00	PRESTON	23	19	26	

start with once the train was on the down main line. The maximum speed allowed is 80 mph which was attained soon after Garstang. Unfortunately a tsr was in operation approaching Lancaster and the obligatory "approach control" on the signalling resulted in just less than mile a minute time. The WTT times are all taken from the electronic WTT's on the Network Rail's website. The reason I did this was that Real Time Trains did not show any "recovery" time on the southbound run (neither did the WTT). The second run was on one of Trans Pennine Express trains in which the 156 is hired from Northern Rail.

It departed from platform 3 and made a slightly fe
milepost 4 and maintaining this or 74 mph for nearly 18 miles but a much faster approach to

Lancaster station was made with a time of 19 minutes 36 seconds. The difference to driving technique can be seen with the faster approach to Lancaster with 156498 with the DRS driver being more restrained due to the inexperience of the drivers which should improve with more driving turns.

Coming south another of the few Northern Rail workings from the Cumbrian Coast to Preston There is no "extra" "recovery" time added so the schedule is easy, with 156498 averaging 67.7 mph to Preston with a competent run with running into platform 5 at Preston so a slight reduction in speed was necessary as we crossed from the up main line to the platform line at Fylde Junction.

CUMBRIAN CLASS 37s – First Impressions

We show below some initial runs along the Cumbrian Coast behind Class 37s' The runs north of Barrow show the extremes in performance. John Rishton's run left Barrow slightly late, and was unable to reduce the lateness, probably due to the unfamiliarity with the loco by the train crew. David Adams' run, in contrast, was short-formed and seemed to have problems in spinning out the time available.

Day/Date				Tuesday 9th June 2015				2015		
Train				10:04 Preston - Barrow				10:04 Preston - Barrow		
Motive Power				37.423 (plus 4 Mk2 plus dead 37)				37609/37409(dead)/4		
Load (tons)				6/347/360						
Weather				dry						
Rec. Pos. GPS				J Rishton - 3/6 - GPS				D Adams 2/5		
Miles	mm	cc	location	Sch	mm:s	mph	avge	mm:s	mph	avge
0	0	01	Preston	0	00:00	4L	0.0	00:00	4L	
0.50	0	41	Preston psb		01:24	rbt28	21.4			
1.33	1	26	Oxheys					02:46	46	28.7
1.84	1	68	Cadley Causeway		03:18	52	42.3			
3.97	3	78	B5269		05:25	68	60.4			
4.72	4	58	Station Lane, Barton		06:03	73	71.1	06:14	71	58.8
7.44	7	36	Brock		08:07	82	80.6	08:21	82	77.1
9.34	9	28	Garstang	9.5	09:31	81	81.4	09:47	79	79.5
11.40	11	33	footbridge		11:04	80	79.7			
12.73	12	58	Scorton					12:17	80	81.4
13.88	13	71	overbridge		12:55	81	80.4			
15.25	15	20	Bay Horse					14:12	80	78.9
16.14	16	12	M6 - A6 link road		14:36	81	80.6			
17.34	17	28	footbridge		15:29	82	81.5			
17.80	17	64	Oubeck					16:06	78	80.2
18.20	18	17	Five Ashes Lane		16:15	55/sig	67.3			
19.17	19	14	Cinder Lane		17:28	28	47.8			
19.84	19	67	Lancaster Old J					17:45	63*	73.7
21.02	21	02	Lancaster	20.5	21:41		26.3	19:37		
0	0	03	Lancaster	0	00:00	6L		00:00		
1.86	1	72	Morecambe south j	3	03:00	60	37.2	03:13	59	34.7
3.10	3	11	Hest Bank		04:09	69	64.7	04:22	65/sigs	64.7
4.35	4	31	Bolton-le-Sands		05:23	49/ac	60.8	05:39	42/40/47	58.1
6.03	6	08	Carnforth north j	6.5	08:00	12	38.5	08:44	12	32.8
6.21	6	20	Carnforth	8.5	09:18		8.3	10:02		8.3
0	0	31	Carnforth	0	00:00	7L				
0.63	1	00	milepost		02:08	40	17.7			
0.80	1	15	Sand Lane					02:30	41	19.2
1.55	1	74	Ings Point		03:17	54/60	48.0	03:26	53/55	48.2
3.36	3	58	Silverdale	5.5	05:55		41.2	06:16		38.3
0	3	58	Silverdale	0	00:00	8L				
1.20	4	74	Waterslack Q		02:10	53	33.2	02:19	51/56	31.1
2.00	5	58	Black Dyke		03:02	48	55.4	03:12	49*	54.3

