

TRACTION

A CELEBRATION OF CLASSIC DIESELS & ELECTRICS | ISSUE 236
NOV-DEC 2016

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in the Fens

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TRACTION welcomes contributions from railway staff and enthusiasts about diesel and electric traction and railway operation. If possible articles should be sent in digital format either by email or on CD or memory stick. Photographs and slides should be scanned and also submitted in the same way. Please contact the Editor for further details and advice about scanning methods when submitting photographs.

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Welcome to issue 236 of TRACTION. To start the wheels rolling we begin with a feature about the East Anglian railway location of March in the days of Speedlink and Enterprise freight trains. In 'SPEEDLINK TO ENTERPRISE' Mark Brammer charts the turbulent course of freight operations in this part of the country. Happily, the recent redevelopment of Whitemoor Yard for infrastructure work, and the numerous container trains passing through, means that March is once again a busy location.

Andrew James looks at the performance of the preserved former Hastings Line diesel electric multiple unit No. 1001 on excursion trains in 'OUT AND ABOUT WITH 1001, THE 'GREEN MACHINE'.

'THE LIFE STORY OF 58001' is the subject of an article by Alex Fisher following the history of the first member of the Class 58s through from its construction to its use during the building of the high speed lines in France.

In 'SOUTHERN LOCOMOTIVE FINALE' John Petley traces the increased use of locomotive haulage on the former Southern Region that happened in the 1980s, followed by its inexorable decline in the late 1990s.

In TRACTION MODELLING I look at one of my favourite railway locations in 'MACHYNLLETH - A MID-WALES RAILWAY CENTRE'. Although I didn't visit during the years of the Class 25 and 37 hauled summer Saturday holiday trains, I've always felt it would make a marvellous subject for a medium sized layout, especially in N Gauge.

A modeller who is equally fascinated by a real location is Andy Gibbs. In 'KENSINGTON OLYMPIA - THE CARFLAT EARTH SOCIETY' we begin what is hoped will be a series of articles about the layout's construction.

In one of those amazing coincidences that sometimes occur, driver Mick Humphrys also submitted his article 'MANNING THE MOTORAILS' at the same time as Andy. And where did Mick work as a second man: on Class 25s hauling Motorail trains to Kensington Olympia!

Electric multiple units don't seem to attract the photographer's interest as much as perhaps they deserve but, fortunately, Gavin Morrison recorded the 'GREAT EASTERN EMUS' not only on their original workings out of Liverpool Street but also when some were later transferred to work in the north of England.

This issue's overseas article by Colin Boocock looks at the 'EARLY BELGIAN DIESELS'. This fascinating collection of locomotives deserves to be better known by British enthusiasts; some can still be found at work today.

Mention the word 'hydraulics' to many enthusiasts and memories of 'Westerns' on expresses in the West Country spring to mind. However, the various classes were also much used on less glamorous workings. In our photo feature 'HYDRAULICS ON FREIGHT' the spotlight is turned on some of these duties.

The next issue of TRACTION, issue 237, will be on sale on 2nd December.

Stephen

We are pleased to announce that TRACTION has a new website which can be found at: www.traction-magazine.co.uk

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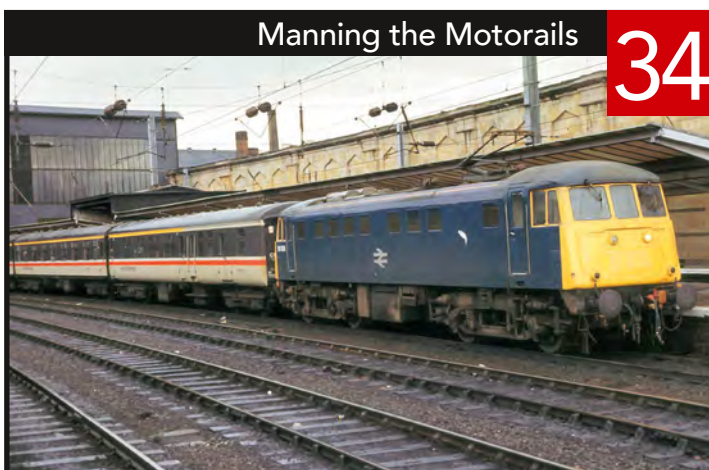
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Cover:

47225 is seen at March East heading the 14:40 Norwich to Whitmoor trip freight on July 12th 1990. Mark Brammer

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Speedlink to Enterprise

by Mark Brammer

1 977 was the Queen's Silver Jubilee year and the year the air-braked Speedlink freight services started. There were air-braked freight services before this at March, using March Down yard near the station, but these moved into Whitemoor Up Yard and Up Departures sidings around the same time that Speedlink started.

Speedlink was an air-braked wagonload freight service, whereby freight trains comprised of individual wagon consignments for customers. Each train load could consist of several different customers' traffic so this required marshalling yards. There were twelve main marshalling yards originally: Whitemoor, Warrington, Willesden, Seven Tunnel Junction, Tyne, Mossend, Healey Mills, Carlisle, Bescott, York (Dringhouses), Toton and Doncaster. Each of these yards was to receive at least one train a day from the other ones. Wagons were fed to the yards by local trip workings in the afternoons and evenings, then travelled overnight on the network to the other Speedlink yards where they

were sorted for their correct destinations and dispatched by local trip working to arrive with the customer before midday.

After rationalisation and modernisation of Whitemoor Junction and March West in the mid to late eighties, both the East and West curves were singled, together with the lines into March Motive Power Depot and Whitemoor Yard. Norwood Road crossing, which was a manned gated crossing, was upgraded and converted to automatic half barriers. March West and Whitemoor Junction signalboxes were decommissioned and the control of all signalling was taken over by March East.

March East now controlled the entry and exit to Whitemoor Yard, March MPD, both curves, the Wisbech Branch and the main line. Its workload increased dramatically and a new post of 'box lad' was created to keep the train register in order and take phone calls. The working for each Speedlink train was a little labour intensive because when trains arrived into Whitemoor from either the East or the

In the last few weeks of Speedlink, 37298 is seen coming off the main line at March East and onto the East curve for Whitemoor in charge of 6H96 the 16:04 from Kings Lynn.

West Junctions the engine would be taken off and sent to the depot for either fuel or crew change. After the train had been remmarshalled, the engine would then return to the yard. This way of working created four movements for the signaller (train in, engine out, engine in, train out) which could be very tricky during busy periods as only one movement could take place at any one time on single lines.

With the advent of freight sectorisation in the late 'eighties, British Rail freight traffic (BR Railfreight) was reorganised from a regional structure to operational sectors and then into business sectors. This was the government's way of marketing freight traffic ready for privatisation and block trains were the order of the day.



ABOVE: 23.05.01. 56103 is working 6E77 passing over the Twenty Foot River at Beggars Bridge with a light load of OTAs.

RIGHT: 14.04.99. 47763 heads 6E77 across the Fens. The first wagons are empty, the yellow ones are containerised tanks of molasses and on the rear the OBAs are loaded with mud oil from Lowestoft for Aberdeen.

Mr. Freeman, Secretary of State for Public Transport (www.publications.parliament.uk) (1) announced in the House of Commons on the 6 June 1991, "The Speedlink wagonload network has losses of well over £30 million a year on a turnover of £45 million. To compete with road, rail has to be efficient, competitive and commercial. British Rail plans to develop train load freight services rather than individual wagon services".

This led to the cessation of Speedlink on July 8th 1991 and heralded the end of Whitemoor Yard, together with mixed wagon load freight trains in the March and Fenland area.

This was a huge disappointment for railway workers, not just in Speedlink yards, but everywhere in the country. Rail workers, (and enthusiasts like myself), whose jobs were not at risk, still felt a great sense of loss. The traffic in the March area after Speedlink now only consisted of the normal 'Sprinter' passenger



services, block trains and a few Freightliners which were very monotonous compared to what it had been. In the signal box at March East there was a huge change in the work pattern, especially on the afternoon and night shifts. The night shift was the worst affected, dropping from between sixty and eighty movements a shift to about twenty and the afternoon shift

didn't fare much better; subsequently the 'box lad's job was axed.

With sectorisation and privatisation now up and running, 'Transrail' based at St. Blazey in Cornwall, seemed to be the only company interested and running long distance wagonload freight trains. The company called this service 'Enterprise'.



18.04.01. 47746 waits in Brandon Yard for its consist of OTAs to be loaded before being tripped back to March and then attached to 6E77.



ABOVE: 24.03.99. 47765 is heading 6L76 at Middle Drove near March. The OBAs are from Aberdeen and will be detached at March and later tripped to Lowestoft.



LEFT: 23.02.99. 31154 is seen just after departure from March Up Yard at Badgeney Road with the OTAs that have been detached from 6L76 at March. They are now being tripped as 6G31 to Brandon.

'Transrail' and two other companies 'Mainline Freight' and 'Loadhaul' were purchased by a consortium led by Wisconsin Central in February 1996 and later that year were amalgamated to form a new company, English, Welsh and Scottish Railway (EWS).

Prior to the purchase of the above companies, North & South Railways, (as it was known

before EWS) purchased 'Rail Express System' in December 1995 and inherited a large fleet of locomotives, a pool of which were Class 47s and had a reputation for being unreliable.

For several years, Whitemoor Yard was left dormant and took on a whole new look as nature claimed it back, turning it into a natural haven for wildlife. The once modern M.P.D.

was razed to the ground and wagonload freight traffic seemed to be lost forever in the Fens. Then, in the late nineties, rail workers and enthusiasts in the March area started to hear rumours EWS were in talks with the Potter Group at Ely to start a new wagonload service from Healey Mills to their Ely Distribution Centre at Ely North Junction and were going to use 'Rail Express System' (RES) Class 47s as motive power.

In October 1997 a new service was timetabled; 6L76 07:32 Healey Mills to Ely North Junction and returning as 6E77 departing Ely at 12:58. At first, and powered by RES Class 47s, there was minimal traffic on both the outward and return trains, sometimes just a single container, but this did increase after a few months. A new contract was agreed for between 10,000 and 15,000 tonnes of paper per annum from the Biberist Mill in



07.04.00. 37379 enters a very run down looking March station on 6L76. This day's traffic was paper and empty molasses.



ABOVE: 26.04.99. 47776 passes March West with a typical 6L76 consist. The first eight wagons are carrying paper and timber. Behind the vans are yellow empty molasses containers with OTAs for Brandon are on the rear.

Switzerland to be delivered to Ely by rail via the Channel Tunnel starting in April 1998. After a while, due to an increase in Channel Tunnel traffic and logistics, the train was re-timetable to start from Doncaster Belmont Yard with a departure time of 07:56.

Other traffic now included animal feed which was a by product of the sugar beet factories. This was loaded at Ely as well as containerised molasses tanks. Empty OTA wagons in the consist from Doncaster were detached at March Up Yard and tripped to Brandon Yard to be loaded with timber from Thetford Forest then tripped back to March Down Yard to be picked up on the return 6E77. There was also a short term contract to move mud oil from Lowestoft to Aberdeen in OBA wagons which

were again detached and attached at the March yards.

For a few years things looked good, but logistics had to be improved with the Channel Tunnel traffic so, instead of this traffic going from Wembley to Ely via Doncaster, a direct service was established between Wembley and Ely via Cambridge. 6L76 paid the price and was withdrawn from the timetable about 2002, putting an end, once again, to wagonload freight in the March area.

On a happier note, around this time, the redundant Whitemoor Yard was being surveyed ready for a new infrastructure depot. This was completed and opened in 2005 and now handles significant amounts of traffic.

BELOW: Photographed from March East signalbox 47298 is seen joining the main line from the East curve with the Whitemoor to Kings Lynn Speedlink trip.



The line from Felixstowe, through March, to Nuneaton was also upgraded ready for the larger 9' 6" containers with more container trains timetabled to run on this route instead of via the busy Great Eastern Main Line through London and the West Coast Main Line.

Today, March and the surrounding Fenland enjoys a great diversity of trains....**(Ed. On many days this traffic amounts to over forty trains in twenty four hours)**

Further reading

(1) <http://www.publications.parliament.uk/pa/cm199091/cmhansrd/1991-06-06/Writtens-2.html>

27.09.2000. 60006 is a rare visitor to March on 6L76 at March West with a light load of three wagons conveying paper.



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Out and about with 1001, the 'Green Machine'

by Andrew James

From the perspective of performance on today's Network Rail, 1001, the green Hastings diesel electric multiple unit (DEMU), is something of a culture shock. That makes it quite alluring in my eyes, conveying a sense of how things used to be: a living time machine in other words. The effect of gravity is much more nuanced with this unit than with modern traction and even an infinitesimal gradient can cause this unit to slow a little as the logs below will testify.

The biggest factor that has affected traction performance since the advent of *Rocket* is the increase in the power to weight ratio of motive power. The 1957-1958 built Hastings units were never that well endowed in this respect, having a mere 1000 BHP for a combined weight of 225 tons, or 4.4 horsepower per ton in real terms. Paradoxically, by the standards of the late fifties, this was a good if not an exceptional figure in comparison with steam, but by today's standards this borders on the chronically underpowered.

Some interesting figures on the Hastings units' performance were quoted in the April 1961 issue of *Railway Magazine* by O.S.Nock. These were derived from a paper given by Mr. W.J.A.Sykes, the-then Chief Mechanical & Electrical Engineer of the Southern Region. The two quoted ones for the relevance of this article are 69 mph on level track and 58 mph on a 1 in 250 gradient. The nominal maximum was set at 75 mph which reflected the former Southern express units such as the PUL/PAN EMU units.

This unit in preservation has run as a five car consist on occasion and so one would expect figures a little better than this from the increase in the power to weight ratio. Paradoxically, one thing to bear in mind, as in all instances of multiple unit trains, is that shorter formations incur a disproportionate increase in air resistance. Therefore the increase in the power to weight ratio, which happens due to there being less weight, is negated by this factor. Thus the unit requires more power, pro rota, to drive itself.

Class 202 Hastings DEMU No. 1001 passes between Bromley South and Shortlands on 21st December 2008, and heads for London Victoria on the first leg of a Hastings - London Victoria - Folkestone Harbour - London Victoria - Hastings charter. This was the first mainline run for the unit for some three years. Driving car No. S60118 'Tunbridge Wells' leads with No. S60116 'Mountfield' on the rear. *Brian Morrison*

By contrast, today's Class 375 EMUs on the same route have a performance curve which goes above and beyond their nominal maximum of 100 mph, although they are not authorised to reach this speed beyond Tonbridge on the continuation to Hastings. The four car version has a power to weight ratio of 11.5 hp per ton, which is more than two and a half times that of a Hastings unit!

On the neighbouring Kent Coast route, by way of an example, a '375' can accelerate to 100 mph from a standing start at Ashford up the 1 in 250/280 ascent to Westenhanger. This suggests that, on level track, they should be able to exceed 110 mph at the very least. The corresponding speed up to Westenhanger for the earlier form of traction would be around 55-57 mph. Incidentally, Hastings units did have regular turns to Dover in the era before electrification of this route.

From the perspective of acceleration, a '375' will reach 70-72 mph in a mile, whereas a Hastings unit will reach around 40 mph! These

examples are an eloquent testimony to how this factor has transformed performance today.

The Hastings Diesels group deserve a lot of credit for the restoration work they have carried out on this unit and the imaginative itineraries they provide. They are also very reasonably priced by today's rail tour standards and this unit generally gives great value for money in its own self-deprecating manner, being chronically underpowered. This is a big plus if you want to experience flat-out running for the longest duration, which yours truly certainly likes.

Sitting in this venerable machine in some of the trailers where Trojan moquette is still fitted, certainly evokes a degree of nostalgia to the writer. This was surely the hardest wearing material in the universe and gives us a clue as to why BR utilised so much of it in the sixties and seventies. The seating itself is somewhat cramped, reflecting the compromise made by designers to fit the units into the restricted clearances south of Tonbridge. This resulted in the coach bodies having to fit a narrower profile, as I'm sure many readers of TRACTION are aware. As a result, conditions on board can be euphemistically termed as 'cosy'. The wooden panelling in some of the coach interiors also conveys craftsmanship to the traveller. This is in direct contrast with the sterile, clinical interiors of today's rolling stock which overindulge in copious amounts of plastic.

Then, of course, there is the noise that emanates from the power cars. This is evidence of its English Electric stable, a trifle more muted than a Class 31 or a 37, but still acoustically satisfying to the senses in conveying a sense of endeavour. My own

favourite stretch is on the 1 in 47/53 climb out of Tonbridge and the subsequent climb to High Brooms which meanders on a serpentine course. I always make a 'beeline' for the door window here because you can hear the power cars gradually burbling away to great effect in perfect unison as the speed very gradually rises to a maximum of around 37-40 mph by the time the latter station is reached.

In the last years before displacement by EMUs on the Hastings route, in May 1986, these units did a fair amount of work on the rail tour circuit. Their most dedicated follower, Michael Oakley, timed perhaps the ultimate Hastings unit experience. This was the 'Long Thin Drag' rail tour which was a mammoth affair from Hastings to Carlisle and return on the 12th April 1986.

