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Free to members

The Prospectus

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Tanks on our lawn. See page 9. Photo Mike Manners

**DAWSON'S DIARY
THE BID FOR THAMESLINK
NOT SO PERMANENT WAY
PROJECT NEWS
SECOND HAND ENGINES
AGM REPORT AND PICTURE**

DAWSON'S DIARY

kept by the President

May public running was very warm once again all was running well, the club's loco was going okay and seemed that the recent repairs carried out to the axle boxes was good.

Then the engine and train locked up and came to a halt not too far from the level crossing. The members set to and pushed the train and loco back to the steaming bay. With a short delay the trains were running once again, good job it was not too busy this time. After some checking it was decided to remove the side rods both sides and remove the front wheel set, with help from some members Nigel and Mike used the turntable pit, using two sand bags on the roof of the loco. The wheel set was soon out of the frames making the loco an 0-4-0. The problem was the screw holding the retaining washer holding the front coupling rod on had jammed the crosshead.

That is what I call team work. Well done everyone.

The following Wednesday our young Jamie gave it a good clean up. He is a very keen young engineer.

The club open weekend on Saturday Alf's tank club camping over the weekend. A very good turnout of various sized tanks and trucks. I noticed a very nice AEC Matador lorry that was used when I was in the RAF in the 1950s!

It was a pity it rained in the afternoon that put paid to the running. Nigel ran his loco ready for public running in June. They want to do it again next year. A good show.

Mike Sinclair's MG car club put on a nice show of MGs for us to admire in the sunshine while it lasted.

MGA, MGTF, MGB, MGTD, Austin 10. Photo John Billard

Next day some of the tanks stayed overnight, the day was fine and we had no visitors with locos. Some members ran their engines. Alf went to ASDA to make us a ploughman's lunch which was very nice. Nigel ran his loco ready for public running in June. That one did work okay!



Trying to Buy a Franchise – The Management Bid for Thameslink 1997.

Last month we covered getting a credible business partner, which took some time and we ended up with a Newcastle based bus company. One of their attractions to the line was that they operated bus franchises in Bedford, Brighton and London, more of which later.

I will not name them so I can then be rude about them, as the way it turned out, they did not have the guts for a competitive bid, they added very little to the bid process, and certainly had no ideas on how to grow a rail business. They were, it seemed to us, used to running a declining bus service and were very cost driven. Regular readers will know that cutting costs was not going to deliver a winning bid. We wanted to invest and do things, while they saw all the risks. In hindsight, we needed that balance, but it was not a positive experience.

The context of the bidding process was that we had gone from being the most difficult franchise to sell because of the Thameslink 2000 plans, to being the one had had the least time and by the time we had a partner, there were barely 12 months to the general election in May 1997 and we knew we had to be sold by then. We also knew what was happening in the bid process, - and colleagues reported the extent to which competition for bids was growing, so that the promises that won London Tilbury and Southend, one of the first to go, would not come close to winning Thameslink.

The government, in the form of the Office of Railway Franchising (OPRAF) were looking to turn commuter routes into premium businesses, turning a subsidy into a substantial profit. The winning bid for the LT&S had what their management considered an aggressive revenue growth forecast, but still required a small subsidy. Our railway had more off-peak traffic than theirs, but we knew that such a bid would be laughed out of court just 18 months later. This is the incentive to take risks with the revenue line that still exists today. It is how competition is brought into railways without the complication of competing trains on the same route (On-Rail competition), and it is what franchises are for. However, as the East Coast bidding has shown on more than one occasion it can be overdone, and large companies can lose a lot of money as a result, paying the government what they contracted, but not taking in the revenue because their plans did not work, the infrastructure was not as agreed etc. etc. The government should, of course, be able to spot such unrealistic aggression in the bids, and I know from inside information that the failing VTEC bid had a revenue forecast some £40m a year higher than First Group's bid, which came second.

The difference was spotted, and First were invited to think again, but refused to move their bid upwards because of the risks they saw. They were, as it turned out, right. But failing franchises do not indicate a failed system, if none ever failed, then the treasury and taxpayer would be always accepting comfortable bids that put money in the private company's profits, not in the Treasury coffers.

If you take revenue risk away from the operator, then all they must focus on is the cost of running the business, that way is death for customer service by a thousand cuts.