Miles	mm	cc	location	Sch	mm:s	mph	avge	mm:s	mph	avge	
2.53	6	20	Arnside	4.5	04:22		23.8	04:31		24.2	
0	6	20	Arnside	0	00:00	8L		0			
0.65	6	72	Arnside viaduct		01:25	43	27.5	01:35	40	24.6	
1.88	8	10	River winster					03:05	55/58	48.7	
2.59	8	67	Holme Island		03:40	48	51.7	03:50	56	57.2	
3.30	9	44	Grange/Sands	5.5	05:19		25.8	05:18		29.2	
0	9	44	Grange/Sands	0	00:00	8L					
0.59	10	11	footbridge		01:26	40	24.7				
0.70	10	20	Bathing Pool X					01:32	39/47	27.2	
1.19	10	59	Cart Lane		02:12	49	46.9				
1.80	11	28	Kents Bank	3.5	03:27		29.3	03:43		30.3	
0	11	28	Kents Bank	0	00:00	7L					
1.17	12	42	Wraysholme		02:10	52	32.4	02:19	49/52	30.2	
2.37	13	58	Cark	4	04:09		36.3	04:19		36.2	
0	13	58	Cark	0	00:00	7L				32.9	
0.58	14	24	Crook Wheel		01:24	43	24.9	01:29	40	23.5	
3.02	16	58	Leven viaduct		04:00	60	56.3	04:12	61	53.7	
3.82	17	42	Plumpton Hall		04:51	57	56.5	05:00	60	60.6	
4.78	18	39	viaduct		05:51	60	57.6				
5.63	19	27	Ulverston	7.5	07:34		29.7	07:43		40.0	
0	19	27	Ulverston	0	00:00	8L					
0.95	20	23	Low Greaves		02:12	35	25.9	02:28	31	23.1	
1.81	21	12	A590		03:36	38	36.9				
1.90	21	19	Ulverston Old Rd					04:07	35	34.5	
2.66	22	00	Lindal summit		04:54	40	39.2				
3.32	22	53	Lindal tunnel		05:53	41	40.3	06:27	40*	36.4	
3.86	23	16	Urswick Road		06:40	41	41.3				
4.50	23	67	Dalton	8	08:04		27.4	08:37		32.8	
0	23	67	Dalton	0	00:00	8L					
0.64	24	38	Dalton junction	1.5	01:23	37	20.0	01:29	40/36*	18.6	
1.71	25	44	Furness Abbey tnnl	[2]	03:03	39/38	38.5				
3.32	27	13	Roose		05:17	50	43.3	05:20	52	41.7	
3.87	27	57	Salthouse junction		06:23	15	30.0	06:36	14*/22/13sig	26.1	
4.62	28	37	Greengate Street		08:51	22	18.2	09:04	25	18.3	
			signal stand (2)		09:56 to 10:15						
5.14	28	77	Barrow-in-Furness	12.5	11:50	0	14.1	10:56	4L	22.5	
Day/Date				Tuesday 9th June 2015				2015			
Train				11:38 Barrow-in-Furness - Carlisle				1138 Barrow-Carlisle			
Motive Power				37.609 (plus 4 Mk2 plus dead 37)				37+37/4			
Load (tons)				6/347/360							
Weather				dry							
Rec. Pos. GPS				J Rishton - 5/6 - GPS to Sellafield,				D Adams 2/4			
Miles	mm	cc	location	Sch	mm:s	mph	avge	mm:s	mph	avge	
0.00	28	77	Barrow-in-Furness	0	00:00	/49	0.0	00:00	/52/27* 3L		
3.59	32	44	A590		06:29	32	33.2				
4.12	33	06	Park south	7	07:38	29	27.7	06:56	32	35.7	
5.49	34	36	Lots Road		09:33	47	42.9	08:45	54	45.0	
6.10	35	05	Askam	11	11:03		24.4	10:09		26.3	
0.00	35	05	Askam	0	00:00	6L	0.0	00:00	2L		
0.77	35	66	path crossing		01:25	44/57	32.6				
1.22	36	22	Dunnerholme					02:01	56/63	36.1	
3.18	38	19	Kirkby-in-Furness	5	04:40		44.5	04:24		49.5	
0.00	38	19	Kirkby-in-Furness	0	00:00	6L	0.0	00:00			
0.34	38	46	path crossing		01:32	27/50	13.3				
0.52	38	60						01:24	31/53	22.1	
2.22	40	37	Foxfield	4	04:37		36.6	04:20		34.9	
0.00	40	37	Foxfield	0	00:00	6L	0.0	00:00	1L		
1.79	42	20	Dodds		03:20	48	32.2	03:13	48/49	33.4	
1.99	42	35	Green Road	4.5	04:00		18.0	03:54		17.6	
0.00	42	35	Green Road	0	00:00	5L	0.0	00:00			