Probably as insurance, units 1032/1011 were bolstered by two power cars from 1001 to guard against failure, I suspect, and fittingly it is the latter unit which continues to provide entertainment to the timing fraternity today. On these tours there were at least two authenticated instances of 89 mph on two separate occasions. In today's tightly regulated industry such excesses are largely a thing of the past. However, there is plenty of collar work to be done at below its 75 mph limit as the logs below will testify.

Tables 1 to 5 aim to give a flavour of a day's travel on this unit. From the perspective of performance the unit has, occasionally, been a little below par when compared with the predictions given in the 1960 Sykes paper, but not enough to cause any undue disappointment. A factor that should be mentioned is that the unit does run in the

winter and as a result the electric train heating (ETH) can drain a certain percentage from the already overworked 4SRKT engines.

In terms of a marathon sprint, table 1 surely represents the zenith of Hastings units running with this monumental effort on the West Coast Main Line. Fittingly, it was also timed by the most prolific of recorders on these units, David Lloyd-Roberts. The aforementioned gentleman commuted on these units in three spells from his home in Tunbridge Wells to Charing Cross. The longest period was the last and lasted for over 18 years from February 1968 to their displacement in May 1986. On a reckoning of around 230 days commuting a year this is over 4100 logs in only one direction!

The ascent from Betley Road to Madeley up the 1 in 177 recalled good steam running from this far-off era and the continuation to the outskirts of the capital was fairly typical of the maximum speeds recorded in the pre-diesel era. Signals hindered progress after Tring, but 1001 had been on full power for well nigh on 2 hours allowing for the two diversions to the slow line. This was radically different in nature to their tenure on the Charing Cross to Hastings services where the duration of effort would rarely exceed 30 minutes. It was probably the longest non-stop run ever achieved by a Hastings unit.

Hastings DEMU No. 1001 climbs away from Folkestone Harbour on 21st December 2008, having travelled from Hastings to London Victoria and then to the Harbour branch, returning via the same route. Brian Morrison



Table 1	Date	12/07/2014		
	Train	17.16 Crewe-Hastings		
	Load	6/238/252		
	Recorder	D.L.R.		
M C		[sch]	m s	mph
158 03	Crewe		0 00	
156 20	Basford Hall		3 16	43
153 20	Betley Road		7 34	52/51
149 74	Madeley	[9]	11 06	51/56
147 40	Whitmore		13 55	63
145 66	Stableford		15 28	71
143 30	Standon Bridge		17 25	76/78
141 09	Badnall Wharf		19 11	78/81
138 67	Norton Bridge	[13]	20 57	73/78
133 43	Stafford	[17]	25 07	78/73
129 40	Milford		28 19	75/76
129 01	Shugborough NEP		28 44	76 (slow line)
127 08	Colwich		30 25	50
124 20	Rugeley Trent Valley	[28]	33 26	67
116 20	Lichfield Trent Valley		40 28	76
113 40	Hademore		42 17	81
110 00	Tamworth		45 03	76
106 40	Polesworth		47 50	74/73
102 20	Atherstone		51 47	56/60/72
97 04	Nuneaton	[52]	56 21	69
93 40	Bulkington		59 35	66/70
91 29	Shilton		61 31	64
83 20	Trent Valley Jct		69 23	51 (slow line)
82 40	Rugby	[63]	70 24	42
78 51	Watford Lodge		77 40	60
75 40	Long Buckby	[75]	80 26	73/74
72 00	Althorp Park		83 06	80
65 68	Northampton	[85]	89 24	18 (slow line)
59 64	Roade		97 48	59
56 58	Hanslope	[95]	100 39	74
54 56	Castlethorpe		102 12	80/78
52 33	Wolverton		103 58	70
49 66	Milton Keynes	[102]	106 11	70/59
46 58	Bletchley	[106]	110 01	62
40 12	Leighton Buzzard		115 54	69/70
36 09	Cheddington		119 21	67
31 56	Tring	[121]	123 29	64/sigs
27 73	Berkhamsted		127 01	58/sigs
24 40	Hemel Hempstead		131 47	43
20 76	Kings Langley		135 22	68/73/sigs
17 35	Watford Junction	[144]	140 44	16
16 00	Bushey		142 46	54
14 57	Carpenders Park		144 04	58/75
11 30	Harrow & Wealdstone	[151]	147 01	70
8 00	Wembley		152 18	sigs/16/14
7 44	Sudbury Jct		155 19	
? ??	Drop off pilot man		155 36	

Table 2	Date	04/07/2009	
	Train	16:50 Nottingham-Hastings	
	Motive Power	1001	
	Load	5/204/220	
	Recorder	A.James	
	M C	m s	mph
	76 25	Peterborough	0 00
	75 00	Fletton Junction	2 51 50
	72 63	Yaxley	5 13 63/74
	69 26	Holme	8 07.5 74
	67 27	Connington South	9 46 73
	66 00	Mp	10 55 69
	63 40	Abbots Ripton	13 16 61
	62 00	Leys Summit	14 43 63
	60 00	Mp	16 25 73
	58 67	Huntingdon	17 20 78/69/74
	55 72	Offord	19 45 72
	54 07	Paxton	21 15.5 71/72
	51 56	St Neots	23 18.5 69/75/E*
	47 38	Tempsford	26 48.5 73
	46 30	Everton	27 43 73
	44 10	Sandy	29 36.5 70/72
	41 15	Biggleswade	32 06.5 71/67
	37 05	Arlesey	35 41.5 71
	35 50	Three Counties	36 53.5 71
	31 76	Hitchin	40 12.5 63
	28 50	Stevenage (old)	43 28 60
	27 46	Stevenage	44 27 71/62
	25 03	Knebworth	46 43.5 67
	21 76	Welwyn North	49 22 70/59*SL
	20 26	Welwyn Garden City	50 59.5 65/73
	17 56	Hatfield	53 13.5 69/64
	15 46	Welham Green	55 00 70
	14 39	Brookmans Park	56 12.5 54
	12 59	Potters Bar	58 05.5 58
	10 44	Hadley Wood	60 11.5 65
	9 14	New Barnet	61 27.5 65
	8 28	Oakleigh Park	62 13.5 62/65
	6 37	New Southgate	63 59.5 64
	5 00	Alexandra Palace	65 27 59/25
	2 41	Finsbury Park	70 12 28
E* eased power			
*SL slow line			

The writer's timing of a run on the neighbouring East Coast Main Line in table 2 was somewhat shorter in duration, but as exhilarating to record. This time the formation was a slightly shortened five car consist, but plenty of effort was required from Peterborough to Welwyn Garden City. The only slight easing was coming down the 1 in 200 from Leys summit to Huntingdon and a momentary hiatus in full power between St Neots and Tempsford. I vividly remember hammering along the fast line on this trip and the sight of A4, *Bittern* standing in Westwood Yard (Peterborough) with another rail tour heading south.

On the level section from Holme to Connington South the attainment of 73 mph at the latter was good and can be compared with the predicted 69 mph for a six car formation. The 1 in 200 ascents to Abbots Ripton and to the site of the old Stevenage station, were taken at around 60 mph: this compares with a predicted 58 mph on a 1 in 250 rise so this suggests that '1001' was performing on spec.

I have shown a further effort on the ECML, in table 3, this time with a six car formation. I cannot say for sure why we were brought to a stand at Alexandra Palace, but I suspect it was to take on a pilot man as immediately prior to this the unit had traversed the North London line and this is, I guess, where the route knowledge of the previous driver would end.

Table 3	Date	26/03/2011	
	Train	06.48 Hastings-Dereham	
	Motive Power	1001	
	Load	6/241/254	
	Recorder	A.James	
	M C	m s	mph
4 77	Alexandra Palace	0 00	
6 37	New Southgate	3 11	41
8 28	Oakleigh Park	5 42	50/48
9 14	New Barnet	6 43.5	49
10 44	Hadley Wood	8 20.5	53/52
12 60	Potters Bar	10 52.5	53/61
14 39	Brookmans Park	12 37.5	56
15 46	Welham Green	13 45	62
17 56	Hatfield	15 39.5	72/74
19 00	Mp	16 46.5	64/sigs
20 26	Welwyn Garden City	18 39	27
		sig stop	
21 76	Welwyn North	27 31.5	35
23 67	Woolmer Green	29 52	49
25 03	Knebworth	31 12.5	55/64
27 48	Stevenage	33 39.5	61
31 72	Hitchin	40 12	

Table 4	Date	26/03/2011	
	Train	15:05 Dereham-Hastings	
	Motive Power	1001	
	Load	6/241/254	
	Recorder	A.James	
	M C	m s	mph
113 70	Wymondham	0 00	
111 27	Spooner Row	5 15.5	50
108 18	Attleborough	8 24	69/71
107 22	Poplar Farm	9 12.5	70/72
104 44	Eccles Road	11 31	68
103 00	Mp	12 52	73/75
101 38	Harling Road	14 05.5	74
100 00	Mp	15 21	69
98 00	Mp	17 05.5	66/64
96 00	Mp	18 56	67
93 50	Thetford	21 09.5	57
91 15	Two Mile Bottom	23 31	69/73
88 72	Santon	24 30.5	72
86 32	Brandon	27 26	75/76
84 00	Mp	29 20.5	74
82 44	Lakenheath	30 33	68
70 30	Ely	50 48	

The ascent over the Northern Heights to Potters Bar was fair if not outstanding work and the summit of the 1 in 200 at Potters Bar was surmounted at 53 mph. The dip after Hatfield saw the unit get within touching distance of its 75 mph limit, before signals intervened after Mp 19. Rail tours these days, as I'm sure many readers of TRACTION are aware, are afforded low priority in an increasingly congested network where paths are at a premium.

Table 4 is the return journey of table 3 and features the Norwich to Ely route from Wymondham. The route in 2011 still boasted semaphore signalling and even some extant telegraph poles, particularly in the Wymondham area and gave a very sixties retro feel in all senses on the occasion of my visit.

The line from Wymondham to Mp 96 ½ undulates and thereafter features slight downgrades and a long level section on to Ely. The rise up to Mp 98 on the short 1 in 217 was surmounted at 66mph, falling slightly thereafter. After the restriction at Thetford, speed rose to 69 mph down 1 in 267 to Two Mile Bottom and then continued to rise down the more shallow descent towards Brandon.

The gradual ebbing of speed afterwards reflects the profile which is on level track south of Mp 85 ½ for over 10 miles. The attainment of 68 mph at Lakenheath is very close to the prediction given in the 1960 Sykes paper. The unit had to reduce to the 45 mph limit south of this point due to the spongy nature of the track bed and hence no more timing points are shown on the remainder to Ely.

Table 5 takes us over the Lickey incline and this really did challenge the unit somewhat. A herculean struggle ensued against the formidable presence of gravity and speed rapidly dwindled to 17 mph at Mp 54 with a very slight reduction to 16 mph at Blackwell at the summit. First generation DMUs by comparison from a standing start at Bromsgrove generally managed to get to 22-25 mph by the time they got to Blackwell with a power to weight ratio not much better than '1001'. This suggests it was a little below par, and was perhaps suffering from field diversion problems during the ascent on the 1 in 37.7 gradient.

Returning back on the former GWR main line through Leamington Spa saw the unit gradually accelerate up the 1 in 187 (in part) to Fosse Road from 33 mph to 55 mph, before falling slightly on the upper section of the 1 in 187 to 53 mph at Mp 101 ½. The 1 in 251 up to Fenny Compton was taken in good style at 63 mph, before a maximum of 78 mph was recorded between Cropredy and Mp 88 on the descent to Banbury.



Hastings Unit No. 1001 passing Tarporley, between Crewe and Chester, with a special from Hastings to Chester on the 17th August 1996. Gavin Morrison

Table 5	Date	03/10/2009		
	Train	16.33 Worcester S.H.-Hastings		
	Load	5/204/220		
	Recorder	A.James		
	M C	m s	mph	
57 40	Stoke Works Jct	14 34.5	34**	
55 31	Bromsgrove	17 29.5	49	
54 40	Mp	18 58.5	24	
54 00	Mp	20 31.5	17	
53 20	Blackwell	23 17	16	
51 64	Barnt Green	25 40.5	50	
49 20	Longbridge	28 32.5	61/sigs	
42 24	Birmingham New Street	45 58		
106 06	Leamington Spa	56 39.5	33***	
10 5 00	Mp	58 16.5	47	
104 00	Mp	59 30	53	
102 40	Fosse Road	61 09.5	55	
101 40	Mp	62 16	53	
99 73	Southam Road	63 59	58/68	
96 00	Mp	67 37.5	65	
94 77	Fenny Compton	68 36.5	63	
92 25	Claydon	71 02	70	
90 00	Cropredy	72 58	77/78	
88 00	Mp	74 31	77	
86 14	Banbury	76 59		
** passing time from Worcester Shrub Hill				
*** passing time from Birmingham New Street				

Table 6	Date	14/03/2002		
	Train	19:10 Charing Cross-Hastings		
	Load	6/230/240		
	Recorder	L.Allsop		
	M C	m s	mph	sch
1 70	London Bridge	0 00		
4 70	New Cross	4 34.5	47	
5 44	St Johns	5 27	44/41	
7 13	Hither Green	7 39.5	46	
8 78	Grove Park	10 00.5	45	
10 20	Elmstead Woods	11.43.5	43	
11 20	Chislehurst	12.58.5	50	
12 51	Petts Wood	14 37	52	
13 66	Orpington	15 55	56	
15 24	Chelsfield	17 57		[18]
15 24		0 00		
16 43	Knockholt	2 45	37	
18 58	Polhill SEP	5 15	70	
20 42	Dunton Green	6 47	71	
22 08	Sevenoaks	8 39		[8]

Table 7	Date	05/03/2002		
	Train	10:37 Charing Cross-Hastings		
	Load	6/241/250		
	Recorder	D.Ashley		
	M C	m s	mph	sch
22 08	Sevenoaks	0 00	4L	
27 00	Hildenborough	5 33	83/87	
28 76	Medway Bridge	7 00	62	
29 42	Tonbridge	8 25		[9]
29 42		0 00		
30 32	Somerton SEP	2 10	30/42	
32 67	High Brooms	6 21		[6]
32 67		0 00	sig stop	
34 31	Tunbridge Wells	7 45		[4]

Acknowledgments

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The former train operating company Connex also had this unit on hire for at least five years. Most workings were on the Marshlink route from Ashford to Hastings, which, being subject to a 60 mph limit, hindered performance somewhat. However, for a spell in 2001-2002, this unit worked selected diagrams on its old stamping ground from Charing Cross to Hastings due to a dire shortage of electric units caused by teething problems with the newly introduced Class 375s.

Quite what the regular clientele thought of this turning up in the 21st Century on the journey to Hastings would be interesting to know. RPS archivist Lee Allsop was on hand to record this effort in table 6.

Performance seemed a bit laboured on the 1 in 140/120 ascent from Hither Green to Elmstead Woods, but better after Chislehurst and 56 mph was reached on more gentle grades at Orpington before the Chelsfield stop. Possibly the driver was sighting double yellow signals earlier in the journey.

From the summit at Knockholt, the line descends on the 1 in 143 through Polhill tunnel and here the veteran quickly accelerated to 70 mph before Dunton Green on the more shallow grades. A maximum of 71 mph was reached before the Sevenoaks stop.

In table 7, the present Editor of the RPS journal *Milepost* was on hand to record another run on the continuation from

Sevenoaks to Tunbridge Wells. The service left the former 4 minutes late and, quite clearly, the driver was determined to reduce the arrears as quickly as possible. A hurricane ascent ensued down the 1 in 144/122 to Hildenborough with speed rising to a maximum of 87 mph thereafter with a quick approach to Tonbridge. Despite this level of energy only half a minute was cut from the schedule.

The restart from Tonbridge was accompanied by a maximum of 42 mph up to High Brooms, which can be regarded as excellent work. Gradients over the last two miles to High Brooms average around 1 in 100. By comparison, in the Sykes paper the predicted speed was 40 mph on a gradient of this inclination.

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The life story of 58001

By Alex Fisher

When a picture of a model Class 58 appeared in the railway press it no doubt came as a revelation compared to the then current BR Blue monotony. Its modular design and striking new livery was set to reinvigorate the Railfreight sector and, it was hoped, stimulate export orders. BR's initial order was for three locomotives but this was soon increased to 14 and by the end of 1982 had reached 35. Ultimately, the order reached 50 but there were never any of the hoped for export orders.

58001 saw its frames laid in Doncaster fabrication shop on the 26th July 1981 but, as the first of its class, it suffered a protracted build. By February 1982, assembly had moved onto wiring the modules; at this time the load-bearing frames were partially completed. On the 18th April 1982, it was still just a frame with an engine whilst the other five modules: number 1 cab, radiator, turbocharger, electrical equipment and number 2 cab, were nearing completion. By 16th June, the cabs had been built and were ready for grafting on the locomotive. On 9th July, 58001 needed only its bogies and side panels fitting whilst 58002 was still at the underframe stage. On 16th July, 58001 was lowered onto its bogies for the first time for height adjustment and it was expected that the locomotive would be ready by the end of August.