So the bidding wars were getting more aggressive and all sorts of transport companies were wanting a rail franchise, so we knew we had to bid hard, and have good plans. Another feature of the bidding was that we really felt that with the shackles of BR thrown off, we could think about almost anything. Our six bid ideas with multi-million revenue impact were:-

New trains

Heathrow Gatwick service

Compensation income from Railtrack on the Thameslink 2000 project

Luton Airport Parkway – new station

Aggressive off-peak marketing and pricing

Investment in service quality issues.

With our bus men adding little to the process (they looked at our costs and did not come up with much) all our plans were very railway. We looked at bus/train integration where their services came close to ours, but none of them had £1m revenue improvement in them so we put warm and fluffy words in the bid but nothing in the additional revenue. The simple fact is that some bus services ran to stations already, and the audience for a bus trip to the station is quite small and needs a very frequent and reliable service to appeal to the customer. Delivering such a bus service was not in their deals with local authorities, so it could not be delivered. We put investment into car parks instead.

Two of our “Big Ideas” fell by the wayside, the third did not work out in practice, as it happened to the franchise winners, but items 4 to 6 on the above list did deliver our winning line from our plans although it was someone else that put them into action.

New trains – With the dual voltage, longer distance/metro service mix that is Thameslink, we saw ourselves as the ideal test bed for the go-anywhere train that the leasing companies would love to build. We had very useful discussions with the most business progressive leasing company (Porterbrook) which were very fruitful until they announced their sale. The company had been bought by its management, and the sale turned the MD’s £300k investment (he had a bigger house than me) into £30m+ in 18 months. Clearly deals with TOCs was not going to match this, so the idea fell away, we would have to manage with the trains we had.

Gatwick – via the City – There is a piece of railway (ex Midland) barely three miles long between Acton and Cricklewood, via Harlesden and Dudding Hill Jc. We wanted to string a few 25kv wires along it, so that instead of terminating trains at St Albans, we could turn at least 2 per hour left at Cricklewood and go round to Heathrow. This would have provided the Heathrow -City link that will be delivered by Crossrail in 2018 at a cost of £15bn plus trains. Small it may have been, but even our crude modelling showed it was a revenue winner.

We hit the buffers of the Railtrack reality on this one, just too radical, too difficult, not aligned to London's transport plans. Just too good! To make it work needed years of preparing the ground, and a business partner with political clout prepared to fund the infrastructure investment, not a provincial bus operator.

Luton Airport Parkway was clearly going to happen, the main attraction for the bid was not the airport traffic, but its proximity to junction 10 on the M1. Motorway widening plans and growing congestion represented a great opportunity to use the new station as a "park and ride" facility. We were talking to the local authority at Harlington as well to do the same from junction 11, but the green belt got in the way of the car park so the discussions were protracted. I imagine that street parking round the station remains a problem in Harlington even now.

Compensation - The brutal truth was that Thameslink 2000 was set to dig up our railway from halfway through the franchise to the end of it. We spent a lot of time thinking how we could make the case for compensation from Railtrack. There is a current misconception in the press that this compensation stream is for passengers to get some of their fares back. In fact it is much wider than that, the operator loses the chance to improve quality, loses revenue and has extra costs involved in managing line closures, diversions etc. Overall, T2000 represented a business opportunity for the franchise, provided they had their arguments for compensation well marshalled. Ours were.

Growing the Off-Peak railway through aggressive pricing and marketing was already working for us. Our peak time trains were already some of the fullest in the country with 30% standing, so no revenue growth there. What stopped people using the railway off peak? We knew from our research in Luton High Street that the average resident thought the fare to London was 30% higher than it actually was. Publicity about high train fares is not new and distorts the truth as we have some of the cheapest fares in Europe as well as some expensive ones – that is how private companies work.

Secondly, few of them apart from commuters saw London as a place to go in their leisure time. Our advertising in Luton and similar places from the date of that research was all about telling folk the truth. London represented a great leisure destination for shopping, arts, sciences and culture, and the cost of getting there was peanuts compared with what you would enjoy (and spend money on) when you arrived. Pictures of Harrods with the logo "Pop round to your corner shop" and the Serpentine with "Take a stroll in the park" drove the message home with the off-peak fare in BIG LETTERS. Cheap advertising, but effective, and already working. We had loads of capacity on our frequent off-peak service - had to be a winner.

To get new punters to return for more we had to have quality in the experience, so stations had to be manned, we had to be able to sell tickets, we needed gates to make sure we protected the revenue, and we needed well-lit accessible car parks so that the late-night returns were not a security nightmare.

These quality issues using the trains and stations we had made the core of our bid.