Miles	mm	cc	location	Sch	mm:s	mph	avge	mm:s	mph	avge
0.70	43	12	Underhill		01:33	47/52	27.1	01:29	44/57	28.3
2.58	45	02	Millom	5.5	04:28		38.7	04:12		41.5
0.00	45	02	Millom	0	00:00	5L	0.0	00:00	T	
1.05	46	06	Haverigg		02:06	47	30.0	01:57	49	32.3
2.07	47	08	Kirksanton		03:17	56	51.7	03:04	59	54.4
3.15	48	14	Silecroft	5	05:20		31.6	05:03		40.6
0.00	48	14	Silecroft	0	00:00	6L	0.0	00:00	1E	
1.51	49	55	Whitbeck		02:42	49	33.6	02:32	52	35.8
3.08	51	21	milepost, misplaced		04:24	60	55.4			
3.68	51	69	River Annas VS					04:43	64	59.6
5.27	53	36	Bootle	7.5	07:10		47.5	06:58		42.4
0.00	53	36	Bootle	0	00:00	7L	0.0	00:00	2E	
1.74	55	15	Middleton Place		02:50	59	36.8	02:37	64/66	39.9
3.09	56	43	Eskmeals viaduct		04:09	59	61.5	03:51	63	65.2
4.51	57	77	Ravenglass	6	06:13		41.2	06:00		39.8
0.00	57	77	Ravenglass	0	00:00	7L		00:00	1E	
0.65	58	49	Saltcoats		01:30	42	26.0	01:40	43/50	23.3
1.17	59	10	Carleton		02:10	50	46.8			
2.07	60	02	Drigg	3.5	04:02		28.9	04:10		34.2
0.00	60	02	Drigg	0	00:00	7L		00:00	/52	
0.48	60	41	Drigg BNF siding		01:17	36	22.4			
1.02	61	04	Summer View		02:05	46/47	40.5			
2.13	62	13	Seascale	3.5	03:57		35.7	03:46		33.9
0.00	62	13	Seascale	0	00:00	8L		00:00	T	
0.34	62	40	footbridge		01:00	33	20.4	00:52	36	23.3
1.75	63	73	Sellafield	3.5	03:53		29.3	03:27		32.9
0.00	63	73	Sellafield	0	00:00	8L	0.0	00:00	T	
2.03	65	75	Braystones		03:21		36.4	03:07	56	39.0
3.53	67	35	Nethertown		05:13		48.2	04:44	56	56.0
6.35	70	20	St. Bees	10	09:21		27.0	08:38		43.4
0.00	70	20	St. Bees	0	00:00	8L		00:00	T	
1.75	72	00	milepost		02:56		35.8			
2.35	72	48	Meadow Road					03:19	59/61	42.5
2.75	73	00	milepost		04:01		55.4			
3.70	73	76	Corkickle	6	05:57		29.5	05:38		35.0
0.00	73	76	Corkickle	0	00:00	9L		00:00		
0.85	74	64	Whitehaven	2.5	02:17			02:02	T	25.1
0.00	0	08	Whitehaven	0	00:00	9L		00:00	/35/23*	
1.33	1	35	Parton	4	03:34		22.4	03:24		23.5
0.00	1	35	Parton	0	00:00	8L		00:00	/31	
0.47	1	72	Parton south junction		01:25		19.9	01:19	21*/18*/21	21.3
1.25	2	55	Parton north junction	4.5	04:02		17.9	03:40	20*/37	19.9
3.20	4	51	Harrington	9.5	08:13		28.0	07:51		28.0
0.00	4	50	Harrington	0	00:00	7L		00:00	3E	
1.73	6	29	Bessemer Way		02:49		36.9	02:38	59	39.3
2.27	6	72	Workington	4	03:58		28.2	03:40		31.6
0.00	6	72	Workington	0	00:00	7L			T	
0.48	7	31	Derwent junction		01:19		21.9	01:15	41/62	23.0
3.60	10	40	Flimby	5.5	05:27		45.3	05:14		47.0
0.00	10	40	Flimby	0	00:00	7L		00:00	1E	
1.11	11	49	overbridge		02:12		30.3	02:03	50	32.4
1.86	0	24	Maryport	3	03:48		28.1	03:34		29.8
0.00	0	24	Maryport	0	00:00	8L		00:00	T	
2.14	2	35	Dearham Bridge		03:35		35.8	03:18	52/53	38.9
3.97	4	22	Bullgill		05:48		49.5	05:33	40*	48.8
5.26	5	45	Ellenhall		07:32		44.7	07:08	55	48.9
7.49	7	63	Aspatria	10.5	10:40		42.7	10:04		45.6
0.00	7	63	Aspatria	0	00:00	9L		00:00	1E	
1.56	9	28	Wellington Farm		03:36		26.0	03:27	48	27.1