58001's first public rollout came on Thursday 9th December 1982 and, by then, inside

Doncaster Works, construction was visible on locomotives up to 58008. Doncaster Works handed over 58001 in a ceremony during which Mr. Henry Sanderson, BR's Freight Director, unveiled the cab side Railfreight sticker, thus causing some confusion as to whether the locomotive should be regarded as officially named *Railfreight* or not. Of note was that the original version of Railfreight logo only had the word in black letters on the yellow cabside, a

ABOVE: 58001 seemed to have lost part of its identity when photographed outside Toton depot, on the 11th August 1984. The place where the digit '1' was, is just visible as a faint mark. railphotoprints.co.uk - John Chalcraft

BELOW: 58001 is seen under construction at Doncaster Works on the 21st August 1982. Dave Higson





black border was added around the name but they were viewed as not being eye catching enough so, instead, white letters were used on a red background with a white border.

The locomotive was noted on the 1st February 1983 undergoing brake tests at Doncaster Works. 58001 was officially added to BR's stock on 6th February 1984. The first photographs of the locomotive out on the main line were taken when it was seen being hauled, with its engine running, from Doncaster to Derby RTC by 31182, along with a brake

van at the rear, on the 12th February 1983. On the 18th it was noted near Derby being dragged by a Class 45 and on the 23rd it was hauled back to Doncaster as the 9Z58 Derby RTC to Doncaster by 25258 and was noted at Chesterfield at 12:53 heading north.

With the locomotive back at Doncaster works undergoing brake tests, it was publicly displayed outside the paint shop with its doors open. It is believed that the locomotive's first run with a train was a Doncaster to Lincoln and Lincoln to Belmont Sidings test train of

ABOVE: 58001 is seen in typically grubby condition wearing Railfreight Coal livery at Bescot depot on June 25th 1989.

John Dedman

BELOW: Doing what it was designed to do 58001 brings another empty rake of MGR wagons into Bescot yard on July 16th 1992.

John Dedman



A day in the life of 58001

The following is a round up of a typical day in the life of 58001 starting on Monday 7th December and finishing on Tuesday 8th December 1992. 58001's day started with driver Reed who had a fairly leisurely afternoon after booking on at 12:00. He took 58001 off Toton shed at 12:55 and over to the New Bank yard where he spent 30 minutes shunting and preparing 6A31 ready for departure to Cotgrave Colliery. Into the afternoon and 58001 was ready to depart with a rake of 42 HAAs as the 6A31 14:40 SX Toton to Cotgrave Colliery. As the train left Toton it went onto the Up/Down Independent line, past the wagon works and onto the High Level Goods line towards Meadow Lane Junction where trains either head south for Trent and Ratcliffe Power Station or eastwards for Long Eaton Junction and Nottingham station. The train then rattled through Attenborough and Beeston stations before slowing for the run past Lenton triangle and Nottingham station.

Throughout this time the train has been controlled by Trent Power Box and, although the former Midland Railway Sneinton signal box lay ahead, by that time it was only a crossing box and worked under the auspices of Trent. The first signal box proper was Netherfield Junction signal box, followed by Rectory Junction where the line for Cotgrave diverged. Even by 1992, little trace of Colwick Yard, once one of Europe's largest marshalling yards, existed although the two roads into the oil depot, along with a couple of cripple sidings, were still in use. At Rectory Junction the connection to Cotgrave Colliery crossed a strangely modern looking viaduct over the River Trent. This, together with another viaduct further to the east, was built for the branch's opening, and dated from the 1960s when Cotgrave Colliery was one of a series of modern collieries to open. The colliery boasted such luxuries as showers and changing facilities, thus allowing miners to depart as clean as they had arrived. 6A31 arrived at Cotgrave at 15:10 and, after loading, it was ready to depart at 17:50. The relatively short and quick run to Ratcliffe took the train back to Rectory Junction, then Netherfield Junction and into Nottingham station. At Trent Junction, Ratcliffe power station was in sight which was reached a mere 40 minutes from leaving Cotgrave. After two hours of unloading, the train was able to depart for Toton North Yard at 20:30 where it arrived just 10 minutes later.

58001 had a few hours lay over until the next MGR run and, at the very end of the day, driver Griffiths booked on at 23:26 for a Bentinck Colliery trip. In the early hours of Tuesday morning, 58001 left the North Yard as an on time departure at 00:41 with 42 HAAs on 7A29 to Bentinck Colliery. Pinxton was reached at 01:10 and after a 5 minute stop to pick up the travelling shunter and branch single line staff, the train was on its way to Bentinck. It was quite a climb to Bentinck Colliery and one that, even with an empty rake, would test a Class 58. With arrival at the colliery at 01:45, a fairly swift loading saw the train leave right time again for Pinxton. A slight delay leaving Pinxton meant it was a few minutes down when it left, but at 03:32 it wouldn't pose any problems.

The train then ran along the Erewash Valley back through Toton to Ratcliffe, where another swift turn around saw the train unloaded and depart just 44 minutes after arriving, an exemplification of the efficiency of MGR working if ever there was one. From Ratcliffe it was back to Toton North Yard and then light engine to Toton depot at 05:40. It was another shift done for driver Griffiths and another 24 hours chalked up in the life of 58001.



ABOVE: 58001 heads a loaded MGR at Shirebrook South Junction on 29th January 1993. Dave Higson

OPPOSITE PAGE: On 8th July 2010, 58001 puts out an enormous cloud of exhaust as it restarts a 2000 tonne ballast train after a long period of idling. 58013 is on the rear of the train. The location is Laire on the Rhin-Rhône high speed line between Dijon and Muhlhouse in eastern France. A.P. Sayer

BELOW: 58001 is on the lifting jacks at Toton depot for a bogie change on September 6th 1992. Dave Higson

loaded HAA wagons plus a brake van, on the 31st March 1983. Although the locomotive was noted back at Doncaster Works in April, on the 21st it hauled a test train of eight first class Mark 2 carriages along the East Coast Main Line from Doncaster to Peterborough and back. It is thought that this was the first time a Class 58 had hauled passenger stock.

The 29th saw it at Immingham Docks having worked from Doncaster. In May the locomotive was back at Doncaster Works and on the 4th was working in multiple with 58002, probably the first time two Class 58s had done so. In a working closer to Toton, where all the Class 58s would go on to be based, it was noted at Trowell Junction with a Derby research vehicle heading north at 14:30 on the 24th May 1983. By the August of 1983 the wheelslip problems the class would suffer from were beginning to be diagnosed and the locomotive was being used on daily trips from Toton Yard hauling test coach ADB975290 and 26 Merry-go-round (MGR) wagons to Cricklewood and back as part of the investigations. The testing took 58001 through Burton-on-Trent with a test coach on 31st August. Other tests saw the locomotive working 1Z21 through Chesterfield with Test Car 6.



It wasn't until 1984 that 58001 finally settled down to MGR workings, although the highlight of its year included the 19th October when, unusually, it had charge of the 6M24, 05:15 Stoke Gifford to Wolverton ARC instead of the booked pair of Class 37s. It was running two and a half hours late but nevertheless did work the 11:52 return train. It also hauled the 14:00 Wolverhampton to Euston which had been diverted into Paddington on the 9th December. Boxing Day 1985 saw 58001 on Toton depot along with eight other classmates.

The following years were fairly uneventful. The locomotive could be found working from Westhouses depot until its closure, and also from Barrow Hill, Shirebrook, Coalville and Toton along with trips further afield to Garston and Saltley. Two noteworthy workings in 1987 included its use on 28th March 1987 on the 4O73 Birmingham Lawley Street to Southampton Freightliner through Bedford at 18:42 and working an empty stock train into Blackpool the following day. On 17th May 1986 it was on Shirebrook shed where it was a regular performer on the collieries in the vicinity which included Shirebrook, Warsop, Bevercotes, Bilsthorpe, Bevercotes, Creswell and Sherwood. A note for modellers is that 58001 was sporting a black Toton hare sticker at this time.

On the 20th January 1988, 58002 became the first Class 58 to undergo any form of classified repair when it received an F examination in Doncaster's No.4 bay. This was followed shortly after by 58018 in lieu of 58001,

which was also due an F exam, as 58018 had suffered a major power unit failure. From the end of January 1988 the entire class were put into the Nottinghamshire Coal pool; until then 58001-19/21-35 were regarded as Toton based whilst 58020/36-49 were for Yorkshire work from Shirebrook and 58050 was still at work as a test locomotive.

Into the 1990s

The early 1990s saw 58001 appearing on Saltley depot more regularly and on 4th November 1991, along with 58009, it worked the 7V90 19:55 Three Spires to Didcot Power Station MGR. In a move away from its usual MGR workings, it was noted on the 6Z69 Bescot to Cardiff Tidal metals working from which it returned light engine on 28th February 1992. A typical day for 58001 in its Railfreight red stripe liveried days would, of course, have been working MGR traffic in the Nottinghamshire, Derbyshire and South Yorkshire coalfields. Apart from 58001's livery changing from Railfreight red stripe to Railfreight Coal Sector livery, little had changed in the first 10 years since 58001 took to the rails.

On 18th May 1993 the locomotive was a little further afield with a loaded MGR passing Shirebrook where it would most probably have been heading towards either High Marnham, Cottam or West Burton power stations. During June 1994 the locomotive was in Doncaster Works for an intermediate overhaul and, in a note for the modeller, it had its Railfreight

Coal decals removed in January 1995. A working even further afield saw 58001 work light engine from Worksop to Liverpool in order to return as the 6Z65 12:47 Allerton to Worksop Yard with 36 HAAs on 13th April 1995. In another note for the modeller the locomotive had Mainline decals applied to its Railfreight grey livery during September 1995.

On the 10th January 1997, a mere 14 years after it was first seen out on the mainline, it was stopped at Toton. The locomotive worked again, however, and with the class in demand for railtours, it worked with 56098 on the Pathfinder Tours' 'Spinning Spectre' railtour between Toton and Worksop on 19th June 1999. This tour ran from Bristol to Goole and return.

On 7th December 1997 it was noted at Leighton station at the head of an engineer's train. Towards the end of 58001's working life it was to be found on Saltley depot on 25th July 1999. 58001 was officially withdrawn on 8th October 1999 and was then laid up, although it later received a repaint of its Railfreight red stripe livery in July 2003 for the Doncaster 150 event and went on to make several appearances in its retro livery.

A further repaint occurred in July 2009 when it gained yellow ETF livery for working abroad. After several years use hauling heavy ballast and track panel trains, during the construction of the new high speed lines in France, it was stored at Alizay depot near Rouen in northern France where it remains at the time of writing.





Southern locomotive finale

John Petley reflects on the end of an era

Whether it was the Class 33s on the Portsmouth to Bristols, Class 50s on the Waterloo to Exeter line or D9000 on its summer Saturday jaunts to Ramsgate and back, many readers will have fond memories of locomotive hauled journeys on the erstwhile Southern Region. However, with the start of the winter timetable on 29th September 2002, memories would be all that were left. Not a single train operated by any of the train operating companies that serve this area would be diagrammed for locomotive haulage. The multiple unit would hold total sway on scheduled passenger trains south of the Thames.

There is no doubt that the new breed of diesel and electric enthusiasts that emerged from the 1960s and early 1970s onwards found better places to pursue their hobby than the Southern Region. It offered no prestigious class of the calibre of the 'Westerns' or 'Deltics', nor any line as interesting as, for instance, Paddington to Reading or the East Coast Main Line. I can remember as a young teenager making my first trip out of Paddington behind D1012 *Western Firebrand* in 1971 and being amazed at both the volume and variety of locomotive hauled trains when compared to the journey to Waterloo or Victoria from my native Dorking. However, there were a

surprising number of routes which boasted at least the occasional locomotive hauled service, and two stretches of line, the West of England route and Bournemouth to Weymouth, where locomotives had a virtual monopoly.

Unfortunately, the trend during the first decade after 1967 was for such services as there were to diminish both in number and variety. Kent, for instance, became completely devoid of any daytime locomotive hauled trains when the 'Golden Arrow' was withdrawn in 1972. All that remained was the 'Night Ferry' and a handful of early morning newspaper trains with a solitary Mark I coach in the formation. Sussex fared little better. The Newhaven boat trains changed over from Class 73s and Mark Is to EMUs in October 1970, leaving only the Class 33-hauled commuter trains to Uckfield and East Grinstead and the Saturdays only Brighton to Exeter train to fly the flag in that part of the world, at least in daylight hours.

In addition, the variety of motive power on offer was shrinking. The 'Warships' gave way to '33s' on the Waterloo to Exeter line in 1971 and six years later, both the straight electric Class 71s and the electro diesel Class 74s had disappeared too. 1977, however, marked something of a watershed. If it saw the end of the Class 33 hauled rush hour workings between Reading and Redhill, as well as the

Clapham Junction is the location of this photo of 73130 heading a Victoria to Gatwick train on the 21st November 1987. David Ford

extinction of two locomotive classes, it also saw some positive developments. Firstly the inter regional workings to Southampton and Poole increased from three to five, motive power being provided either by Class 47s or Class 33s, with the latter usually handing over to a '47' at Reading. Secondly, Class 31s were introduced to the Portsmouth to Bristol services, following a spell of DMU operation, and then, finally, on Sundays and bank holidays, Class 33/1s and spare TC sets started working from Reading to Portsmouth Harbour via Basingstoke. Apart from the loss of the 'Night Ferry' in 1980, no more services were to succumb for another nine years and the trend was for both the number and variety of locomotive hauled trains actually to increase at a time when they were decreasing in some other parts of Britain,

The 1980s

The renaissance continued with the introduction of the twice daily Class 47 hauled Manchester to Brighton trains in 1979 and the transfer of Class 50s to the Waterloo to

Exeter route the following year. The spare '33s' released from West of England duties replaced the '31s' on the Portsmouth to Bristol route, and the service was increased the following year to more or less hourly on weekdays, with a service from Brighton being added in 1982.

In 1982 Portsmouth acquired two daily Class 47 hauled cross country trains, running via Reading, Guildford and Haslemere instead of the traditional route through Eastleigh and Fareham that had been taken by the dated summer Saturday trains that had continued to run since the days of steam. A third Fridays only working, the 12.46 Portsmouth to Leeds, was unusually diagrammed for Class 33 haulage all the way to Birmingham New Street.

1983 saw Brighton gain a third daily cross country train service, and the following year the dedicated Class 73 hauled Victoria to Gatwick service began. The cross country services expanded still further in 1986, with a fourth daily working on the Brighton line, and Dover also joined the network, being served by three trains on Mondays to Saturdays and two on Sundays. Motive power was almost always a Class 47, although substitutions of Class 33s, 45s, 73s and even 31s have been recorded on these cross country diagrams.

This was, perhaps, the golden age for Southern locomotive hauled trains; a period when visitors from other parts of the country could often be seen enjoying the delights of '33', '50' and '73' haulage but, sadly, it was not to last. 1986 brought the first casualty for a number of years when electrification of the South Croydon to East Grinstead line brought to an end the handful of '33' hauled commuter trains that had retained some semblance of interest on this attractive line since the end of steam. Uckfield had lost its daily locomotive working two years earlier, but DEMU shortages had resulted in the return of a locomotive hauled diagram for a brief period in the spring of 1986.

The Solent and Dorset Coast electrification schemes followed hot on the heels of East Grinstead, being completed in 1988. This spelt the end of over twenty years of the push-pull Bournemouth to Weymouth workings, along with the Sunday and bank holiday Reading to Portsmouth workings. There was a short term consolation in that the traction motors for the Class 442s were retrieved from the 4REPs that they replaced and, during the changeover, Class 73s were drafted in to help out, hauling the sometimes lengthened TC units from Bournemouth or Poole to Waterloo. As a full complement of Class 442s was not available at the start of the 1988 summer timetable, pairs of '73s' carried on until late June, putting up some lively performances as they attempted to keep to the accelerated timings.

1988 was a sad year in many ways. Besides the completion of the Solent and Weymouth electrification, it also marked the end of Class 33 haulage on the Portsmouth to Bristol services. By this time some of the Mark I coaches used on this service were among the oldest in service on the entire national network and feeling their age, as many of us who were bounced up and down on the sagging upholstery will remember. It was still, nonetheless, far more enjoyable than travelling in the Class 155s and 158s that replaced them.



**A Waterloo to Exeter train behind 47705 is at Gillingham (Dorset) on December 30th 1991.
Joseph Porter - Ivan Stewart Collection**



31243 is at Southampton with a Portsmouth to Bristol train on the evening of 23rd September 1978. Ray Briscall



**74004 heads Weymouth Quay boat train at Sway in the New Forest on the 10th July 1976.
John Dedman**



50027 is at Salisbury with a Waterloo to Exeter service on the 29th March 1989. *Joseph Porter - Ivan Stewart Collection*

1988 also saw a contraction of the InterCity cross country diagrams. First to succumb were the Portsmouth workings, which had already been reduced to a dated summer Saturday working after the 1987 summer timetable, but even this disappeared the following year. The Dover trains had never really caught on and were reduced to a daily Monday to Saturday working, running via Chatham in the hope that a Canterbury stop would fill a few of the many empty seats. Finally, the Brighton services, after a further acceleration in 1987 had brought Brighton and Manchester to within just over four hours of each other, reverted to the pre 1983 pattern of twice daily via Oxford and Reading.