The result of modelling all these improvements was a bid line that turned the need for a government subsidy of £120 m over the franchise period of 7 years into a premium payment from the extra revenue of £131m. Company profits at a very reasonable level well below the premium payment were on top of this. What a deal for the taxpayer! And this from one of the smallest franchises on offer! Our bus partners were impressed with the thinking, and the individual items withstood their scrutiny for deliverability. They were all included in an impressive pair of glossy documents in the OPRAF format and represented a mammoth amount of thought and effort by the management team on top of their day job. We were proud of it and poised for success. Don't miss next month's instalment!

To be continued



The route to Heathrow
Cartography courtesy 61249



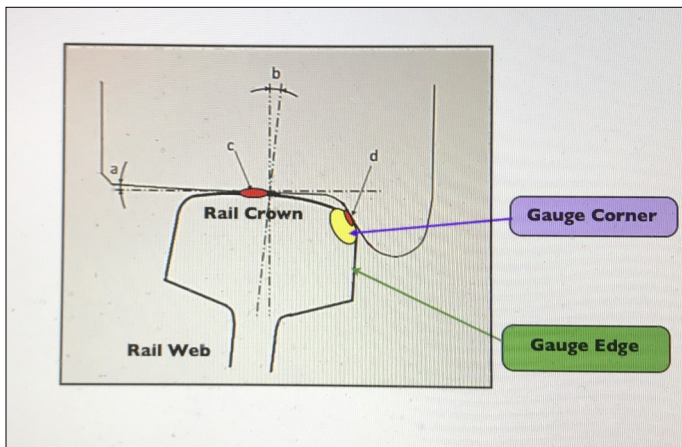
The not-so Permanent Way

by John Spokes

You may not realise when travelling by train that the processes going on beneath your seat, at the interface between the wheels and the rail, are very complex and to some extent still only partly understood. The first person to give this some serious analysis was Heinrich Hertz who in 1881 developed the initial theories on elastic contact. He's better known now for his work on electromagnetic waves and his name has been given to the unit for frequency.

Typically the point of contact between a wheel and a rail is the size of the nail on the average forefinger which equates to a static pressure for normal axle loadings of about 130,000 pounds per square inch. When a wheel rolls on rail, and more importantly when it's driven or is braking, ROLLING CONTACT FATIGUE (RCF) takes place. So the not-so-permanent way is slowly, but imperceptibly wearing away. Fortunately the development and use of high-manganese steel means this generally takes some time. I say generally, but this is not always the case and if the rate of wear was uniform and thus could be controlled, then track and wheel maintenance would be greatly simplified. However, RCF leads to many types of problem. Gauge Corner Cracking, the subject of much debate following the October 2000 Hatfield disaster, is one such example and this event led to major political fallout as well as being the catalyst for considerable research in this field.

Figure 1 shows the section through a rail and wheel showing the two normal points of contact: one at the rail crown and the other at the gauge corner. I say normal, but



generally only contact at rail head is made; the flange/gauge corner contact only comes into play when traversing sharp curves, shallow curves at speed and on switches (points).

The profile of a good wheel is a slightly curved section of a cone.

The cone angle is typically 2 degrees. You are probably aware that the coning (on two wheels rigidly fixed to an axle) provides a natural means of self-centering on the rails, as movement to the left or right causes one wheel to travel a slightly further distance than the opposite wheel and this drives the wheel set back to the centre of the rails. Irrespective, HUNTING, or transverse oscillation, to use the jargon,

still takes place and was an accepted fact of railway operation in the days of steam and especially so with short wheel base goods rolling stock. In March 1955, the test of two French Bo-Bo electric locos up to 330 kmph (205 mph), as a precursor to the TGV, caused very significant track misalignment and near disaster. Modern practice, in addition to effective bogie design and maintaining a good wheel profile, is to apply some form of lateral damping between the bogie and the vehicle body.

Because curves present one of the big challenges to the rail wheel interface a number of measures are used to mitigate the effect of negotiating a bend.

Mr Newton said something about a body (in this case a train) continuing in a straight line unless acted upon by implied forces. So when a train is driven around a curve the train and its passengers experience centrifugal force. If this centrifugal force is too high then the carriage could turn-over (outwards) or the outside wheel flange could ride over the track. BIG TROUBLE. In addition to the centrifugal force there is the weight of the train which, because of gravity, acts vertically down. So ideally when going around a curve the net effect of these two forces should act at a right angle to the track so there is no forces trying to overturn the vehicle or force it off the rack.