Miles	mm	cc	location	Sch	mm:s	mph	avge	mm:s	mph	avge
2.57	10	29	A596		04:45		52.7	04:33	65/68	54.7
4.60	12	31	overbridge		06:38		64.7	06:25	63/64/62	65.5
6.45	14	19	Waverton		08:21		64.7			
6.96	14	60	Crossing					08:39	65	63.5
7.73	15	42	overbridge		09:27		69.8	09:21	66	65.8
8.42	16	17	Wigton	11	10:49		30.3	10:33		34.5
0.00	16	17	Wigton	0	00:00	8L	0.0	00:00	T	
0.99	17	16	ob					01:50	51/64	32.3
4.55	20	61	Curthwaite		05:22		50.9	05:20	62	60.9
6.16	22	30	farm track		06:53		63.7			
7.33	23	43	Dalston	9	08:34		52.1	08:41		49.9
0.00	23	43	Dalston	0	00:00	8L	0.0	00:00	T	
2.21	25	60	Cummersdale viaduct		03:15		40.8	03:05	62	43.0
2.66	26	16	farm track		03:43		57.8			
3.38	26	74	Currock junction	6.5	04:53		37.0			
3.72	27	21	Currock Road		06:01		18.0	04:37	15*	58.8
3.96	27	40	Newcastle and goods lines		07:23		10.5			
4.07	27	49	Carlisle SJ					06:20	11*/23	12.4
4.36	69	08	Carlisle	11	08:43		18.0	08:12	3E	9.2