Still, amongst all the disappointments, 1988 brought one interesting innovation. Eastbourne replaced Brighton on summer Saturdays as the destination for the Sussex cross country services. This lasted until 1996, after which they reverted back to Brighton. Their withdrawal was rather surprising, as the trains usually seemed to load fairly well right through to the coast.

Into the 1990s and beyond

Into the 1990s and more sadness. Not only were the Class 50s phased out of the Exeter trains but HSTs, displaced from the East Coast Main Line electrification, replaced Class 47s on a number (although not all) of the Poole services in 1991. The '47s' continued to hold sway on the Brighton line and in Kent, at least for the time being. Two years later, with

the arrival of the Class 159s, it was curtains for locomotive haulage on the Waterloo to Exeter line. Perhaps it had lost something of its popularity when the '50s' gave way to Class 47/7s, but it was still a sad day to see 133 years of locomotive haulage finally come to an end on this scenic route.

By the time the private sector took over, the only locomotive hauled diagrams left in the former SR territory were the Class 73 hauled 'Gatwick Express' services and the remaining '47' hauled Virgin Cross Country services. With both these classes well into their fourth decade, it was very obvious that the end could not be far

33109 is seen on a train from Weymouth at Bournemouth made up of a 4TC set on August 19th 1985. *Michael Ellis*





33037 and 33046 head the Exeter to Brighton train through St Denys near Southampton on 29th August 1981. John Dedman

away. However, Virgin gave us a few surprises first. The daily service to Dover had been cut back to a dated summer Saturday working in 1993, and then diverted to Ramsgate. Its final two years, before being axed in May 2000, saw it entrusted to D9000 Royal Scots Grey, which performed superbly, even if the trains probably carried more enthusiasts than holidaymakers! Virgin also put Portsmouth back on the cross country map in 1998 after ten years' absence. Initially the service was to be worked by Class 158 DMUs but, in 1999, it was decided that one working each day should be an HST. As

things turned out, the HST fleet, now in its third decade, was not as reliable as it once had been, and shortages of HST sets resulted in the Blackpool to Portsmouth and return being increasingly turned over to a Class 47 and coaches, becoming more or less a regular diagram by May 2000.

To Virgin's credit, the 'Voyagers', when they finally started to appear in 2001, entered service with far fewer teething problems compared with other companies' new-build DMUs and EMUs. At first, they appeared on extra diagrams, but in the autumn of 2001, they began to

oust the Class 47s and Mark 2 stock from their regular workings. The Brighton and Portsmouth workings had gone over by the end of the year, as had the 08:18 Manchester to Bournemouth and 14:18 return. The other three diagrams serving Bournemouth and Poole went over to 'Voyager' operation at the beginning of May 2002, leaving only the summer Saturday Liverpool to Weymouth service, which remained a locomotive diagram until July. The final details of these workings, along with the occasional substitution of Class 47s and Mark 2s for HSTs and 'Voyagers' have been well documented elsewhere. Suffice it to say that these substitutions occasionally even saw Class 47s returning to Brighton and Portsmouth, as well as the Bournemouth line. Consequently, we did not totally miss out on the specially repainted locomotives down here, and indeed one of these was used on the final 09:10 Liverpool to Weymouth and 17:15 return on 20th July.

So ended diesel haulage, but the '73s' continued to soldier on between Victoria and Gatwick. The new Class 460 EMUs first appeared as long ago as 1999, and were planned to have taken over completely by the autumn. Indeed two farewell rail tours to Eastbourne and Bognor, using '73s' and the Gatwick Mark 2s, were advertised to run on 11th September. They never ran, perhaps providentially, as, unlike the 'Voyagers', the '460s' were beset with teething troubles which proved very hard to rectify. Indeed, as late as June 2002, as many as three locomotive hauled sets could sometimes be seen. However, the numerous problems were resolved eventually and, with no great ceremony, the final Class 73 and its rake of coaches retired to Stewarts Lane.



A Manchester Piccadilly to Brighton train hauled by 47556 pauses at Kensington Olympia on January 11th 1990. Joseph Porter - Ivan Stewart Collection

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Machynlleth - a mid-Wales railway centre

by Stephen Rabone

The railway centre of Machynlleth, in the former county of Merioneth, has fascinated me almost as long as I've been interested in railways. Long summer holidays in nearby Towyn (now Tywyn) in the early 1960s saw my family visiting the town or changing trains there on numerous occasions. I remember visiting the locomotive shed on several occasions, always with the permission of the friendly foreman. One particular day in summer 1965 stands out when my brother and I spent an entire summer Saturday on the station watching operations.

By that year the dieselisation passenger services on the Cambrian lines had started with DMUs of various types having taken over all but a handful of passenger services - these latter included the morning and evening mail and passenger services from Shrewsbury to Aberystwyth and the 'Cambrian Coast Express' from Aberystwyth and Pwllheli to Paddington. In addition, on summer Saturdays there were further long distance trains to London, Birmingham and Manchester. In 1965 these were all still in the hands of steam locomotives: GWR 'Manors' and Standard 4MT 4-6-0s and the occasional Ivatt 2MT 2-6-0.

My notes for July and August 1965 show the following DMU power cars were seen;



TOP: On May 21st 1988 37429 and 37427 arrive at Machynlleth with the 09:40 Euston to Aberystwyth whilst a four car Class 150 in the original Regional Railways livery stands in the loop alongside the depot. The Euston train is formed of ten Network SouthEast Mark 1 coaches. *Gavin Morrison*

BELOW: On the 18th August 1968, during the first year after the end of steam on the Cambrian, Sulzer Type 2 No.D5013 lurks inside the roofless part of the steam shed at Machynlleth, whilst a DMU can be seen inside. Amazingly, the shed has now been refurbished and is still in use as part of Arriva Trains Wales' maintenance depot. *Gavin Morrison*

I didn't record the numbers of the non powered vehicles as I considered these to be just coaches.

M50938/39/40/45/46/65/66/6769/70/83/85

M51177/81/8283/8485/86

M51418/21/24

1965 was to be the final year of our family holidays in Wales and I didn't visit the area again for nearly thirty years, missing the days of the summer Saturday diesel hauled expresses behind Class 24s, 25s and 37s.

Modelling the diesel years

Machynlleth, with its relatively simple track layout would make an interesting layout, probably best reproduced in 2mm scale (N gauge). Using Google maps satellite images, it is possible to work out that the length of the track layout shown on the accompanying plan is about 600 metres - this equates to about 4 metres in 2mm scale. In 4mm scale this would be just under 8 metres in length.

The platform lengths can also be calculated; the Down (Aberystwyth bound) platform is about 145m long whilst the Up (Shrewsbury direction) platform is 180m in length. By careful compression I feel it should be possible to reduce the length of the scenic section down to about 3 metres in 2mm scale and about 6 metres in 4mm scale. However, I'd try to keep the length of the platforms, especially the Down platform, to the scale length. In the days of long locomotive hauled trains this short platform, only capable of holding about 7 or 8 Mark 1 coaches, often caused problems with trains having to 'draw up' to let passengers out of the rear carriages.

One of the features of Machynlleth that makes it so suitable to model is that, despite the passage of time, much of the station's appeal to a modeller remains largely unaltered, even in the days of the new ETMRS cab signalling. The basic track layout is much the same, with even the old steam shed still in use. Gone of course are the low level goods yard, which is now an industrial estate, the signal box and the former GWR lower quadrant signals.

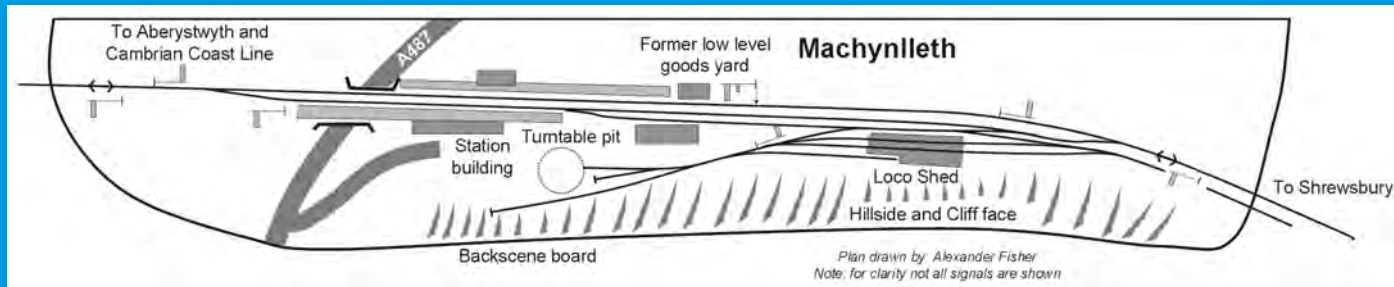
A new DMU maintenance depot has been built where there were once locomotive sidings



ABOVE: 25298 and 25254 are seen ready to leave for Shrewsbury on the 14:00 Saturdays only Aberystwyth to Shrewsbury on the 1st September 1984. A Class 101 Metro-Cammell DMU is waiting to pull forward into the station to form a service to Pwllheli. *Gavin Morrison*

CENTRE: 25298 and 25254 enter Machynlleth with the 14:00 Saturdays only Aberystwyth to Shrewsbury on 1st September 1984. Note the timber waiting shelter on the Up platform, the porter with a trolley full of parcels sacks and the cyclists: not much chance of getting that lot on a 'Sprinter' in a few year's time! *Gavin Morrison*

BELOW: On 15th September 1984, during the last weekend that the Class 25s worked the Cambrian services, 25034 and 25058 run into Machynlleth adorned with suitable headboards. Note the lower quadrant GWR style signals; the one behind the carriages has a 'calling on' signal, which is just visible. *Gavin Morrison*



Modelling Machynlleth

The track plan shows a slightly simplified version of the track layout that was in existence during the 1980s. The old low level freight yard has been omitted but could be reinstated if desired. Like many stations Machynlleth is 'long and thin' so lends itself to being built in 2mm scale (N Gauge). I envisage the layout having off stage storage loops behind the scenic section and linked to the scenic section with curves at either end of the layout. In 2mm scale it should be possible to fit the

station and storage areas comfortably into a space of about three metres by just under one metre (about 10 feet by 3 feet in imperial measurements). Those preferring 4mm scale will obviously need considerably more space.

Virtually all the motive power and rolling stock needed for the layout is, or has been, available in N Gauge with the key locomotive types of Classes 20, 24, 25, 31, 37 and 40 and DMUs of Classes 101 and 108 being produced by Graham Farish. Some of the other DMU classes will need building from

kits or adaptation from other models. A similar situation exists in 4mm scale with Bachmann and Hornby producing most of the models needed.

Operation will revolve around the through running of Aberystwyth to Shrewsbury DMUs and long distance locomotive hauled long distance trains, terminating Pwllheli to Machynlleth local services and the occasional freight train. Movements of DMUs to and from the old locomotive depot for fuelling would add further variety.



ABOVE: In 1969 Sulzer Type 2 No. 5084 passes Towyn (now Tywyn) with a Cambrian Coast freight service. The train has the typical mixture of wagons: a couple of vans, some empty coal wagons and a rake of explosives vans from Penrhyndeudraeth. *Railphotoprints.co.uk - John Day collection*

BELOW: On 21st May 1988 a pair of 'Sprinters', 150118 and 150131, have arrived with a service from the Cambrian Coast line and are about to move across to the Down loop line ready to form the next connection to Pwllheli. Note the now trackless low level freight yard and the carriage watering points in the space between the running lines. The mast for the Cambrian Lines radio electronic token block system (RETB) can be seen behind the signal box. Machynlleth retained its signalbox and semaphores until the introduction of ETMRS cab signalling. *Gavin Morrison*



and a turntable. A large footbridge with lifts has been erected on the platforms, which rather spoils the appearance of the station and has proved controversial in the town. However, let's go back in time to the days of summer Saturday locomotive hauled trains when trains were still signalled by semaphores and the signal line tokens were exchanged between driver and signalman.

Freight traffic

Following the end of steam on the Cambrian, Class 24s and 25s were the dominant motive power throughout the early 1970s and 1980s. They operated the freight trains which originated at Bescot yard. For instance, in 1977, train 7J23, the 01:20 from Bescot, worked to Pwllheli on Tuesdays and Thursdays. On Mondays, Wednesdays and Fridays the train first went to Aberystwyth before going down the Cambrian Coast line to Porthmadog. The return working ran as 7G34 to Bescot.

LOCOMOTIVE WORKINGS AT MACHYNLLETH

1980 - Class 25s

Saturdays only

10:41/44 Aberystwyth - Euston
12:10/25 Euston - Pwllheli
14:33/35 Euston - Aberystwyth
18:33/36 Pwllheli - Wolverhampton

1988 - Class 37s

Monday-Thursdays

07:44/44 Aberystwyth-Euston 'Cambrian Coast Express'(single 37/4)
20:26/27 Euston-Aberystwyth 'Cambrian Coast Express'(single 37/4)

Fridays

07:44/44 Aberystwyth-Euston 'Cambrian Coast Express'(single 37/4)
20:26/27 Euston-Pwllheli (single 37/4 next day's 08:00 Pwllheli - Euston)
22:04/05 Euston-Aberystwyth (single 37/4 next day's 07:14 Aberystwyth - Euston)

Saturdays

07:44/44 Aberystwyth-Euston 'Cambrian Coast Express'(single 37/4)
09:01/2 Birmingham-Aberystwyth (pair 37/6s - returned with 10:10 Aberystwyth - Euston)
10:00/00 Pwllheli-Euston (single 37/4 - 6 coaches)
10:40/45 Aberystwyth-Euston (pair 37/6s)
12:21/27 Euston-Pwllheli 'Snowdonian'(pair 37/0s - returned with 15:05 Pwllheli - Euston)
14:23/24 Euston-Aberystwyth (pair 37/4s - returned with 15:25 Aberystwyth - Euston)
15:55/58 Aberystwyth - Euston (pair 37/4s)
17:17/43 Pwllheli-Euston (pair 37/0s)
20:26/27 Euston-Aberystwyth 'Cambrian Coast Express'(single 37/4)

The photograph accompanying this article of 5084 at Towyn in 1969 shows a typical formation with empty coal wagons and loaded gunpowder wagons from the explosives factory at Penrhyndeudraeth. In addition bagged fertiliser was also transported in 4-wheel vacuum braked vans. Before the goods yard at Machynlleth closed, fuel tankers, as well as coal and fertilisers, were also handled there.

Aberystwyth also had an oil terminal which received tankers that were conveyed in the normal freight services. After the end of other freight traffic on the Cambrian lines in 1983, the Aberystwyth trains operated as an air-braked block train running from Stanlow. Eventually this went over to double-headed Class 20 power and later to Class 37/4s, before the traffic ceased in the late 1980s.

Passenger trains

In the early 1970s, the York to Aberystwyth mail train operated between Shrewsbury and Aberystwyth in the early morning, returning in the early evening. Photographs show a typical formation was a three coach Mark 1 rake with various parcels vans, both bogie and four-wheel.

Whilst the majority of passenger trains at Machynlleth were operated by DMUs the summer timetables brought an increase



This photo is included to show details of the delightful station building and canopy. 150145, like many other Class 150s, was running at this time as a three car unit with the centre car being from a disbanded Class 150/2. The date is the 8th August 1990, by which time the semaphore signal at the end of the Down platform had been replaced by a colour light.. Dave Higson

in locomotive hauled trains especially at weekends. These were usually powered by double headed 24s and 25s which, sadly, were not always reliable and there were frequent reports of failures and serious delays. Sundays in the 1970s often brought a succession of excursion trains through Machynlleth to Barmouth and Aberystwyth. For instance, on the 5th June 1977, no fewer than four excursion trains headed off down the coast to Barmouth having started from Birmingham, York, Stroud and Crewe. At this time BR often used spare Mark 1s to form weekend mystery or holiday preview trains. Occasionally Class 40s also appeared on these excursions. The Class 24s ceased to operate on Cambrian passenger services in 1978, with the Class 25s continuing until September 1984. From summer 1985 they were replaced by the much more reliable Class 37s, again usually working in pairs and with a much enhanced summer Saturday service.

On 13th October 1980, Barmouth viaduct was closed to rail traffic after divers found up to three-quarters of the timber trestle piles had been damaged by teredo navalis (known as the 'ship worm'). The viaduct was closed until 1981 and was subsequently closed in the mid 1980s for further work. One curious operational feature during this period was the use of parcels DMU M55995 to power engineering trains. The same type of vehicle was also used as mail vans on some Shrewsbury to Aberystwyth DMU services in the 1980s.

With the reintroduction of the 'Cambrian Coast Express' from Aberystwyth to Euston in the late 1980s, InterCity liveried Mark 2 air-conditioned stock operated daily through Machynlleth. Sadly, the through London service ended on Sunday May 12th 1991 after which they were replaced by 'Sprinters'

operating only as far as Wolverhampton. The following year Class 31s, again usually operating in pairs, became the normal visitors on summer Saturday trains for the final summer of locomotive hauled workings.