One solution is to use super-elevation or CANT, to use the rail industry term, i.e. raise the outside rail relative to the inner. At high speeds this would mean that the Cant would have to be very high and then if the curve was taken at a lower speed all the passengers would fall towards the inside of the curve. COSY. You may have experienced this unpleasant sensation when going slowly or, worse, stopping on a track with high Cant. The maximum Cant normally used on Network Rail is 150mm (6 inches) although sometimes 180mm is used. This generally means that the effect of centrifugal force is not completely eliminated and this is called CANT DEFICIENCY, which most people still find tolerable.

Another measure is to control the approach to a bend using TRANSITION CURVES. These are not just any old shape and are quite complicated mathematically (a chap called Euler investigated them quite a lot), but a good description is to say the curvature (radius) increases linearly as the train moves through the curve. Without them the train would go from a straight into a constant radius bend and the effect would be an instantaneous build-up of the centrifugal force, which would not only be unsafe but extremely uncomfortable for the passengers. Those of us who drive a car or motorbike, instinctively adopt a Transition Curve when we approach and leave a corner. Formula 1 drivers put together a series of Transition Curves when driving what is called "The Racing Line". The picture below shows another example, this time a Theme Park Ride. You should be able to see the constant radius curve at the top of the ride and the Transition Curves leading in and out. Sorry to say, but some of the Transition Curves on the Reading Club tracks are probably not mathematically correct!

The third method of dealing with curves is to use a TILTING mechanism such as the Pendolino. This mechanically forces the Centre of Gravity of a vehicle towards the inside of the curve so that for a given speed the resultant of the



vehicle weight and the centrifugal force acts more closely at a right angles to the rails and reduces the tendency to tip over (outwards) or ride up the rail. Thus, a given curve can be taken at a higher speed than without Tilt.

Next time I'll talk about wheel-rail adhesion and the tricky (sticky) subject of Creep, which has nothing to do with the approach to our President in an attempt to get a Certificate for a dodgy boiler. I'll then describe some of the more common wheel and rail defects and how they can be dealt with.

To be continued

USERS OF THE GROUND LEVEL TRACK PLEASE NOTE

Nigel Penford

Members/visitors using the hydraulic unloading lift on the ground level track must remove their vehicle/trailer as soon as possible from the hardstanding when loading/unloading is complete.

This request comes as they may obscure the view of road traffic coming on site. This is most important during club running/young engineers day as there will be no club member manning the road crossing. If there is a problem loading/unloading and you will be parked up for some time it is required that a red flag be posted on the approaching signal.

During club running young driver training or visitors/inexperienced drivers may be on the track. This would also apply to public running for late arrivals.

Safety is our top priority so let's continue to enjoy this great hobby with out any problem.

CLUB RUNNING AND TANK WEEKEND

Jim Cusworth

Over the weekend of 12/13 May the RSME played host to the UKTC for their annual get together and BBQ. Members arrived with their tanks from the Friday afternoon and we set up 3 tents to accommodate sleeping, cooking and for overnight tank accommodation. We also had a model traction engine arrive on Friday to run over the weekend. The weather on Saturday morning was fine and saw the tanks being run and displayed along with RSME members driving locos around the track as it was also club running day. Unfortunately the traction

engine developed a problem which stopped it from running in the afternoon. Sadly about 2pm the weather changed and the rain arrived for the afternoon. This didn't stop the BBQ going ahead and members from both clubs enjoyed the food and had an enjoyable evening.

The Sunday morning brought the sun out again and although a lot of members didn't stay overnight those who remained enjoyed a warm day driving there tanks and a few drove a loco around our track.

Sunday morning also saw the arrival of members from the MG owners club. Some very nice vintage cars were lined up along the front of the clubhouse and looked superb in the sunshine.



A tank line up

Karl's smart engine.



Is it real? ...asks Mike Manners who took the pictures.

SOME NEWS ON VARIOUS PROJECTS

Mike Manners

Club Baldwin

Well, the Club Baldwin made it back to the Club track and all was working well for the first couple of running sessions. The good news did not last.

At the last public running session, with a train full of passengers, disaster struck. Just after the signal past the level crossing the Club Baldwin literally stopped dead. It was immovable. Not good news on a busy public running session having the ground level track obstructed by an immovable locomotive.