NETWORK DEVELOPMENTS – Ian Umpleby

There have been few speed changes of any note over the last period, the most significant being between South Gyle and Dalmeny (90 to 100 mph) in connection with the Haymarket to Inverkeithing headway reduction scheme; the latter will reduce the impact of calls at the new Edinburgh Gateway station (by the Airport) now being constructed. An increase from 20 to 40 mph off the Knottingley line at Shaftholme Jn and an upgrade from 65 to 75 mph at Nigg on the Far North line are others. The Medway signalling scheme has stalled threatening opening of Rochester's relocated station at the end of the year as signalling equipment needs to be (re)moved. The delayed Wolverhampton (May 5) and Cardiff (late June) schemes have been much on a like for like basis. Similarly the transfer of control of the Derby Power Box area to the East Midlands SCC has initiated few changes. The remaining ECML boxes north of Doncaster towards York have been taken out of use. The closure of Stafford Nos 4/5 boxes is scheduled for the 15th September with control from Penkridge/Colwich to Norton Bridge being transferred to Rugby. The Norton Bridge flyover works are well under way but 2 years away from completion. Following opening of the Todmorden curve and Ebbw Vale Town extension in May the much anticipated reopening of the Waverley or Borders Line from Edinburgh to Tweedbank (Galashiels) should take place in early September. Introduction of services over the new connecting line from Chiltern's main line to Bicester Village (formerly Town) and Oxford Parkway has been put back to the 26th October. Newcourt on the Exmouth branch opened belatedly in early June but Cranbrook between Pinhoe and Whimble continues to be dogged by delays, but should open soon. The date for the new stations at Bermuda Park and Coventry Arena on the Nuneaton to Coventry line has slipped to September. The relocation of Bromsgrove station has also slipped from May to November. Apperley Bridge, between Leeds and Shipley should open in August with Kirkstall Forge later in the year. With work completed on the NW Electrification scheme from Liverpool to Wigan/Manchester attention switches to the Manchester to Preston line due for completion in December 2016. Reconstruction work on Farnworth Tunnel south of Bolton is due to last until early October. Other forthcoming closures are Chippenham – Bath (18th July – 31st August) and Bathampton – Bradford-u-Avon (all August). Bolton to Blackburn closes from the 18th July to 23rd August for the creation of a "dynamic" two mile loop which will enable a half-hourly service. Winchburgh Tunnel between Edinburgh and Linlithgow is being reconstructed to increase clearances for electric trains and (slower) alternative services have to be used between Glasgow and Edinburgh until the end of July. In Cardiff the "City Line" curve between Central station and

Ninian Park has been doubled. Crossrail work becomes increasingly focused on the surface sections with tunnelling work almost complete, particularly at Abbey Wood and Chadwell Heath to the east of London. From Paddington westwards electrification works have become more evident. Stockley Flyover is now in operation, Acton Yard lines reorganised and a simplified Windsor Line junction (postponed just before writing) being some examples. A side issue has been the temporary return of token working to the Windsor/Henley branches. The vast remodelling works at Reading are nearly finished. Lines east of London Bridge saw a further realignment during the Spring Bank Holiday weekend. The Walsall to Rugeley electrification work continues. In Ireland trackwork on the Dublin to Cork line to return/increase segments to 100 mph progresses. Returning economic confidence has led to the introduction of a non-stop 0615 Cork to Dublin express. The delay to implementation of the Coleraine to Londonderry Phase 2 improvements has been broken with work starting soon. The only loop at Castlerock will close and be replaced by a more central one at Bellarena which may require the station to move also.

Going Around in Circles - David Ashley

When HSTs were introduced 40 years ago, I was impressed with the way they were geared for 125mph running, and were working mainly on 125mph-approved routes. I was, therefore, disappointed when they were diverted away from the ECML and FGW Bristol/Swansea routes, and initially onto the Berks & Hants, Golden Valley and Cotswolds Line, and subsequently (following ECML electrification) onto MML and XC routes, where there were limited opportunities (if any) to exploit their maximum speeds.

It seems that South East Trains (SET) are adopting similar principles with their Class 395 HS1 units. They have gradually extended their range of duties, and in recent timetables they now provide a through service from St Pancras via Ebbsfleet, Gravesend, Strood, Faversham, Herne Bay, Margate, Ramsgate, Sandwich, Dover and back to St Pancras, via Folkestone, Ashford and Ebbsfleet. The opportunity to achieve 140mph speed on their 3½hour journeys are limited to 38mins from St Pancras to Ashford and 20mins from Ebbsfleet to St. Pancras. Speeds in the range 70-90mph are registered in North Kent towards Birchington, and beyond that, around the coast to Dover, are significantly less. So we have 140mph-capable trains trundling around Thanet and averaging just over 50mph on their 3½hour journey.