The vast majority of passenger services were, of course, operated by DMUs and over the years a large variety of types have featured. Most trains were of two-car Metro-Cammell (Class 101), Park Royal (Class 103) or Derby units (Class 108 of both the 2 and 4 digit route indicator panel varieties). Three car Swindon 'Cross Country' DMUs (Class 120) were also regular performers and could also be seen with mail vans as tail traffic on the early morning and evening services. Summer weekends also brought three car Derby suburban units (Class 116) from the West Midlands. By the 1988 summer timetable Class 150 'Sprinters' were operating most Cambrian services and these were identified as such in the All Line Timetable with an 'S' symbol.

Whilst I had missed all the changes of the 1970s and 1980s I returned to the Cambrian in the mid 1990s to find a surprising variety of the 'Sprinter' variants. Classes 150/1, 155 and 158 were seen on Birmingham to Aberystwyth trains, with '153s' and '156s' working the coast line to Pwllheli and some service to Birmingham. Today, of course, whilst the service level is considerably better than in the past, all scheduled services are operated by Arriva Trains Wales Class 158s, with the ETMRS-fitted Network Rail Class 37 powering the occasional freight or special passenger train.

Much of the information used for this article has come courtesy of the Internet, especially from threads on RMweb and the www.2d53.co.uk website. The timetable information is from the National Rail timetables for 1980 and 1988.

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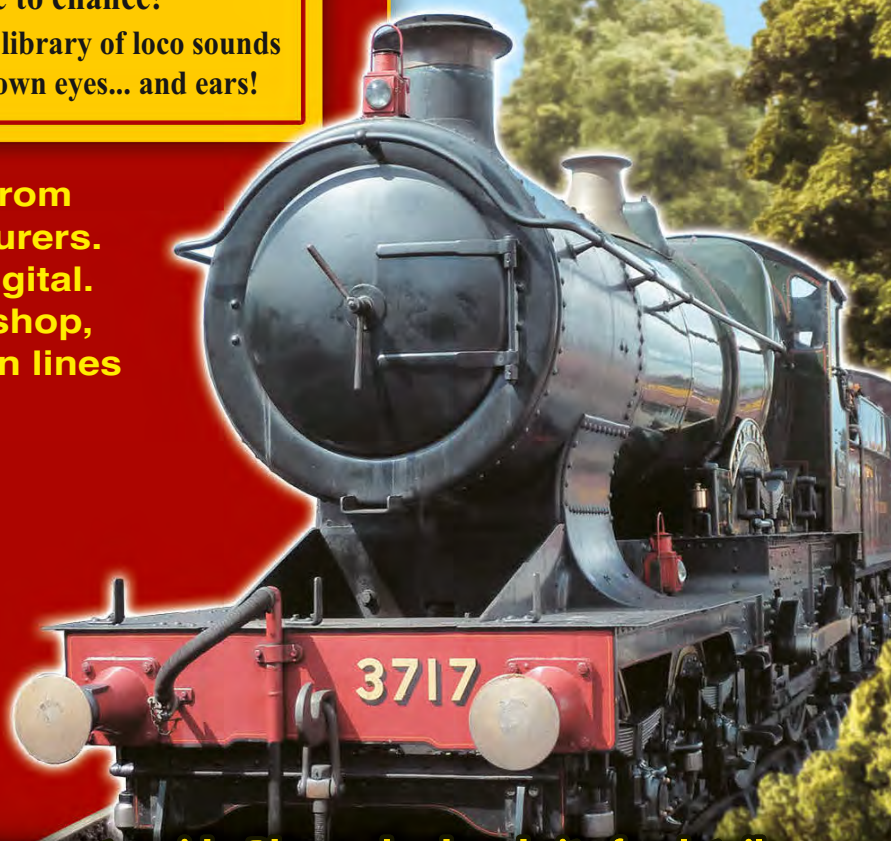
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Kensington Olympia - The carflat earth society

Part 1 by Andy Gibbs

In this issue we start a series of articles about an ambitious plan by Andy Gibbs to build a representation of Kensington Olympia in N Gauge. In part one the background to the layout and its planning are considered.

Having modelled the Rio Grande in N gauge for several years and exhibited my layout, 'Minty-Colorado', at several exhibitions, it became time to start a new project. In the intervening 10 years or so British N gauge has come along in leaps and bounds with modern stock that looks like what it's supposed to and runs well too.

I decided that I could use information I had from compiling my website (www.1S76.com) about the cross country trains to Brighton to produce a layout. Instead of the mountainous landscape of my Rio Grande layout it was to be the flatness of West London and Kensington Olympia.

'Minty' was dismantled to make room in the loft for the new layout. Our 1930s built

On Saturday 28th February 1970 D5183 runs into Kensington Olympia from the Mitre Bridge direction with a special train, 1Z77. The train may have been run in connection with an exhibition at Earls Court. *Rail-Online*



house has a reasonably open loft space, but the useable space limits the layout to around 10ft by 8 ft. There is also a 2ft width of board limit so that I can get it out of the loft trap hatch.

The baseboards were designed and then the timber cut to size at the timber merchants. This effectively gave me a flat pack layout to put together. Boards are 2ft x 4ft in 6mm ply with plenty of bracing. Legs slot into each board and have adjustable feet. Each baseboard is bolted to its neighbour and its legs with bolts and captive nuts.

So Kensington Olympia it was to be, based around 1980 so that I could still run Motorail trains. There would also be a mix of air-braked and vacuum braked freights plus the fledgling Manchester to Brighton services and the excursion and SAGA holiday charter trains to the south coast.

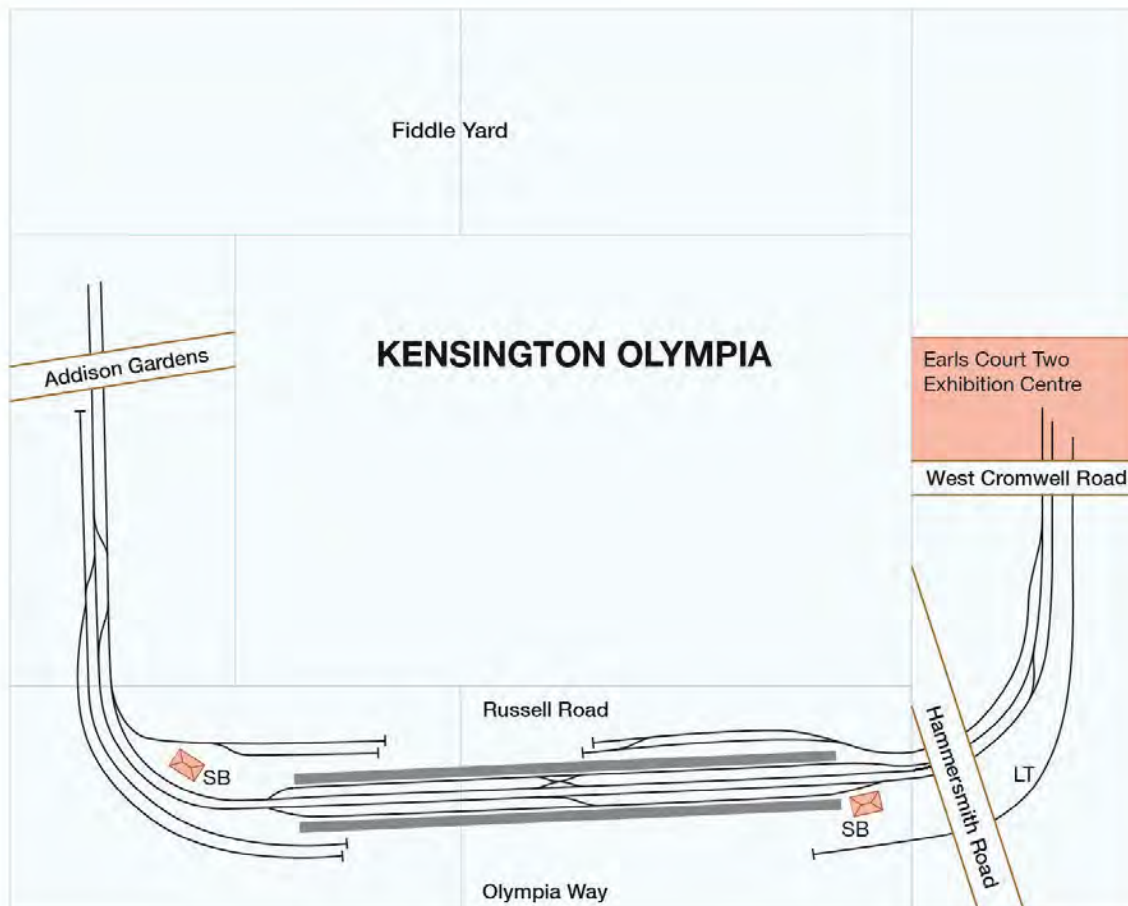
Even with a 10ft space the station needed to be shortened considerably, so what do you leave in and what do you omit? Slap bang in the middle of the station on the east side is a scissors crossover and on the west side a simple crossover. These need to stay as, of course, did the four tracks through the station.

There were lots of bay platforms at the NE and SE corners of the station plus, of course, the Motorail terminal on the NW side and the District line platform to the SW. The District line had to stay although running the station to a weekday timetable would mean I could avoid running any LT trains!

The long Motorail siding next to the running lines had to stay and by reducing the other three Motorail sidings to two I should be able to fit them all in, but the lines would have to be curved. The bay platforms on the east side of the stations would be simplified to just two each and all the platforms would be shortened. The main platform will be long enough to hold 10 cars plus locomotive(s) although each end will have a slight curve rather than being dead straight.

Scenic breaks into the fiddle yard will be by using the bridges. These are Addison Gardens at the north end and the West Cromwell Road (A4) at the south end. Beyond this was the Earls Court Two exhibition centre, which was built over the railway line as an extension of Earls Court: both are now demolished. I believe Earls Court Two was built in the mid 1980s so is a little bit too late, but will make a great scenic break.

Several trips to Olympia with the camera gave me plenty of reference photos but I also searched the Internet for other images. Lots of alterations have taken place over the years at Kensington Olympia so I was careful to backdate everything to 1980 or thereabouts. I also obtained plans of the station and the local area thanks to members of the Worthing Model Railway Club. An eBay purchase also got me a signalling diagram of the whole of the West and North London lines to help in planning.



Not to Scale

Plan re-drawn by www.stimula.co.uk



D7667 is seen at Kensington Olympia on Sunday 18th August 1968 with what is believed to be IV33 the 10:45 Holyhead to Kensington Olympia service. The Class 25 will have worked the train forward from Mitre Bridge Junction after taking over from an electric locomotive. On the right is a train of empty milk tankers that was being assembled here from various locations in London, before being worked back to the West Country or Wales. *Rail-Online (caption details by David J. Hayes)*



As part of the planning for building Kensington Olympia Andy mocked up different parts of the layout. This view shows several of the "signature" features of the station including the scissors crossover and the footbridge. The footbridge was kit-bashed from Faller parts and will be described together with other buildings, such as the signal boxes and main station buildings, in Part 2. *Andy Gibbs*

• In Part 2 Andy Gibbs will describe the construction of some of the key buildings for Kensington Olympia



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Manning the Motorails

The days when passengers could travel by rail with their cars from one end of Britain to the other are now long gone but Mick Humphrys recalls his time on the footplate working the Motorail trains.

Kensington Olympia was once utilised as the main London terminal for these class 1 services to the north with departures to Carlisle, Stirling, Perth and Inverness. Other Motorail services also ran to the South West and west Wales from Kensington. I have briefly mentioned my workings on the Motorails in my articles "Sleeper Stories" in *TRACTION 224* and "Who's on the big engine" in my article about the Class 25s in *TRACTION 235*. With more still to be told I thought I would expand on these unique workings as I was involved with them from the start of my railway career in 1979 to their eventual end in May 1995.

My first depot, Stonebridge Park, to the north of Kensington Olympia (known as Kenny to the railwaymen), provided the traincrew for the Motorail services (see tables 1 and 2) and I very quickly became involved in these workings when I started as a 16 year old driver's assistant or secondman in August of that year. The frequency that I worked on such was greatly increased the following year when, at the start of the summer timetable in May 1980, I was allocated a position in the summer only Motorail link/roster. Consisting of eight weeks of work including two lines of spare (no allocated jobs) this link contained all the secondman's Motorail jobs at the depot and, along with seven other junior men (boys), these were to be my workings over that long hot (or so it is remembered now) summer. Although there were only up to four weekday departures and arrivals, one each to the aforementioned destinations, the volume of work with the empty coach stock and shunting requirements certainly kept me and my colleagues, within the Motorail link, busy.

The first morning turn had a very early book on of 04:40 and involved coupling and preparing two Class 25 diesel locomotives. The

small 1250hp workhorse of the depot was the traction utilised for the first leg or last leg of the journeys from Mitre Bridge/ West London Junction to Kensington Olympia and vice-versa. Once prepared, the two locomotives were worked round to Willesden Carriage Sidings and attached to 5P27 the 06:10 empty coaching stock (ECS) to Kensington Olympia. 5P27's usual Mark 1 coach formation was six first class compartment coaches, one restaurant dining coach and one guards brakevan, giving a total of eight vehicles and a weight of around 256 tons.

Upon arrival at 06:40, an increasingly busy Kensington Olympia would be noted with railway staff preparing for the sleeper arrivals or busy loading the passengers' cars onto the car flats in the specially adapted bay roads within the roofed section of Kensington Olympia (nowadays a car park). Sometimes one or two of the passengers would look quite nervous having handed over the keys to their cars!

Whilst this was taking place a run round was performed and the passengers boarded the coaches. When all were fully loaded, with the passengers settling into their compartments, these coaches were then drawn forward, stopped when over the point work and then, with the shunting signal off, set back onto the waiting car flats. Once coupled and a brake continuity test completed this heavy formation would be scheduled to depart as 1P27, the 07:57 to Carlisle. With a maximum load of up to 595 tonnes and 18 to 20 standard coach units, the two hard working Sulzers would haul this consist up the bank to Mitre Bridge. Here I would uncouple the '25s' and an electric (usually an old banger from Classes 81-85) would take over. The early start was compensated for by an early finish as, once the locomotives were deposited back at Sudbury holding sidings and uncoupled, the day's work was done!

A Class 85 is passing Hillmorton with 1S55, the 08:55 Kensington Olympia to Perth Motorail in June 1975. *John Ford*

I'll have a lie in too

Rostered on this early job for the week with the same driver for the first two days, I did on one occasion manage to upset my driver, John Hurley. On the Monday he asked me to arrive on time the following morning and start up and prepare the two '25s' on my own so that he could arrive a little later. I was living at Carpenter's Park and my first train to work was the 04:21 staff service. This service was not booked to stop at my home station but common practice was to wave a white light to the approaching Class 501 unit and, hopefully, have the driver flash the destination indicator light and, even more hopefully, stop.

I caught this service on the Monday along with John who didn't have the stress of whether it would stop or not as he lived at Harrow & Wealdstone: a booked stop for the service. With the words, "Have them singing a song in the morning", John and I finished the job on the Monday. I had by then already planned my rebellion with the attitude that if he is coming late so will I! He was therefore less than pleased, when boarding the later train on the Tuesday, to see me half asleep in the corner; needless to say the atmosphere was a bit frosty as we hurriedly prepared the locomotives.

Things soon cheered up, however, and my guilt was slightly further compounded when, just prior to departing, Willesden Carriage Sidings with 5P27 instructor driver Mick Jones, along with two trainee drivers, arrived to work the rest of our shift for us. We quickly departed with John's previous bad mood forgotten and he constantly saying, "What a great job this is."

The other morning jobs involved working the sleeper services from Mitre Bridge to Kensington and then the ECS back to Willesden Carriage Sidings, as described in my article "Sleeper Stories" in TRACTION 224. Then we took 5S55 ECS from the carriage sidings to Kensington, which then formed 1S55, the 10:55 service to Perth. This was unusual as I recall it was booked to be formed of air braked vehicles.

On the Carpet

The afternoon jobs/ turns were very similar in format to the morning turns with the ECS sleeper and subsequent passenger workings as listed in the tables 1 and 2. With some jobs quite short on hours we were always rostered to work a minimum eight hour shift, but 'a job and finish' attitude prevailed. This was not the case, however, when, on the 23rd May 1981, I worked a Saturday morning Kensington turn with my driver David Doman.

After completion of the run up from Kensington with 1S55 and the locomotives safely disposed off at Sudbury, driver David and I promptly departed railway premises. Unknown to us at the time, the foreman required both of us for further work. Happily in the dark until I next booked on duty the following Tuesday, I was shocked to be issued with a 'Please Explain'. This small form was issued for misdemeanours and was the first stage of the discipline processes which on the railway at this time had some similarities with the armed forces.

They were issued for such charges as absent without leave (AWOL), late on duty (LOD) and, as on this occasion, missing from duty. Detailing the charge, the form invited one to provide an explanation on the reverse. This I duly did after consulting David who instructed me to write the following, "After completing my booked duties my driver told me to go home." This, of course, shifted the blame onto him. Accepting three hours loss of pay I thought that was that until one morning about six weeks later when I was ordered to report to the depot manager's office upon completion of my morning's work.