We had to uncouple the passenger carriage and push that back past the level crossing and then slide the Club Baldwin back into the steaming bay with all six wheels locked solid. A quick examination soon revealed the problem. The coupling rods on the left side of the loco were perfectly in line and horizontal as they should be. On the right-hand side of the loco it was a different story. The rear coupling rod was horizontal but the front one was pointing down at the front by about 15 degrees! Why? Because the coupling rod retaining screw had worked loose and eventually jammed under the crosshead. The jammed wheel had stopped dead but the locomotive and the other five wheels had continued to rotate until everything jammed up solid. Now what do we do?

Luckily, we had enough other locomotives on the ground level track to cope so a quick decision was made. We would remove the jammed axle and leave the loco in the bunker balanced on just four wheels while the front axle and wheels were repaired.

Dropping out the front axle was interesting and involved me lying in the turntable pit with the front of the Baldwin hanging over my head. We had two bags of sand on the cab roof to make sure the locomotive did not tip forward. The front axle and wheels were held up with rope while I removed the brake gear and axle box keeps. I then got my head well out of the way while the axle was lowered to the ground.

Over the next couple of weeks young Jamie gave the loco a good clean around the area of the front axle. An area difficult to get at but now accessible with the axle removed. The axle complete with wheels and axle boxes still attached went back to Nigel's workshop for repair. More problems!

The wheels had to be removed and the only way to do this is to cut the axle in half and press the axle halves out with a hydraulic press. One side was ok but on the side where the wheel had rotated on the axle there was a bit of a problem. The wheel had been retained on the axle with a grub screw half in the wheel and half in the axle. As the wheel had been forced to rotate on the axle this had rolled the screw around between the wheel and axle and everything was immovable. Locked up solid!

An attempt at drilling the axle out simply resulted in the drill impacting the very hard screw and being forced aside. In the end as much of the axle as possible was drilled out and the hydraulic press finished the job. The repair job was going to involve making a new axle, cleaning up the wheels, broaching

keyways in the wheels and axles and replacing both of the needle roller bearings. This was where the next problem showed up.

In one axle box the old roller bearing shell had simply dropped out. In the other the shell was immovable and there was no way of getting to the back of it as it was in a blind housing. Another problem to solve. We got there in the end by cutting through the bearing shell and peeling the shell out of its housing!

Well to cut a long story short, a new axle has been machined, the bearings replaced, keyways broached and the wheels pressed back onto the axle. It's now just the job of getting it back into the locomotive, rebuilding all of the motion and brake gear and giving it a test. With any luck we should have the club Baldwin back up and running ready for the next public running session.

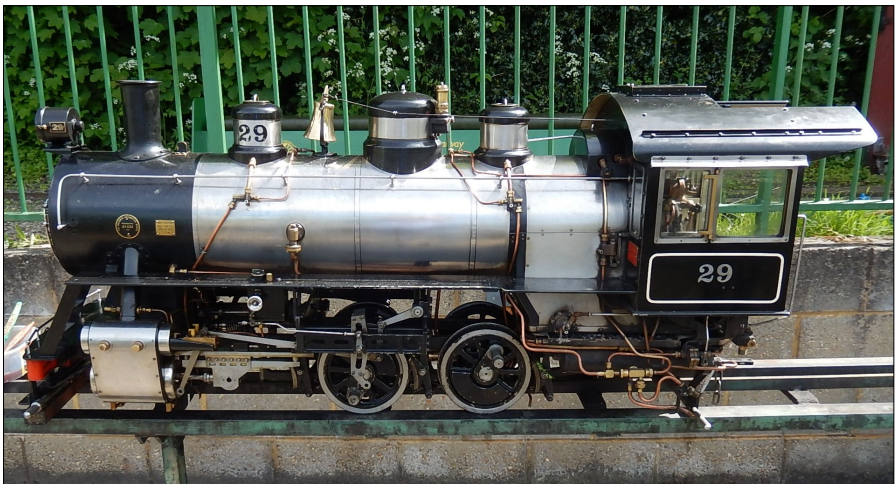
I am keeping my fingers very crossed.

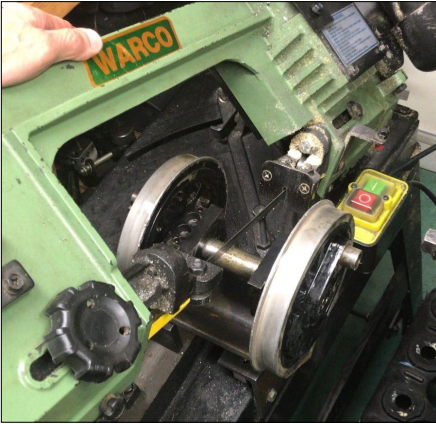
New Ground Level Passenger Trolley

We are nearly there with the new ground level passenger trolley. The final coat of paint was applied during the last Wednesday work session. The bogies are fitted and we have all the bits and pieces ready for the final assembly. We are just waiting for the new seat and the application of the Club logo and lettering and the foot plate grippy strip and it will be job done.