The adoption of advertised circular journeys is also rather strange, as it can cause reliability problems, due to the difficulty of providing recovery if difficulties occur. TfL overcame this problem with their Circle Line trains by running them as services that start at Hammersmith and terminate at Edgware Road. Maybe it isn't such a problem with the lower density of traffic in Thanet, but it must be frustrating arriving at Dover for a train to London, that is delayed on its outward journey, but with no lay-over to reduce lateness. It seems that SET adopt the policy that they operate elsewhere on their network, and send them "fast" to recover lost time.

In this case, the train had lost time before Ebbsfleet and was 32mins late away from Gillingham. The data has been collected from RTT, who have difficulty – particularly on SET routes – to establish whether the train actually stops at a station, particularly in manually-signalled areas. The data certainly suggests that ran non-stop between Gillingham and Faversham, and from there to Margate – This train left Faversham at 1159, and the 1037 Victoria has held and would have picked up passengers for intermediate sections. Similarly, the train left Dover at 1305, so passengers for intermediate stops could have used the 1303 to Victoria, which followed the HS1 train, but this would not have helped passengers who wished to board it to go to St. Pancras. As there is only one train an hour from Ramsgate to

Dover, it is likely that the train did, in fact, stop at the intermediate stations. However, regaining 27mins is impressive, as is the time from Dover to St. Pancras of 53¼mins.

Presumably trains running seriously late, could divert away from Thanet and travel direct from Faversham, via Canterbury, to Dover – saving 45mins.

		Date	10/06/2015			
		Train	1027STP-RAM-STP			
		Recorder	RTT			
miles		Timing Point	Sch.	m	s	
0.00		Gillingham	0.0	0	00.0	32L
3.06		Rainham	4.0	3	15.0	31L
8.76		Sittingbourne	11.5	8	15.0	29L
16.03		Faversham	20.0	15	00.0	29L
0.00		Faversham	21.5	16	15.0	
7.09		Whitstable	7.5	7	00.0	28L
10.79		Herne Bay	13.0	10	00.0	25L
21.90		Margate	27.5	20	00.0	21L
3.20		Broadstairs	5.0	4	00.0	19L
5.39		Ramsgate	11.5	9	00.0	19L
0.00		Ramsgate	13.0	11	15.0	
8.36		Sandwich	11.5	13	32.0	19L
0.00		Sandwich	13.0	14	13.0	
4.14		Deal	5.0	4	30.0	18L
13.50		DOVER Priory	22.0	20	45.0	16L
0.00		DOVER Priory	24.0	21	30.0	
7.38		FOLKESTONE Cen	10.0	9	00.0	
21.14		ASHFORD	25.5	21	00.0	
0.00		ASHFORD	22	30.0		13L
56.12		ST PANCRAS	38.0	30	45.0	5L

Another anomaly with circular journeys is the ticketing opportunities. There is an understanding that travel in these circumstances can be in either direction – particularly important for train timers brave enough to risk long discussions about the NRCoC with train crew! SET may have been aware of this, but the resulting presentation in the GBTT, particularly in Table 194 is confusing to say the least, and in the error-strewn summer timetable, the up Ramsgate-Dover-St. Pancras trains are not shown at all.

However, anybody looking for a train from Gravesend to Ebbsfleet in SET's Section 1 "Train Times" pocket timetable would only be offered a 2¾hour journey (2 miles in the opposite direction), and if looking for a fare on NRE from Gravesend, via Margate, to Ebbsfleet, would be offered the same train at an off-peak return fare of £3.80 – not bad for 260 miles of travel – although further discussions may have ensued if trying to break the journey. However, I felt pious when I chose to buy a return ticket to Ramsgate from the ticket machine adjacent to the ticket office, but was peeved when I found out that buying it from the SET machine on the upper (platform) level, would have cost £6 less!