This office was the domain of Mr Harry Owen who was very much a product of the recent steam age. He was a short stout man attired with black turn up trousers and a waist coated black suit or, when slightly more casual, a brown cardigan. His dark complexion was emphasised by his jet black hair and half moon, horn rimmed glasses either perched on the end of his nose or hanging from a silver chain around his neck. He did indeed possess a bowler hat which he wore for Royal Train duties.

My morning's work had consisted of second-manning driver Cliff Gaskell and we finished up in the queue on the golden mile (see Sleeper Stories in TRACTION 224) with 5M78 the ECS sleeper vehicles from Kensington Olympia. Cliff had done his best to assure me that all was fine and Mr Owen probably just wanted to give me a pep talk on how to progress through the early stages of my railway career. With Cliff letting me away I made my way to Mr Owens's office reporting in the first instance to the train crew supervisors before entering his office.

Table 1 Monday - Saturday

May - October summer of 1980 & 1981 (all trains timed as D/E595)

Destination Days Run	Carlisle M-F	Perth SAT	Perth M-F	Inverness M-F	Stirling M-F	Perth SAT
Headcode	1P27	1S55	1S55 AIR	1S01 Sleeper	1S22 Sleeper	1S00
Kensington Olympia dep	07:59	08:55	10:55	19:20	20:55	21:35
West London Jnc arr dep	08L07 08L27	09L03 09L24	11L05* 11L22*	19L29 19L49	21L04 21L25	21L44 22L04
Crewe Station	10:27	11:25	13:29	22:10	23:44	00:58
Standard Carriage Length	18SCL	19SCL	19SCL	19SCL	20SCL	19SCL
Departure Time Origin Days Run	23:40 Stirling M-F	21:15 Inverness M-F	09:05 Perth SAT	09:55 Perth M-F	16:10 Carlisle M-F	
Headcode	1M62 Sleeper	1M78 Sleeper	1M69 AIR	1M69	1A87	
Crewe Station	04:35	05:20	14:10	15:11	18:12	
Mitre Bridge Jnc arr dep	07L21 07L41	07L53 08L13	16L13 16L36	17L41 18L01	20L25 20L53	
Kensington Olympia arr	07:50	08:32	16:45	18:10	21:02	
	20SCL (624 t)	19SCL	19SCL	19SCL	18SCL	
* = Locomotive change booked to take place at Willesden No.7 L = Locomotive Change SCL = Standard Carriage Length AIR = Air braked						

Table 2 Sundays

May - October summer of 1980 and 1981 (all trains timed as D/E595)

Destination	Perth	Stirling			
Headcode	1S55	1S15 Sleeper			
Kensington Olympia dep	12:00	20:55			
West London Jnc arr dep	12L08 12L28	21L04 21L25			
Crewe Station	16:00	23:44			
	19SCL	20SCL (624 t)			
Origin	20:20 Stirling	21:18 Perth	23:40 Stirling	19:55 Inverness	11:00 Perth
Headcode	1092 Sleeper	1M81 Sleeper	1M62 Sleeper	1M78 Sleeper	1M69
Crewe Station	00:46	03:47	05:04	05:45	17:18
Mitre Bridge Jnc arr dep	03L55 04L15	06L57 07L17	08:31 08L51	09L07 09L27	19L44 20L04
Kensington Olympia arr	To Dover	08:32	09:00	09:40	20:13
	20SCL (624 t)	19SCL	20SCL (624 t)	19SCL	19SCL (624 t)
L = Locomotive Change SCL = Standard Carriage Length AIR = Air braked D/E595 = Indicates the timing load for which the timings have been calculated					

I stood on the carpet in front of his huge desk complete with dark green baize insert and with Mr Owen peering over his half moon glasses. The reason for my audience soon became apparent as I was sternly lectured on my actions when reported missing and

that although I was under the charge of my driver I was still answerable to the train crew supervisors. I left his office saddened that I was not being offered promotion but vowing never to commit the same crime again or at least not get caught!

Overspeeding the Motorails

It was again when working 1S55, on the June 12th 1981, that I got a bit more practice on coupling two Class 25s together with driver Bryan Shelly. After coupling 25113 and 25095 in multiple we took the ECS from Willesden Carriage Sidings down to Kensington Olympia. All went fine this hot summer day, with a right time departure and the engines soon sounding sweet at full power tackling the 1 in 60 incline. When nearly at the summit near the appropriately named North Pole junction, there was a jolt and drop off of power was felt on the footplate. With rapidly losing speed and low power Bryan just managed to make it over the top, finally coming to a stand at the junction signal where locomotive changeover would take place.

Upon an initial investigation it was found that the rear '25' had shut down but so as not to cause any further delay we detached the locomotives and shunted the pair into the adjacent south west sidings with the aim of taking them both straight onto the nearby Traction Maintenance Depot situated on the other side of the West Coast Main Line. Once on the depot it was soon found that 25095 had shut down due to an overspeed occurring. The overspeed is a safety device fitted to many diesel engines to prevent engine revolutions per minute (r.p.m) exceeding a safe working speed.

On the Class 25 the speed of the engine is from 325 r.p.m at idle rising to 750 r.p.m at full power but if, due to a fault, this speed ever reached approximately 890 r.p.m the overspeed will 'trip' and shut the engine down, preventing possible serious damage to the engine's crankshaft and other internal components. Although able to be reset by the driver up to a maximum of two times, on this occasion it was felt necessary to leave the locomotive at the TMD. After I had uncoupled we ran light engine back to Sudbury holding siding where I had to recouple to another engine ready for the next working. This was 5S01, the afternoon ECS working back to Kensington; still, I needed the practice and my biceps needed the workout!

Collision at the Carriage

On Tuesday 20th May 1980, 25204 and 25193 were approaching the carriage sidings to attach to 5S01, the 16:20 ECS to Kensington Olympia. The senior driver assumed he was approaching a set of coaching stock further down the yard on a different road. His secondman at the time was looking back, only to turn and see in the locomotive's windscreen the approaching corridor connection of a Mark 1 coach. He turned to his driver to shout a warning but it was too late. Despite the driver applying the brake in emergency mode, 25204 struck the coach with such force as to make the buffers of the coach ride up over the locomotive's buffers and compress the front of the cab. This caused all the cab windows to shatter and the control desk to move back and trap the driver's right knee. His head had been thrown back and he had turned a ghastly shade of grey. The secondman, regaining his composure, shouted from the cab door for help and, along with his driver, was assisted off the locomotive. How do I know so much of this: I was the secondman!

After a check up by traincrew supervisor George Newbury, who was a St John's



D7667 is at Kensington Olympia on Sunday 18th August 1968 with what is believed to be IV33 the 10:45 Holyhead to Kensington Olympia service. In the background is the purpose built Motorail car loading terminal building. The carflats at the rear of the train will shortly be uncoupled and propelled into the terminal for unloading. Rail-Online



25204, the locomotive that was involved in the collision when Mick Humphrys was secondman is seen awaiting scrapping at Swindon Works on the 5th October 1980. Dave Higson

Ambulance qualified first aider, my driver, who was badly shaken and had sustained bruising to his calf, and I were taken to Park Royal Hospital. I was soon discharged as I did not have a scratch but my driver was detained for observation. In a sign of the times, I was back at work the following day with driver Les Baggert on the same job! The outcome was not so good for 25204 which, after assessment at the Willesden Traction Maintenance Depot (TMD), was declared unfit for economical repair then hauled to Crewe at 25mph for component removal and officially withdrawn. It was finally, together with 25102, dragged to Swindon on 9X34 during August and scrapped by October of that year.

Mastering the Vacuum Brake

With the exception of 1S55 on the down and 1M69 on the up, all the Motorail services I was involved in were vacuum braked. Readers will know that the principle of vacuum operation was that exhausters on the locomotives

'sucked' the air out of a vacuum pipe and, in turn via this pipe, a vacuum chamber fitted to each vehicle. A piston in this large cylinder type chamber was kept lowered when a vacuum up to 21 inches was created in both sections of this two part chamber. The lower end of the piston was connected to brake rigging which consisted of connecting rodding and brake blocks etc. Application of the brake occurred when the driver's brake valve on the locomotive was applied; this allowed atmospheric pressure of 14.7 p.s.i to enter the system via the brake pipe and direct admission valves. Air pressure entering the bottom section of this chamber acted upon the underside of the piston and caused it to rise. This action in turn applied, via the brake rigging, the brake blocks to each vehicle's wheels. In practical operation of this brake, there was a delay in the brake application and indeed the brake release. However, the release could be enhanced by the driver increasing the speed of the exhausters, which removed the air out of the

system at a faster rate thus re-creating the vacuum more quickly and therefore allow the brakes to release sooner.

Correct use of the vacuum brake required a great deal of skill and I was taught by some of the best drivers and indeed observed some of the worst. Drivers who were masters of their craft taught me that the best method to adopt was to apply the brake in the first instance to reduce the vacuum to 10 inches. This achieved a brake application of 50% to 60% and left a substantial amount of brake force still to be applied as necessary. As the train came to a stand at the desired place, the good technique to practise was to have reduced speed such that the brake could be gradually released bringing about a smooth stop. This was termed as stopping on a rising brake.

With these mammoth Motorail trains these actions were performed akin to an art form by some drivers. It was such men who had total

ability and confidence in their craft who were the drivers who 'put you in the chair' and allowed you to drive. They always knew exactly what you were required to do, or should be doing, before you did! Some lesser drivers, and there were a few I worked with over the years, adopted the technique of immediately they encountered a cautionary aspect or sighted one in the far distance placed the driver's brake valve straight to emergency. Even worse, in my view, was that some drivers used the emergency position as their first application of the brake at the predetermined braking point. I can only add in their defence that at least the high speed was reduced quickly. This, in my opinion, displayed a lack of skill, confidence and, most damning of all, nerve.

My mainline work to perfect the vacuum braking technique was limited as most of the jobs beyond Mitre Bridge were single manned. I did, however, have plenty of practice with

the Class 25s on the first and last leg of the Motorail's journey. One exception was a night Crewe return job which involved a book on of 22:59 on Sunday night, running light engine to Mitre Bridge to await the arrival at 23:39 of 1S15, the 21:20 Motorail service from Dover to Stirling. Upon arrival, the diesel locomotive, usually a Class 47, would be detached and I would hook on our Class 81-85 ready for a departure a minute before midnight.

Formed of up to 624 tonnes and 20 SCL (one standard carriage length (SCL) is 60 feet), this mammoth train, in terms of both route mileage and actual train length, was allowed 2 hours 23 minutes to Crewe, arriving in the railway town at 02:22. A break was then allowed, with a hopeful anticipation of a right time arrival at 04:45 of the return working. 1M62, the reverse working with the same formation, had departed Stirling some 5 hours earlier at 23:40. Arriving, if right time, at the Mitre Bridge at 07:21, after a long night I would have to muster the energy to hook off our locomotive then return light engine to either the carriage sidings or Sudbury. With no other night work rostered for secondman, the Monday following was a rostered rest day, allowing an afternoon shift to be worked on the Tuesday. On Sunday June 7th 1981, I worked 1S15 with 81012 and 1M62 with English Electric 83009 and my driver was again Cliff Gaskell.

From Kensington Olympia to Euston

I enjoyed the two summers of 1980 and 1981 on the Motorails but, in order to work more class 1 trains, I transferred 'in the grade' to Euston in April 1982 and my Motorail workings temporarily ceased. The Motorail work, however, followed me with the closure of Kensington Motorail Terminal in October 1981; the last train from Kensington Olympia was in fact 1S22, the 20:50 to Stirling on the October 23rd of that year.

When the services restarted in 1982, they had been rationalised somewhat. In the first year of operation from Euston, it was felt that it was impractical to shunt coaching stock from a platform onto the car flats as had been the practice at Kensington, therefore they were run as separate trains for 1982 only as shown in table 3.

From the 1983 summer service, they were once again formed of coaches and flats, with the shunt move being performed usually between platforms 14 to 16 and the loading bays at Euston. Running the loaded carflats separately was always a risky venture as, on more than one occasion, the cars arrived before their occupants or vice-versa. This strategy did not last long, with the usual Motorail service of combined coaches and carflats operating the following year, as shown in table 4. The exception to this was the night sleeper service to and from Inverness which continued as two separate trains.

The infrastructure at Euston was altered with a purpose built Motorail reception, parking and reception area and platform loading ramps all constructed on the buffer stops ends on platforms 17 and 18. Many of the staff from Kensington Olympia, including the car loaders, had transferred with the work so I recognised a few faces. The Motorail work created quite a lot of additional work for the target jobs number 1 and 2 (See TRACTION 235) although sadly for the secondmen, none of the main line jobs were double manned. The maximum speed of the



81008 awaits departure from Carlisle with a southbound Motorail on the 30th July 86. Note that the passenger accommodation is made up of first class coaches lettered InterCity Motorail. This train is believed to be the Stirling to Euston service. *David Ford*



87003 is shunting the Carlisle Motorail vans off the Euston to Stranraer train at Carlisle on 21st April 1987. *David Ford*

Motorail services had been increased to 90mph and an interesting addition was the placement of blue windscreen shields on the cars to give them some added protection.

Introducing ‘Scuds’

With my move back to Stonebridge for my promotion to driver in 1985, my Motorail workings ceased until 1990 when I finally achieved my objective from the start of my career and became a driver at Euston. The target movements by now worked by one of the two resident Class 08s consisted of detaching the Motorail vehicles from the rear of arriving trains or placing them at the head behind the locomotive. The car flats had, by this time, been replaced with converted Mark 1 GUV parcel vans. These vehicles, which conveyed up to three cars and with up to 4 in a formation, were able to cope with the much reduced service demands since the Kensington days. They were an obvious improvement for the cars were protected from the elements and they allowed loading in much the same way as the car flats via the ramps at the end of platforms.

An additional method of loading was, however, introduced with a purpose built vehicle which facilitated loading from the platform side via its lowered ramps. This speeded up the loading and unloading process without the need for the GUVs to be detached and placed on the ramps. In true railway style the two vehicles, which were introduced around the time of the first Gulf War, were nicknamed ‘scuds’ after the Saddam’s missile launchers. Table 5 shows the Motorail services from Euston in the early 1990s.

The introduction of Driving Van Trailers (DVTs) resulted in some interesting shunting movements for the down daytime departures. The Motorail GUV vehicles were positioned at the buffer stops of platform 16 and, with the aid of the ‘scud’, the cars were loaded. The target Class 08 would then remove the ‘scud’. The coaching stock was then coupled to the Motorail vehicles, being driven from the DVT. This, I can testify, required very careful control of the DVT, bearing in mind that you were on a rising gradient controlling, at very slow speed, a locomotive some 10 coaches away. Coupling onto the GUVs was with the buckeye couplings, ensuring the buckeyes closed and locked. An ease away test was then performed to prove this, which again required precision control. This was by no means as easy as it sounds!

1A73

With a large volume of night work at Euston, a regular Motorail working was 1A73, the 23:20 departure from Carlisle. This was formed of up to seven sleepers, two day coaches, a brake van and two or three Motorail GUVs. One such occasion I worked it as a junior driver was on the night of Wednesday 8th January 1992. With a book on time at 21:55 this allowed time for preparation of my locomotive, 90020, and attaching it to the down working of 1S24. This was the 22:55 departure of the second TPO service of the evening to Glasgow (the first being 1S09 departing at 20:35; the story of my TPO workings is yet to be told!).