Raised Track Extension Project

Work continues on the foundation work for the new point in the woods. The largest of the foundation pads has been excavated. We have had to build a bit of a blockwork retaining wall as the ground drops away on the wood side of the pad. If the weather is suitable, at next Wednesday's work session, we should be pouring the pad. We then have two other pads to excavate and pour. These will not be as big as the current one as they are nearer the swing out section pivot point.





Above. Raised track progress
Left top. Cutting the Baldwin
axle.

Below Painting the new trolley



Jamie cleans up the Baldwin



Left A smoky Wild Swan

All pictures
Mike Manners

WOLVERTON PUG

Second Hand and into the Diesel Era – part 2

In the 1960s 14 LNER B1 4-6-0s were employed at mainly ex Great Eastern and Great Central loco depots as carriage heating departmental locomotives.

They were deployed as follows in 1963 :-

Norwich 61059 (no.17), 61204 (19), 61205 (20),

March 61181 (18)

Cambridge 61233 (21), 61300 (23)

Ipswich 61252 (22)

Kings Lynn 61375 (24)

In 1965 the deployment was as follows :-

Peterborough New England 61272 (25)

Norwich 61138 (26)

Parkeston 61105 (27)

Colwick 61264 (29) in 1966

Canklow 61050 (30), 61315 (32)

In 1965 two class J72 0-6-0 tank locos joined the departmental fleet based at Tyne Dock Nos 69005 (58) and 69023 (59). 69005 was named JOEM and is now preserved. Their use at Tyne Dock was fairly limited I believe.

One of the most bizarre departmental locomotives was the provision by the Scottish Region of a withdrawn LNER class D11 4-4-0 no. 62685 *Malcolm Gaeme* at Edinburgh Princes Street Station during 1961 on a siding immediately below the Caledonian Hotel to provide central heating when the hotel boilers were out of action.

As steam disappeared during the late 1960s the works steam shunters followed suit. But by then of course the heavy work formerly undertaken on steam locos (boilers, wheels and rolling frames moving about the works for various attention) had gone and the new diesels and electrics did not need the same level of shunting. Also the local diesel maintenance facilities would supply class 08 diesel shunters for the necessary shunting around the works.

New technology was becoming available for traction and this needed testing facilities both in the workshop and on sections of track. The BRB Director of Mechanical and Electrical Engineering took over part of the old Midland route from Nottingham to St. Pancras via Old Dalby and Melton Mowbray also the closed (1967) Great Northern route between Mickleover, on the Derby Friargate route, and Egginton Junction, on the Derby to Crewe via Uttoxeter line. These routes being close to the DM&EE's Derby base at the Railway Technical Centre were to be used for testing various items of new kit, for which traction was required to haul them about. This was in the mid 1970s at a time when a number of unsuccessful and non-standard (i.e. hydraulic!) locomotives from the 1955 Modernisation Scheme were being disposed of, as part of the BRB National Traction Plan. Some of these locos still worked (just!) and the more nostalgic of the testing team obviously took a delight in keeping them going, all but briefly.

So at various time the following ended up being used for this purpose :-
WR Hymek numbers 7076, 7089 (renumbered-TDB968005, formerly at Plymouth
Laira as a heating unit in Feb 1975-steam presumably!), and 7096-all used as 'dead-
load'. Warship no 832 *Onslaught*, Metro-Vic D5705 (TDB968006), Baby Deltic
D5901, Clayton class 17's D8512 (S18512), D8521 (S18521) - source of spares,
D8598 (S18598), Class 24s, 24061 (RDB968007), Class 46s 46009 (97401)-Destroyed
at Old Dalby with several mark 1 coaches by being run at high speed (driverless!) into
a nuclear flask to test the flask's strength with the press in attendance. The flask
survived unscathed!