So what makes SET think that Thanet needs three HS1 trains per hour, whilst Folkestone and Dover only get one? Following the decline in UK holiday resorts, artist Tracey Emin has tried to create an interest in the area, as has Mary Portas in retail businesses there. The re-opening of Dreamland in Margate may also increase footfall, and Nigel Farage also generated an, albeit brief, interest in the area when standing for UKIP in the Thanet constituency at the recent general election

A few years ago, I thought that a proposal to electrify the Marshes line to Hastings, and send Class 395s along it, was an "April Fool" joke. But based on what SET have done, maybe there was more than a shred of truth in the proposal. Can we expect them to complete another circle by sending the service further north to Tonbridge, and reverse it back to Paddock Wood and then continue via the Medway Valley to Strood and back to St. Pancras!

NORWICH to LIVERPOOL ST in 80

In the April edition we printed a run which commemorated the introduction of electrified trains through to Norwich. Member Chris Burton mentioned that Tim Calow had been on the Class 86 Farewell Tour, with a standard 10-coach load, which achieved a time of 82m07s, and a net time well under 80mins.

Tim has supplied a log of the train, and it makes impressive reading. The fact that a 93min schedule had been supplied by Network Rail, and that they looped or diverted three trains en route that would have otherwise hampered progress, seems to imply that railway personnel were expecting an exceptional run. In view of this, the fact that it was a high-profile public run, and that ten years have elapsed since it was made, the log has been reproduced in full – in spite of some surprising speeds

It's fitting that the Class 86 era began and finished in such style.