After an uneventful trip to Crewe, arriving right time at 01:18, I had a coffee and was pleased when 1A73 drew into platform 5 again

Table 3 Euston Services Summary of Motorail Services from Euston 1982 (all services conveyed carflats only with passengers travelling in other services)			
Destination Days Run Timing Load	Stirling M-S E455	Stirling MWFO E595	Inverness TTHO E595
Headcode	1S55 (AIR)	1S01	1S01
Euston Dep	09:40 (09:25 SO) 48 SLUs	21:05 54 SLUs	21:05 54 SLUs
Origin Days Run Timing Load	Inverness MWFO E595	Stirling TTHO E595	Stirling M-S E455
Headcode	1M62	1M62	1M69 (AIR)
Euston Arr	05:24 54 SLUs	05:24 54 SLUs	16:52 48 SLUs
SLU = Standard Length Unit AIR = Air braked D/E595 = Indicates the timing load for which the timings have been calculated			

Table 4 Summary of Motorail Services from Euston 1983-1985				
Destination Days Run Timing Load	Carlisle M-S E595	Stirling MWFO E595	Inverness Sun-Fri E595	Stirling Sun-Fri E595
Headcode	1P74	1S01 The Motorail Limited	1S05 (Passengers) 1S07 (Cars)	1S25
Euston Dep	10:20	11:15	22:10 (Passengers) 22:15 (Cars)	22:40
Destination Arr	14:38	18:15	08:55 (Passengers) 09:22 (Cars)	06:19
Origin Days Run Timing Load	Stirling M-S E595	Carlisle M-S E595	Inverness Sun-Fri E595	Stirling Sun-Fri E595
Headcode	1M69 The Motorail Limited	1A06	1M16 (Cars) 1M15 (Passengers)	1M14
Departure Time	11:45/12:03 (10:45 SO)	14:37 (09:31 SO)	19:30 (Cars) 20:30 (Passengers)	23:20
Euston Arr	18:54 (17:21 SO)	19:10 (13:33 SO)	07:19(Cars) 07:37 (Passengers)	07:27

Table 5 Euston Services Summary of Motorail Services from Euston 1990-95 - All trains timed for E595 load					
Destination Days Run	Stranraer M-S	Fort William M-F	Inverness M-F	Glasgow M-F	
Headcode	1S74	1S07 Sleeper	1S25 Sleeper	1S26 Sleeper	
Euston dep	10:30***	21:00	22:10	23:30**	
Origin Days Run	Carlisle M-S	Glasgow M-F	Fort William M-F	Inverness M-F	Stranraer M-S
Headcode	1A73 Sleeper	1M11 Sleeper	1M16 Sleeper	1M15 Sleeper	1M06
Euston arr	04:46	06:02**	06:49	07:34	18:53
** Motorail portion from/to Stirling attached/detached at Carstairs. ***Motorail GUVs also detached at Carlisle.					

on time at 02:04 with 86225 in charge. Walking along the train I noticed that, somehow, one of the built in tail lamps on the third Mark 3 sleeper from the front was on. Once I, and the driver I was relieving, had figured out how to switch it off, I finally departed ten minutes late. Further delayed by running on the slow line between Crewe and White House Junction (just south of Stafford) and a diversion via Northampton, I pulled into Euston at 05:20, 34 minutes late. A late arrival of 1A73 was always greeted with dismay by the crew on Euston target 2 as detaching the Motorail GUVs from the rear of the train and placing them on the stops of platform 16 for unloading was usually their last job. To be still on the engine after 05:00, eagerly waiting for the day crew on target 1 booking on at 05:30 was the worst case scenario.

Mishap at Brandon

A regular job that I did work as a junior driver at Euston was 1A73 (this was a Carlisle sleeper service formed of seven sleepers, two day coaches, a brake van plus two Motorrail vans) departing around 02:10 from Crewe. It was driving the Sunday morning working of this service that a good friend and colleague of mine, Gary Farr, was involved in that most dreaded of incidences, a high speed derailment.

The unfortunate train of events began earlier that morning, sometime after midnight, when three Class 47s were running light engine from Bescot to Rugby. The locomotives were brought to a stand at Coventry, with reports of something wrong on the rear locomotive. Upon inspection with a check that no brakes were on, nothing untoward was found. The '47s' continued but, unfortunately, on the rear locomotive, one of

the traction motors had seized and, although not under power, still resulted in a locked axle: hence the previous report. A short distance south of Coventry is Brandon and located here was an emergency point crossing used on rare occasions for single line working. Upon traversing this crossing the locked axle of the rear '47' caused extensive damage to the point frog but continued without stopping.

Gary was at the controls of 86102, *Robert A Riddles*, and had departed Crewe right time and, after the long drag via Bescot, was pleased to be on the main line and was steadily increasing speed to the train's maximum of 100mph. Passing over the damaged crossing Gary noted a serve jolt on his engine, which in fact derailed and then re-railed itself in quick succession. The rest of the train was not so lucky derailling with the consequence of a loss of brake pipe pressure and a fierce tug from the rear. Upon examination, the rear Motorrail vehicles had not managed to make it over the crossing and became derailed. Substantial damage was caused to vehicles and infrastructure although fortunately no one was seriously injured. An immaculate fully restored 'MG B' was, as I recall from some photographs of the scene, in need of some more body work repair.

On the following Sunday morning I passed the scene, during the resultant single line working, at 10mph with 1D48 the 08:50 Euston to Holyhead whilst being diesel hauled with 47456. The train locomotive, 87023, had failed at London with a faulty windscreen wiper and, with diesel hauling in operation between Euston and Watford, the sensible decision was finally made to leave the Brush Type 4 on at Watford. This was greeted with delight by the Bletchley driver Bob Ford (now a friend and colleague with me at Euston) who was manning the '47' and was now well on his way to making 12 hours on duty. With a 15 minute late start from Euston, another 15 minutes was lost at Watford whilst deciding not to detach the '47'. This was followed by an hour's wait at Rugby waiting for a path onto the single line working between Rugby and Coventry (the line via the Trent Valley was closed due to engineering work at Nuneaton). I finally arrived, and was relieved, at Wolverhampton at 13:05. 47456 and 87023 were both detached and a fresh Class 47 was provided for 1D48's onward journey.

The end of the Motorails

During 1994 with privatisation looming, the end of the loss making Motorail rail service seemed on the cards and it came as no surprise to us footplate staff at Euston when indeed the end was announced in December 1994. Despite strong protests from Scotland's regional council chiefs who believed that a court ruling had saved the services, the final Motorail service had, by May 1995, completed its last journey. So ended this unique service from London to Scotland, enabling you to travel in comfort and then explore the Highlands in one's own car. It was one of the first victims of the new railway edict that the railway is not there to provide a service but rather to make money for share holders; nowadays many of them European Governments!

With thanks to Gary Farr and David Warby for their assistance with information for this article.



One of the 'scuds' is seen at Glasgow Central. Motorrail vehicle YXA No.96453 was a former 25T bogie WELTROL 900926 that had been rebuilt for use to enable loading of cars into the GUVs from the platform. *David Warby*



The scene at Euston with five BR Motorrail GUVs on the rear of 1555, the 08:30 to Glasgow Central. The author describes the difficulty of coupling the DVT to the vans in the article. *David Warby*



The Great Eastern EMUs - spread their wings

photographs by Gavin Morrison

One of the surprises of the 1990s was the transfer north of some of the electric multiple units that worked out of Liverpool Street to cover shortages of rolling stock in the Manchester and West Yorkshire areas. Gavin Morrison's photographs show some of these units working on the former Great Eastern lines and after their transfer to the North of England.

Wearing the BR blue and grey livery Class 302 unit 302266 climbs out of Liverpool Street up Bethnal Green Bank on March 19th 1985.



Some of the Class 302s were converted for use by Royal Mail and were painted in this distinctive red and yellow livery. Unit 302991 is seen passing Bethnal Green on August 19th 1989.



Network South East liveried Class 307 unit 307122 was stabled at Southend Victoria when this photograph was taken on the 12th August 1989.



After new units arrived in the South East, some Class 307s were transferred away from Great Eastern services to the West Yorkshire PTE to work local services from Leeds to Doncaster. Unit 307130, painted in the red and cream WYPTE livery, passes the site of Beeston Station on the outskirts of Leeds whilst forming the 16:22 from Leeds to Doncaster on the 20th September 1991. Beeston station had closed on the 2nd March 1953.



The Class 309 'Clacton' units were the the first 100 mph EMUs. They were at first painted in BR maroon and had stylish wrap-round cab windows. After refurbishment these were replaced with smaller windows as seen in the photograph. Unit 309602 is seen heading away from the photographer as it climbs Bethnal Green Bank en route to Clacton on August 12th 1989.



A rather grubby looking 309611 is arriving at Clacton on Sea with a train from Liverpool Street on June 16th 1990. Note the former Great Eastern railway signal box and the searchlight colour light signals.



After they had finished working services out of Liverpool Street a number of Class 309s were transferred to the Manchester area to work outer suburban services for Regional Railways and then First North Western. Unit 309623 is leaving Stockport for Stoke on Trent on 19th May 2000.



For the opening of the Aire Valley electric services from Leeds to Ilkley, Skipton and Bradford Forster Square the West Yorkshire PTE obtained surplus Class 308s and painted them in their red and cream livery. Unit 308162 is seen arriving at Ben Rhydding with a Ilkley to Leeds service on October 5th 1995.

309624 carried a special advertising livery publicising the rail link to Manchester Airport which opened in 1996. On May 11th 2000 the unit is seen entering Stockport with a southbound working, probably to Stoke on Trent.





Early Belgian diesels

Belgium was one of the earliest countries that Colin Boocock visited as he discovered the fascination of railways on the continent. Diesel and electric locomotives were beginning to be introduced there in the late 1950s and early 1960s.

In 1957 diesel locomotives were still rare in Britain, though I had by then travelled many miles behind some in Ireland, so watching some fairly new diesels perform in Belgium was still a new experience. Until 1971, Belgian State Railways (Société Nationale des Chemins de Fer Belges – SNCB; or NMBS when expressed in Flemish) used a class-plus-running number sequence on its locomotives similar to that used in West Germany, diesel classes being in the 200 series. On the locomotives, the painted numbers were not separated, being expressed as six digits with no space or other marker.

Produced from 1955 by Cockerill, the 55 Bo-Bo diesel electrics of Class 201 were neat mixed traffic locomotives, their Baldwin diesel engines putting out around 1,700bhp. This class became Class 59 in the 1971 general renumbering of SNCB locomotives in which the former six-figure numbers were reduced to four digits, more appropriate for a relatively small fleet. This class was rugged and long-lived, continuing in heavy freight traffic into the early 1990s.

An interesting policy that SNCB adopted for its initial batches of diesels was to order parallel but different types from the country's two main locomotive manufacturers. The Cockerill company was based near Liège in the French-speaking region of Belgium, whereas Brugeoise et Nivelles (BN), despite its French language name, had a main factory in Bruges, which is in the Flemish-speaking part (Bruges is known as Brugge locally). BN bought in two-stroke diesel engines and electrical equipment from General Motors, whereas Cockerill purchased heavy, slow-rotating Baldwin engines and called on ACEC (Ateliers de Constructions Electriques de Charleroi) for the electrical equipment.

So alongside the Class 201 Bo-Bos came 40 locomotives from AFB of Belgium divided into three almost identical classes, based on the streamlined General Motors design that was also sold widely in Scandinavia and in Hungary (see my article on GM locomotives in *TRACTION* 221). Classes 202, 203 and 204 (later 52, 53 and 54) were Co-Cos of 1,700bhp and had a streamlined cab front design reminiscent of early American diesel types.

After DMUs had taken over their remaining push-pull passenger duties early in the 21st century, BN/GM Class 62 Bo-Bos still found useful employment on freight and infrastructure trains. Passing Antwerpen Oost station on 7th December 2003 are Bo-Bos 6285 and 6231 in multiple with a long train of loaded steel-carrying bogie flat wagons.

All images by Colin Boocock

These were also diesel electrics and, except for Class 204, were fitted with rheostatic braking. Class 203 locomotives were purely for freight and had no steam heating equipment. The three classes were outwardly identical, apart from early livery variations that became subsumed by more modern styles in the course of time. In the mid-1980s some Class 52s, which were being used on passenger work around Namur, were criticised by drivers for discomfort in their cabs. New cabs were



As an experiment, so that electric and hydraulic transmissions could be compared, both BN and Cockerill delivered diesel hydraulic versions of their diesel electric Bo-Bos, each producing six in number. One of the Cockerill batch, No. 211004, was glimpsed running into Brussels Midi in 1962. This class had a relatively short life. The six BN diesel hydraulics on the other hand were sufficiently useful to be kept on freight work around Antwerpen until 2001.

The first main line diesels from Cockerill with Baldwin engines were the Class 201 series of Bo-Bos. With leaf spring secondary suspension, these locomotives could well have given their drivers a rather lively ride at times. In 1980, long before part of the station was modernised to accept Eurostar and Thalys high speed trains, Brussels Midi looked as it had when rebuilt in 1946 after the war. Early Cockerill/Baldwin Bo-Bo diesel electric No. 5935 pulls out with a commuter train of maroon stock, its own livery being various shades of green and pale yellow. This locomotive was built as No. 201035.

fitted that changed the frontal appearance of the locomotives significantly. This group also lasted into the 1990s.

More orders were soon placed, with the first new deliveries appearing in 1961. There were two groups, as before, all mixed traffic locomotives, and nearly all were diesel electrics. Those from Cockerill were a Bo-Bo design with a sloping, angular front, and a similar but more powerful Co-Co. The 106 Bo-Bos were Class 210 of 1,400bhp, later renumbered Class 60. A batch of six diesel hydraulics of the same general design apart from their transmissions was introduced for comparison. These were Class 211 and became Class 64. The hydraulic locomotives were withdrawn from 1983, while the diesel electrics soldiered on until 1989. The Co-Co version was a heavy thumping diesel electric machine delivering 1,925bhp. These 93 locomotives started life as Class 200, later Class 51, and worked all sorts of services, including heavy freights and Brussels push-pull commuter trains. They lasted until 2003.

During the years 1969 to 1971, No. 200.001 was experimentally rebuilt with a 4,000bhp Cockerill diesel engine and emerged with its new number 5001. It reverted to standard as No. 5101 in 1980.

In parallel with this wave of new locomotives came two more basic types from BN, a Bo-Bo, Class 212, later 62, and a more powerful Co-Co type, Class 205, later Class 55. The Bo-Bos numbered 136 and spread across the network widely. Their GM engines were rated at 1,410bhp. They were fitted for push-pull working and also worked heavy freights in multiple. Several of this class have lasted well into the 21st century, still being visible on infrastructure trains around the country, many now standing out visually in a bright, light blue livery. As with the Cockerill locomotives, a batch of six was delivered as diesel hydraulics, this Class 213 in 1971 becoming Class 65, later 75, and just surviving into the 21st century, being withdrawn by 2001.

The 42 BN Class 205 Co-Co diesel electrics were also of 1,925bhp, becoming Class 55 from 1971. This class became the front-line express passenger diesel type for many years, as well as getting much use on freight. The Co-Cos were international in their travels, being seen in the Netherlands, at least as far as Maastricht, and as far south as Luxembourg city. Indeed, Luxembourg Railways (CFL) also purchased a batch of 20 of the same type, their Class 18. These lasted until 2015, with possibly three now still working with CFL Cargo in Denmark. Some SNCB Class 55s have lasted to the present day, several being employed on infrastructure work.

Happily, examples of most of these classes exist in preservation and, apart from a few wandering 55s, they can only be found in Belgium.





Thrumming through Namur station on 31st August 1961, with a heavy train of loaded iron ore hopper wagons, are American-style Co-Cos No. 202001 and 202004 of the NoHab/GM type that was popular in Scandinavia and later in Hungary. These had 1,700bhp two-stroke engines, making them a very useful class of mixed traffic locomotive. Fitted with steam heat boilers, these locomotives graduated more to passenger work when later freight diesels arrived on SNCB.



Drivers began to complain about noisy and draughty cabs on the NoHab/GM Co-Cos, so SNCB rebuilt them with modern, sealed cabs to mitigate the problems. This considerably altered the appearance of the locomotives, being more angular than the original streamlined shape. No. 5202 approaches Namur station with a local service on 12th September 1987.



A lighter Bo-Bo type was introduced in 1961 by Bruges et Nivelles (BN) using the 12-cylinder version of the GM 567C two-stroke diesel engine. These locomotives were for general purpose traffic with a wide route availability, and proved to be SNCB's most useful main line diesels, lasting in to the 21st century as Class 62. Some are running to the present day in infrastructure service. This view shows No. 212104 having arrived at Liège Guillemins station with a local stopping service on 20th October 1962.



The 'big brother' of the BN Bo-Bos was the Class 205 Co-Co of 1,925bhp, which had the 16-cylinder version of the GM two-stroke engine. These locomotives were ideal for heavy international passenger trains and for freight as well. In this photograph, No. 205026 (later renumbered 5526) passes through Poulseur station with a fast service from Luxembourg to Liège. The lighter track on the left of this view is part of the standard gauge Poulseur Tramway that was operated by the Société Nationale des Chemins de Fer Vicinaux (SNCV) which used steam tram engines on this line to link local factories to the main railway. Photographed in 1961, the tramway closed only a month or so later. Most of the formerly extensive network of SNCV lines were metre gauge and populated by diesel trams for local passengers, often running cross-country on roadside routes. It's all long since gone.



The Luxembourg to Liège passenger trains were shared by SNCB and Luxembourg Railways (Chemins de Fer Luxembourgeois - CFL) who also owned 20 locomotives of the same type as the Belgian Class 55s. CFL No. 1818 was seen rolling into Luxembourg station from the depot in summer 1968. This class was also valuable for handling the heavy freight trains that emanated from the small country's extensive steelworks and other industry. The livery is a smart maroon lined out in yellow.



Cockerill also produced some big diesel electric Co-Cos with deliveries starting 1961, these with Baldwin 1,925bhp diesel engines. Of this type, No. 5106 (formerly 200006) leaves Brussels Midi in 1980 with a mixed rake of Belgian and French stock. The orange coach is in the livery of the finance group Eurofima, which leased main line carriages to SNCB and also to Austria around that time, both railways running them in the leasing company's orange livery for a decade or more.



The Cockerill equivalent of the BN Class 212/62 was this type of Bo-Bo, originally Class 210 which later became Class 60. No. 6025 was photographed with a short local train at Ath, between Lille and Brussels, in 1980. This had a Baldwin diesel engine of 1,425bhp. A large number were built, 106 in total, but they were withdrawn earlier than the more reliable BN/General Motors Bo-Bos.