46023 (97402). 46035 *Ixion* (97403)-now preserved as D172, 46045 (97404), Electro-
Diesel 74010, Class 08 - 08117 (RDB968020). General Electric AC no 84009
(ADB968007, then-ADB968021). The class 84 was used as a load bank after final
withdrawal from traffic. The whole class of 10 (E3036 to E3045) locos had been
withdrawn from traffic on the West Coast Main Line in the late 1960s, early 70s. This
was due to problems with their mercury arc rectifiers. They were placed in store at the
old steam shed at Bury along with the seven ex Manchester-Sheffield DC class 77
electrics prior to their sale to the Dutch. All the class 84s were eventually refurbished
and modified and returned to traffic.

Around the same time and with the increase in provision of air-conditioned and
electrically heated rolling stock, steam lines at carriage sidings to heat the stock were
no longer any use. The answer was to provide a diesel engine generator. Further use for
the redundant traffic fleet therefore followed.

There were in 1979 the following at locations listed :-

Class 16 British Thompson Houston Nos 8243 (DB968000) at Stratford Thornton
Fields carriage sidings, (now the Olympic Stadium!). 8233 (DB968001), 8237
(DB968002) and 8203 (DB968003) all at Finsbury Park for Hornsey, Holloway and
Ferne Park carriage sidings. Brush type 2s no 31024 (ADB968015) at Bounds Green,
31013 (ADB968013) at Norwich, 31002 (ADB968014) at Great Yarmouth, 31008
(ADB968016) at Stratford, Sulzer type 2s 24054 (TDB968008) at Plymouth Laira, then
Newton Abbot, 24142 (TDB968009) Worcester then Swansea Maliphant carriage
sidings.

In addition to these a number of redundant Sulzer class 25s were converted into
mobile electric train heating suppliers for use in Scotland based at Aberdeen. These
were called ETHELS (Electric Train Heating Ex Locomotives) and numbered ETHEL
1 (ADB97250-25310) ETHEL 2 (ADB97251-25305) ETHEL 3 (ADB97252-25314).

After the class 40s were withdrawn, except 40122 kept for rail tour duty, in 1985 four
were re-instated for hauling engineer's trains in connection with the Crewe
remodelling. They were :- 40060 (97405), 40135 (97406), 40012 (97407), 40118
(97408). They were re-numbered in the departmental fleet.

In 1990/91 five class 45s were based at Gateshead for ECML wiring trains between
Newcastle and Berwick. They were :- 45022 (97409), 45029 (97410), 45034 (97411),
45040 (97412), 45066 (97413).

A class 25, no. 25131 (97202), was used as a training loco at Toton and two class 31s

were used by the RTC at Derby in 1986 and 1987 vis. 31298 (97203), and 31326 (97204) .

During the conversion of the Isle of Wight Railway to third rail electrification, class 05 No. 05001 (D2554), became the last survivor of the class, when transferred from Harwich Parkeston Quay to the Island for engineering trains, subsequently becoming 97803. It is now at the IOW Steam Railway.

After they were no longer required for traffic purposes the prototype HST power cars nos. 43000 (975812) and 43001 (975813) were transferred to the RTC at Derby and renumbered into the departmental fleet. When the RTC had finished with them 43001 was scrapped and 43000 preserved by the NRM.

Other oddities consisted of former NER 1500v DC Bo Bo electric no 100 (formerly NER No 13 and 26510) which ended up as depot shunter at Ilford from Aug 1949 until 1963.

The former GWR gas turbine locomotive number 18100 was converted by Metropolitan Vickers in 1958 into a 2,500 bhp ac electric locomotive for testing the first part of the West Coast Main Line electrification between Crewe and Manchester.

DS209 Secmafer shunter based at Shalford in October 1966 and Theale PW depot until April 1968, then returned to France.

Ruston and Hornsby former Southampton Dock shunter no D2991, in 1973 became a generator at Eastleigh works.

Class 03 No. 03079 (97805) was transferred to the IOW in 1984 to replace 05001 at Ryde. It was supplemented by no 03179 (97807) in Jan 1989.

The following class 08s were converted to snowploughs on the ER in the mid 70s D3078 (ADB966506), D3006 (ADB966507), D3035 (ADB966508), D3069 (ADB966509), D3037 (ADB966510), 08117 (ADB968010), 08119 (ADB968011), 08111 (ADB968012).

The following were used as training locos at various times - Peak No. 45017 (ADB968024), BRCW Type 2 no 27207 (ADB968025), Sulzer Type 2s, 25908 (ADB968026), 25912 (ADB968027), BRCW Type 2 No. 27024 (ADB968028) English Electric Type 1 no. 20001 (ADB968029).