Date	30/10/2004						miles	m	c		sch	m	s	mph	avge
Train	1844 Norwich-Liverpool St						51.81	63-07	Bentley			34	44.7	108/103	99.9
Loco	86235 Crown Point						53.90	61-00	Brantham			35	55.2	110	106.7
Load	10,335/370/455						55.45	59-36	Maningtree	40.5	37	06.7	73	78.0	
Recorder	T Calow						56.40	58-40	M.P. 58.5		37	50.3	83	78.4	
Pos	6/11, Fine Clear						58.85	56-04	Ardleigh		39	26.7	104/108	91.5	
miles	m	c	sch	m	s	mph	avge								
0.00	124-04	NORWICH (1)	0	0	00.0			60.90	54-00	Parsons Heath		40	36.3	105	106.0
0.30	123-60	Thorpe Jct.		0	53.8	33	20.1	63.28	51-50	COLCHESTER	47.5	41	59.4	98/96	103.1
0.60	123-36	Trowse S/bridge		1	24.7	41	35.0	65.90	49-00	M.P. 49		43	36.2	100/76sig	97.4
1.05	123-00	Trowse Low J	2.5	2	00.3	52	45.5	68.28	46-50	Marks Tey	51	45	17.1	93	84.9
	113-68							69.90	45-00	M.P. 45		46	17.9	101	95.9
1.90	113-00	M.P. 113		2	54.0	63	57.0	71.40	43-40	M.P. 43.5		47	10.3	107	103.1
3.90	111-00	M.P. 111		4	29.6	95	75.3	72.65	42-20	Kelvedon		47	51.7	111/106	108.7
5.90	109-00	M.P. 109		5	43.1	101	98.0	74.90	40-00	M.P. 40		49	06.8	111	107.9
7.40	107-40	M.P. 107.5		6	36.0	104	102.1	76.30	38-48	Witham		49	53.4	107/100	108.2
8.90	106-00	M.P. 106		7	26.4	109/101	107.1	79.05	35-68	Hatfield Peverel		51	29.4	107	103.1
10.90	104-00	M.P. 104		8	36.0	104	103.4	80.90	34-00	M.P. 34		52	30.9	111	108.3
12.65	102-20	M.P. 102.25		9	36.2	106	104.7	82.90	32-00	M.P. 32		53	42.4	68/63tsr	100.7
14.36	100-43	Tivetshall		10	33.3	108	107.8	85.15	29-60	CHELMSFORD	61.5	55	50.1	59/46tsr	63.4
16.20	98-56	Gissing		11	36.2	104	105.3	86.90	28-00	M.P. 28		57	31.0	58	62.4
17.85	97-04	Audley End		12	30.7	112	109.0	88.90	26-00	M.P. 26		59	11.3	88	71.8
19.90	95-00	DISS	15	13	38.5	106	108.8	90.06	24-67	Church Lane		59	57.5	95	90.4
21.90	93-00	M.P. 93		14	45.3	108	107.8	91.31	23-47	Ingatstone		60	46.3	90/94	92.2
23.48	91-34	Mellis		15	38.1	107	107.7	92.40	22-40	M.P. 22.5		61	29.2	90	91.5
24.90	90-00	M.P. 90		16	25.5	110	107.8	93.90	21-00	M.P. 21		62	33.5	80	84.0
26.40	88-40	M.P. 88.5		17	13.8	112/114	111.8	94.71	20-18	SHENFIELD	71	63	11.7	76	76.3
28.90	86-00	M.P. 86		18	35.7	105	109.9	95.69	19-20	Summit		63	54.9	85	81.7
30.90	84-00	M.P. 84		19	43.6	111/108	106.0	96.79	18-12	Brentwood		64	37.2	96	93.6
31.90	83-00	Haughley Jct.	22.5	20	16.5	110	109.4	98.44	16-40	M.P. 16.5		65	39.0	99	96.1
34.31	80-47	STOWMKT		21	54.1	64tsr	88.9	99.98	14-77	Harold Wood		66	40.9	86	89.6
35.90	79-00	M.P. 79		23	07.4	85	78.1	101.45	13-39	Gidea Park		67	59.9	50sig	67.0
37.79	77-09	Needham Mkt		24	20.1	104/109	93.6	102.53	12-33	ROMFORD		69	29.9	31/30sig	43.2
39.65	75-20	Baylham		25	22.5	106	107.3	103.44	11-40	M.P. 11.5		70	51.0	64	40.4
41.30	73-48	Claydon		26	29.1	69tsr	89.2	104.94	10-00	Chadwell Hth		72	08.5	81/82/68sig	69.7
42.90	72-00	M.P. 72		27	40.3	92/100	80.9	106.31	8-50	Seven Kings		73	14.2	70	75.1
45.40	69-40	East Suffolk J	31	29	19.1	64	91.1	107.54	7-32	ILFORD	81	74	10.3	85	78.9
45.90	69-00	M.P. 69		30	01.4	34	42.6	108.69	6-20	Manor Park		74	58.4	85	86.1
46.19	68-57	IPSWICH	32.5	30	33.1	37	38.4	109.64	5-24	Forest Gate		75	38.2	84	85.9
46.90	68-00	Halifax Jct.		31	24.5	64	49.7	110.94	4-00	STRATFORD	84.5	76	34.9	80	82.5
48.40	66-40	M.P. 66.5		32	34.0	83	77.7	111.94	3-00	M.P. 3		77	19.0	82	81.6
49.90	65-00	Belstead		33	35.9	93	87.2	113.79	1-12	Bethnal Green	90	78	57.4	48	67.7
								114.85	0-07	L'POOL ST-12	93	82	07.5		20.1

RPS Membership profile

RPS membership: age profile		
Age	Number	%
Under 25	2	1.1
26-35	1	0.5
36-45	8	4.2
46-55	29	15.3
56-65	52	27.4
66-75	64	33.7
Over 75	29	15.3
Not known	3	1.6
Corporate	2	1.1
Total	190	100

A question was asked at the AGM in May concerning the age profile of the RPS membership. Here is a table, which is based on the age of the member, as submitted on the membership renewal form.

The profile probably reflects the patterns representative of most railway societies. It is reassuring that our rate of renewal remains at very high levels, and that the current number represents an all-time high. The fact that we are still recruiting new members, is probably due to the publicity provided by the authors of the P&P articles in Railway Magazine, for which we are very grateful. Word-of-mouth is probably one of the more effective ways to encourage new members. If you notice train timers on railtours and heritage railways, please mention the RPS to them.

TUESDAY 21ST JULY 2015

Area Meeting

LEEDS

THURSDAY 24TH SEPTEMBER 2015

Area Meeting

Borough, LONDON

THURSDAY 29TH OCTOBER 2015

Area Meeting (**NOW 1600 start**)

BRISTOL PARKWAY