Early Belgian diesels								
Class	201 / 59	202-204 / 52-54	212 / 62	213 / 65 / 75	205 / 55	210 / 60	211 / 64	200 / 51
Designed for	SNCB	SNCB	SNCB	SNCB	SNCB	SNCB	SNCB	SNCB
Introduced	1955	1955	1961	1965	1961	1961	1962	1961
Built by	Cockerill/BN	AFB	BN	BN	BN	Cockerill	Cockerill	Cockerill
Wheel arrgt.	Bo-Bo	Co-Co	Bo-Bo	B-B	Co-Co	Bo-Bo	B-B	Co-Co
Diesel engine(s)	Baldwin 608A	GM 16-567C	GM 12-567C	GM 12-567D1	GM 16-567C	Cockerill TH8.95SA	Cockerill TH8.95SA	Cockerill 10-608A
Power output	1,700bhp	1,700bhp	1,410bhp	1,440bhp	1,925bhp	1,400bhp	1,400bhp	1,925bhp*
Maximum speed	120km/h	120km/h	120km/h	120km/h	120km/h	120km/h	120km/h	120km/h
Traction equipment	ACEC	GM	ACEC	Hydraulic: Voith L216rsb	ACEC/SEMG	ACEC/SEMG	Hydraulic	ACEC/SEM
Starting tractive effort	196Kn	245kN	190kN	191kN	272Kn	196Kn	Not known by author	272Kn
Train heating	Steam Vapor 6166	None	Steam Vapor 6166	Steam Vapor 6166****	Steam Vapor 6166	Steam Vapor 6166	Steam Vapor 6166	Steam Vapor 6166
Weight in w.o.	87.2tonnes	108tonnes**	80tonnes***	79tonnes	110tonnes	78tonnes	Not known by author	117tonnes
Original number range	201001-55	202001-017; 203001-019; 204001-004	212001-003; 212101-133	213001-006	205001-042	210001-106	211001-006	200001-093
Final number range	5901-55	5201-5217; 5301-5320; 5401-5407	6201-6393	6501-6506****	5501-5542	6001-6106	6401-6406	5101-5193*
No. built	55	40	93	6	42	106	6	93

* No. 200001 uprated 1969-1971 to 4,000bhp and renumbered 5001. Rebuilt to standard as 5101 in 1980.
 ** Class 53 weighed 106.6 tonnes.
 *** Nos 221001-003, later 6391 to 6393, had Flexicoil bogies and weighed 78 tonnes.
 **** In 1982-83 renumbered 7501-7506 when steam heating boilers were removed

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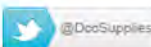
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Hydraulics on freight



'Hymek' D7007 prepares to leave Radstock West with a freight for Bristol East Depot, on September 2nd 1965.
Derek Fear/Railphotoprints.co.uk

North British Class 43 Warship 861 Vigilant departs Exeter Riverside Yard with 6B36 the 19:20 freight to Plymouth Friary, on the 28th May 1971.
John Medley/Railphotoprints.co.uk

North British Type 2 (Class 22) 6343 shunts the yard at Tiverton Junction while working 7B74 the Hemyock to Exeter milk and freight service on May 26th 1971.
John Medley/Railphotoprints.co.uk





Class 52 1028 *Western Hussar* passes Tally Ho as it climbs the lower slopes of Dainton with an eastbound fitted freight on the 11th August 1972.
Railphotoprints.co.uk - collection



Maroon liveried Class 52 D1056 *Western Sultan* is seen passing Narrowways Junction with the 11:40 Lawrence Hill to Radyr coal empties on the 8th May 1969.
Hugh Ballantyne/ Railphotoprints.co.uk



50046 runs around its train at Oakdale Colliery.

AJAX

What a great article in **TRACTION 234** about 50046 Ajax and its loco history. When I worked at Crewe Works and the '50s' were put on the load bank in the test houses for final testing the inspectors liked to do all the tests in the cab at the opposite end to the fan.

*S. Armstrong, Blackpool -
ex Crewe Works erecting shop (9903)*

I read with interest the excellent article by Paul Hill on 50046. A further reason was that, despite being a driver at the London Midland depot of Stonebridge Park, the first locomotive I ever stepped on as a fully qualified new driver was indeed Ajax. On Thursday August 15th 1985, after successfully passing my medical in the morning, I reported at 14:00 to St Pancras Chambers (located in the upper floors of this magnificent station) to see chief traction inspector Philip Bassett for what was termed 'approval'. This short 'pep talk' confirmed my appointment as a driver and what was expected of me and I departed his office with a spring in my step.

My next turn of duty was on the following Saturday booking on at 04:30, on my rest day, for a secondman duty which was cancelled. After settling down in the mess room for some shut eye, by 07:30 and slightly more refreshed, I wandered round to the foreman's office. I noticed on his pad listing the spare footplate crew that I was shown in the secondman's column. My pride got the better of me as I stated that I had had my medical and approval and was now a driver! "Excellent!" remarked John Smith the foreman, as he rubbed out and rewrote my name in the driver's list adding, "I'll soon find you something to do."

I didn't have to wait long when the tannoy called out my name. The job was to make my way to South West sidings and conduct 5M31, an ECS working from the Western Region, to Acton Lane Reception sidings. Then, after the locomotive was detached from the coaching stock, I was to conduct it back to South West sidings. Arriving at South West sidings, 50046 Ajax was there idling away manned by a very senior Old Oak Common (OOC) driver who seemed amused that this youngster was to show him the way. The move involved a 'run round' at Mitre Bridge Junction and I was

grateful that the OOC driver knew more than he initially let on. The stock was finally left on Acton Lane Reception No. 2, its forward working being in the hands of a Class 81 waiting on the goods line.

From here the OOC driver suggested being routed back to the Western via the short connecting line up the incline to Acton Canal Wharf, then to Acton Wells with a right turn back down to the Acton Main Line. Insisting that he had no further need of my services I made my way back to Stonebridge completing my first ever duty as a driver on the most unlikely class of locomotive. In recent years when working to Manchester I always looked fondly down at the remaining No. 1 cab in the back garden of Mel Thorley when passing on the mainline at near Stockport!

Mick Humphrys by email

As a response to the article on 50046 Ajax and as the author of the CP 1801 article in the same edition of *Traction* (234); I would like to contribute a little bit of info about 50046's only rail tour working, (something that I participated in back then). This was the Welsh Warrior 1Z33 which was run by RPPR on Sunday 12th August

1979, care of John Vaughan and associates. The tour left Paddington at 08:23 and went to Newport via 'The Hole' (I'm not sure if this was the first time a Class 50 had gone through the Severn Tunnel). From Newport the tour went to Oakdale Colliery where there was a photo stop. As the '50' ran round, people were along the trackside and up on the embankments taking photos, but due to sensible behaviour and good stewardship, no one got hurt in those days! After the '50' had got to Cardiff it was exchanged for a couple of Class 37s which took us up to Rhymney and back. At Cardiff Ajax was reattached for the run back to London. I remember that the '50' slowed right down in the bottom of the Severn Tunnel and thrashed its way out on the English side on full chat - incredible! The run towards Swindon was equally exciting as one or two enthusiasts timing the train said we were doing in excess of 100mph! The stock was a rake of BR Mark 1s. One comment that has stuck in my mind from that unrepeatable day was:

"With a hoover and ajax we've been to Wales to 'clean up' the valleys". Happy memories.

Phil Barnes by email.

In Paul Hill's article on 50046 in TRACTION 234 he states that its last visit to Crewe Works was in March 1975. On the evening of Friday 11th June 1976 I arrived at Crewe at 21:00 on one of my many overnight bashes to North Wales, only to find 50046 waiting to take over the 19:15 Euston to Holyhead which surprised me as the last few '50s' had been transferred from Crewe to the Western Region in May, although 50046 had been a W.R. locomotive since May 1974, two years previously.

At the time I assumed that it had been in Crewe Works for attention and that Crewe Depot were making use of it before sending it back to the W.R. but, if Paul is correct, then what was it doing at Crewe and how had it got there? For the record its workings that weekend were as follows: Friday 11th June, 19:15 Euston - Holyhead (from Crewe), Saturday 12th June, 01:10 Holyhead - Euston (to Crewe), 10:25 Euston - Llandudno (from Crewe) and 15:53 Llandudno - Euston (to Crewe). Could this have been the last working of a Class 50 on normal service trains along the North Wales coast?

Also could I correct the caption to the photograph of 25309 on page 20 at Stafford. What is visible in the background is the old goods shed, not the steam shed. This was at the north end of the station behind Stafford No.5 signal box and is still in use today as a factory although heavily modified.

Steve Horner, Droitwich

PINXTON SIGNAL BOX AND STAFFORD

I found Alex Fisher's modelling article about freight movements in and around the Pinxton area of the East Midlands (TRACTION 233) most interesting? One of the locations mentioned in the Pinxton article was Welbeck colliery, which was an important supplier of coal not only to power stations but also to other industrial locations. One of these was Northfleet cement works in North Kent. Coal was delivered to Northfleet using the Merry-go-round (MGR) concept introduced for power station coal operations in the mid-1960s.

Such MGR workings between Welbeck and Northfleet were usually re-engined and re-manned at Toton, and also given a wagon examination before continuing their long trek to North Kent. The route taken from Toton to the South East was along the Midland Main Line (MML), usually via Corby. They then crossed London from Cricklewood, to reach Southern Region territory at Kew, via Acton Wells Junction.

Interestingly, however, during the early 1970s, the MGR coal workings between Welbeck and Northfleet were reaching London via the southern section of the West Coast Main Line, which I assume they accessed at Northampton (or possibly Bletchley?). One such working (6062) was reported in the October 1970 issue of 'The Railway Magazine' as being seen in the London area regularly powered by pairs of Class 47s (Nos. 1804+1825; 1807+1943; 1813+1826; and 1813+1857), presumably working in tandem (i.e. with a crew in each locomotive). Perhaps someone can say if the service was double-headed from Toton and if so, why?

Upon reaching London the train then proceeded to cross the capital via the West London Line. Pictures of these workings passing through Kensington Olympia can be found on the Rail-Online website. By the late 1970s, these long-haul MGR diagrams were producing Class 56 locomotives, which sometimes replaced a pair of Class 37s at Toton. During the early 1980s, some of the long-standing MGR coal duties between Welbeck and Northfleet were discontinued or had been amended to work out of Thoresby rather than Welbeck.

It is perhaps also worth mentioning that it was possible back then to see MGR formations travelling loaded in both directions along the MML south of Glendon South Junction; southbound to industrial destinations such as cement works and paper plants in North Kent, and northbound laden with coking coal from the Kent coalfield to coking plants and steelworks in the North East (those MGRs forming a backload of coking coal to the North East had usually worked into the region with coal for the Bowater paper company at Sittingbourne).

If I'm not mistaken, and I'm sure someone will correct me if I'm wrong, it was not unknown for those MGRs destined for the Southern Region to be piloted across London by a slow speed control (SSC) fitted Class 47 when necessary (e.g. when the train was hauled by, say, a Class 45 or a non SSC equipped Class 47) to facilitate discharge of the train at its final destination.

*David J. Hayes,
Wednesbury*

IN AT THE DEEP END

I have just received and thoroughly enjoyed TRACTION 234. I read with particular interest Colin Boocock's 'In at the deep end' as I grew up in Scunthorpe and my formative years featured regular visits to Frodingham depot. His reference to the Open Day at Immingham also struck rang a bell and I wondered if the attached might also be of interest to readers?

Andrew Galpin by email

On the occasion of the open day at Immingham depot on the 1st September 1974 Woodhead Line electric 76054 and 'Deltic' 55008 are among the major attractions. Andy Galpin



REVIEWS

The Latest Books & DVDs

TRACTION is always interested in reviewing books and dvds related to diesel and electric traction in the British Isles. Please send items to the editorial address at: TRACTION, 120 CHURCHILL ROAD, MIDDLESBROUGH TS6 9NS.

DVD

SCOTTISH RAILWAY ROUNDOABOUT: 2015 VOL. 5 PARTS ONE & TWO

Total running time: 124 minutes.

Price: £14.95 plus £1.55 postage

Publisher: Michael Field Video

Cheques to: Michael Field, The Rowans, Bishop Kinkell, Conon Bridge, IV7 8AW

This is a two disc DVD covering the events of 2015. The first DVD covers January to April, including the 'Easter Highlander' special with 37s and 'Deltic' 55003 on the 'Royal Scotsman'. The second disc covers the rest of the year, including the Borders Railway opening. Both these DVDs cover events filmed largely in the north of Scotland, but also with many scenes shot further south around the Forth Bridge, in Fife, near Carstairs, Fort William and at Bowness. The quality of the filming is excellent with great care having been taken to find interesting locations. Apart from a few sequences featuring Class 158s and 170s, everything else is of locomotive hauled trains: charter specials, the 'Royal Scotsman' tour train, Network Rail test trains and, of course, freight traffic such as the 'Tesco' container trains, infrastructure, oil, nuclear flask trains and the now largely disappeared coal trains. The motive power is surprisingly varied: Classes 20, 37, 47, 55, 56, 66, 67, 68 and HST all feature. There is plenty of coverage of hard working locomotives in spectacular scenery, including some in snow conditions. There is a clear and unobtrusive commentary and some on-screen location and train information. *SRa*



BOOKS

DARK DAYS AND BRIGHTER DAYS FOR NORTHERN IRELAND RAILWAYS

Author: E. McMillan

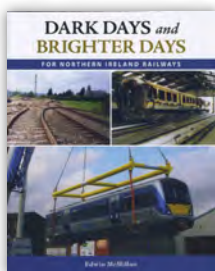
Price: £18.00

ISBN: 9781780730943

Publisher:

Colourpoint Books

This 288 page book is a fascinating account of the dark days of the period of Northern Ireland's history known as 'The Troubles' and their effects on the



operation of Northern Ireland Railways. The book is largely an auto-biographical account following the author's career from when he joined NIR in 1973 as a clerk through to his retirement 40 years later.

The first part of the book covers the author's career before considering in more detail other aspects of NIR. Two chapters entitled 'NIR during The Troubles' cover the periods 1972-77 and from 1978-2013. These include much information about the often horrendous terrorist attacks mounted on the railway. Other chapters cover the operation of special trains and rolling stock, stations and infrastructure changes, anti-social behaviour problems, the author's involvement in prosecutions and, finally, accidents and incidents. At the end of the book is a 24 page long listing of terrorist incidents between 1972 and 1977.

The book is well illustrated with a wide selection of both B & W and colour photographs. For any enthusiast with an interest in Irish railways this book is essential reading. *SRa*

THE GREEN DIESEL YEARS

Authors: Martin Jenkins & Charles Roberts

Price: £22.50

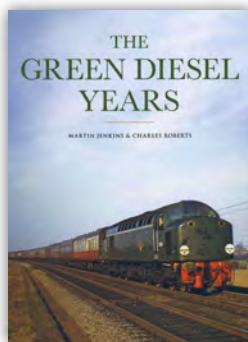
ISBN: 9780711038318

Publisher: Ian Allan Publishing

This 96 page A4 hardback book covers the 'green diesel' era between 1955 and the early 1970s. There are about 200 colour photos that show the variety of diesel locomotives and DMUs in these early years of diesel power on Britain's railways.

After a brief introduction, there follows a wide ranging selection of photographs, with locations starting at Kyle of Lochalsh in the north of Scotland, and slowly working southwards to finish eventually at Penzance.

Many of the photographs were taken at interesting railway locations, often long gone, with the more mundane workings (and therefore typical of the era) being prominent. The vast majority show the trains within the landscape or railway infrastructure context which make them even more interesting as so much has disappeared.



Photographic reproduction is of a good standard, whilst the captions are informative and give much background detail. For enthusiasts who remember those years this book will bring back many memories of days watching trains, and for those too young will show just what you missed. Highly recommended; sit down with a glass of wine and travel back half a century to the green diesel days. *MW*

BRITISH DIESEL LOCOMOTIVES OF THE 1950s AND '60s

Authors: Greg Morse

Price: £7.99

ISBN:

9781784420338

Publisher: Shire

Publications Ltd.

In this 64 page A5 card cover book the author briefly outlines the development of mainly diesels up to the 1960s. The text is supported by a good selection of photographs. *SRa*



SEVENTIES SPOTTING DAYS AROUND THE EASTERN REGION

Authors: Kevin Derrick

Price: £14.99

ISBN: 978144566069

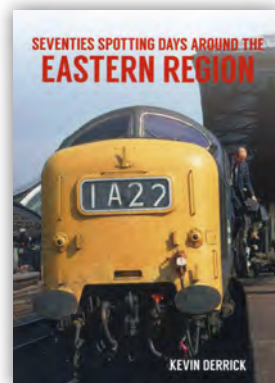
Publisher: Amberley Books

Kevin Derrick has assembled a collection of about 190 colour photographs covering the railways of the Eastern Region in the 1970s.

The chapter headings give a good idea of the geographical coverage:

York, Stratford, Woodhead,

Doncaster, the East Coast Main Line southern section, East Anglia, the North East, King's Cross and Yorkshire. Photographs are shown two to a page and are sharp and extremely well reproduced. For fans of the blue period this will be a delight. *SRa*



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