BRCW 'Crompton' no. 33018 (ADB968030) was used for training by the MOD at Moreton-on Lugg.

Brush Type 4 Class 47 no 47538 (ADB968035) was used during 1992/3 at Devonport Dockyard during the programme of fitting modular catering equipment to the HST catering vehicles.

Class 08 no. 08247 was numbered PO1 as depot shunter at Polmadie Glasgow. Subsequently this was replaced by 08173 also as PO1.

Network Rail the successor to Railtrack had by 2016 acquired its own fleet of second hand Modernisation Scheme diesel locomotives. All were, or are, painted yellow as follows :-

Class 31 Brush type 2 31105, 31233, 31465, at Derby RTC and 31285 at Craightinny

Class 37 EE type 3 – 97301 (37100), 97302 (37170), 97303 (37178), 97304 (37217) at Derby RTC.

Class 73 EE Electro Diesels – 73138, 73951 (73104), 73952 (73211 *County of West Sussex*) at Derby RTC. They also acquired two class 86 electrics 86253 and 86210 renumbered 86901 and 86902, painted yellow and used for testing overhead line equipment.

And finally the Flying Banana, ‘New Measurement Train’ HST Power Cars- 43013, 43014, 43062. These were once part of a fleet of 8 what were termed ‘surrogate power cars’. They were fitted with buffers and TDM (Time Division Multiplex) equipment to allow them to work with class 91s. This was because the class 91s built at Crewe were completed ahead of the Mark 4 coaches for the ECML electrification. These power cars were used with class 91s and a rake of Mark 3 sleepers for testing on the ECML. It had been planned to haul HST trailers with a class 91 at one end and a surrogate HST power car at the other. As far as I can recall this never happened and they were only used for the aforementioned tests.

The other 6 surrogate power cars were – 43065, 43067, 43068, 43080, 43084 and 43123, which went to Grand Central Trains to work with their three sets of six mainly converted Mark 3 loco-hauled stock. These are now being replaced by Adelante sets displaced from the WR by IETs.



D2554 at Ryde
3 May 1969





B1 Dept No 30
(61050) ex Canklow.
Normanton
3 February 1968.

D600 Active,
Dept No 29
(61264), and
48151



Allerton 84004 and 83002
off repair.
29 August 1972

Derby RTC
S15705 and
D8598





Network Rail Class 86
at Rugby

All photos WP

2018 AGM REPORT

A very successful AGM was held on 17 May with some 50 members and friends present in the club house.. All the reports were accepted including the minutes of the last meeting, those from the Trustees and the Financial Statements and Accounts. There were no motions submitted. In an election Peter Culham, Stuart Kidd and Nigel Penford, having retired by rotation, were re elected with Robert Denton being the runner up.

The President's Cup was presented by Les Dawson to Alf Cusworth (left) for his outstanding services to the club in the past year. Photo John Billard



STOKE ROW RALLY 9-10 JUNE 2018

Members are invited to exhibit at this rally where there is a dedicated model tent. Security will be arranged for the Saturday night.

Please contact Alf Cusworth for further details

DIARY

| | | | |
|----------|------|--------------------|---------------|
| Saturday | 2nd | Birthday party | 11.00-13.30 |
| | | Birthday party | 14.30-17.00 |
| Sunday | 3rd | Public running | 13.00-16.30 |
| Saturday | 9th | Club running | 11.00 onwards |
| Sunday | 10th | Autistic Pride Day | 11.00-16.00 |
| Monday | 11th | Trustees meeting | 19.30 |
| Saturday | 16th | Birthday party | 11.00-13.30 |
| | | Birthday party | 14.30-17.00 |
| Sunday | 17th | Birthday party | 11.00-13.30 |
| | | Birthday party | 14.30-17.00 |
| Friday | 22nd | Young Engineers | |
| Saturday | 23rd | Young Engineers | 11.00-13.30 |
| | | Club running | 14.30 onwards |
| Sunday | 24th | Birthday party | 11.00-13.30 |
| | | Birthday party | 14.30-17.00 |
| Saturday | 30th | Birthday party | 11.00-13.30 |
| | | Birthday party | 14.30-17.00 |

Opinions expressed in PROSPECTUS are the personal views of the contributor and cannot be taken as reflecting the views of the club committee or editor.

**The deadline for the July PROSPECTUS is
18 June. This is the final date.**

Contributions from all members are greatly welcomed

They may be submitted in hard or soft copy to the editor.

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