Reading Society of Model Engineers www.prospectpark railway.co.uk Charity Number 1163244

# The Prospectus

January 2019



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Free to members



A Lisbon street funicular as seen on 11 December 2018. Interesting non-period livery. Can an RSME member give an explanation of the overhead system? - Answers to the editor.

Photo John Billard

DAWSONS DIARY
A SUCCESSFUL SANTA EVENT
IN THE USA
ALL IN A PHOTO

## DAWSON'S DIARY

# kept by the President

Alf and his team of members have made a very good job of refurbishing Santa's Grotto. I like the fireplace. Well done chaps.

Our new member Dan Strange has had a steam and hydraulic test on a 5" 0-4-2 GWR 1400 class tank made by Silver Crest. He was very pleased that it passed ok. Once Don got the engine in steam he was soon learning to drive and how to keep going. He looked a very happy man! Dave Jerome had his 7 1/4" Deltic. Not a kit and not plastic, all hand built. Young Quinn was seen with Dave having a drive later on his own. This lad is very keen on anything to do with railways. Perhaps one day work his way up to become a model engineer in time. This is what we need at the RSME.

The two visits of Santa 15<sup>th</sup> and 16<sup>th</sup> December were carried out under extreme conditions; the Saturday event very cold and wet. The members did a grand job coping with it. Sunday 16<sup>th</sup> was so much easier; still cold but no wind and fine much of the time. Locos ran on both tracks without too many snags. The trustees and the members **owe a big thank you** for being so organised.

A Happy New Year to all from Les Dawson.

# ANOTHER SUCCESSFUL SANTA EVENT by Peter Culham

Many thanks to all of those who helped over our big weekend, with Saturday being a real challenge in some truly testing weather conditions. Compliments from many of our visitors were passed to us on both days and also through our Facebook site and emails. Our train drivers drove through the rain on Saturday, which drew much appreciation; the refreshments were delivered non stop, and it's clear that the lovely presents were a real hit with the children. The car park was ably managed to avoid problems at the entrance.

And.. a fact... on Saturday in the rain, every ticket holder attended! A selection of facebook / email messages -

Thank you so much to all volunteers for a great morning with the trains today. A lovely visit to Santa. (Laura)

Thank you to all involved in todays event. A wonderful time with Santa, the drivers and volunteers. It's really started our Christmas. (Jo)

Weather not great but we had a lovely time and Santas presents were very good. (Sandy)

My two absolutely loved it yet again! Thanks to the team that despite the weather made us smile. (Paul)

A great event. Had a brilliant time despite the rain. Hope you've all dried out. (Natalie)

Yes, weather 'orrible' but it didn't stop people enjoying Santa rides. Had a great time and lovely seeing the faces of children meeting Santa. Brilliant. (Clive)

Fab time at Santa Special despite awful weather. Our son loved the trains. Thanks to all volunteers, and very impressed with the toy for our nearly 2yo from Santa. (Laura)

Lovely morning with my two boys despite rain. Our steamy ride in the rain was magical. (Becky)

Such a great morning event, my little boys and I had a wonderful time. (Jenny)

After a stressful afternoon with car breakdown on the way, and panicking we wouldn't make it, managed to arrive with my very excited little girl to see Santa. Fab event thank you. (Carly)

Wonderful afternoon, fantastic toys, endless train rides, and a hot cuppa to keep us going. We'll be back. (Katharine)

A wonderful afternoon. My 3yo twins had a ball with their new toys and going on the trains. (Kat)

Thank you all. My friend and I (and our children) thoroughly enjoyed it. The gifts from friendly Santa were really good quality and we all enjoyed riding the trains and drinking tea (Vanessa)

So, there we have it, another event wrapped up. All comments above also gave thanks and seasons greetings to everyone involved.

PONDERINGS by 61249

## **AEA Technology Rail**

Last month my story was about one of the products (Wheelchex) that emerged from British Rail Research which had the potential to transform the performance of the part of the railway to which it was applied. In the case of "Wheelchex" a significant reduction in the incidence of broken rails.

An easy sell you might think, but not so as I demonstrated, and only applied when allied to a strong business interest. Even this does not work in all circumstances, as I remember when on a sales pitch to a rolling stock

engineer in the US of A where, as you all know, the railways have been private and vertically integrated for a long time. In fact of course they aren't with a plethora of private operators running over the infrastructure owned by another company as the way to overcome the thorny issue that railways have that not every operator can afford, nor do they need, their own railway. I mention this as separation of wheel and rail with a contract between the parties thrives in other parts of the world, which is different from what you read in the newspapers. They give us the "fake news" impression that the UK is the only place such things happen.

Inside those big companies there exit silos of skill, attitude and business influence. One of the best quotes I can remember from a train engineer in a big freight railroad was when we explained how good Wheelchex was at getting rid of bad wheels "Get rid of bad wheels?" his horror in the concept was in his voice and body language, "I make a lot of money out of bad wheels". I have no doubt this was true, and his maintenance activity was funded by a significant income from repairing bad wheel flats and other defects on privately owned wagons that happened to be running on "his" railway.

I must say that from an AEA Technology Rail perspective we found the US a very difficult market to sell into. Their economic drivers were different, and they had a co-operative system for managing innovation through the Association of American Railroads. The Transportation and Technology Centre (TTCI) is a research facility based in Pueblo Colorado with its own test track supported by the Association. All very impressive, but their business model had taken them down some strange avenues. One divergence is in the design of passenger rolling stock to protect occupants in the event of a collision. BR Research had investigated this in some depth and come up with a number of features that helped to avoid injury and damage in accidents/incidents. The main conclusion was that trains should be designed to absorb energy, with crumple zones, override protection etc.

The American way was to build very solid things that ploughed their way through obstructions. Very different! Bearing in mind that the thing a passenger train in America is most likely to hit is a 120 tonne freight loco designed with weight for adhesion in mind and with a few thousand tonnes behind it, one can see why the approach appeals. In the global technology market the TTCI was a rival supplier to railways, and it did not prove possible to co-operate with them, although we tried.

In the process of talking to them I did get to ride their test track on a Japanese gauge changing train, built with traction motors with the coils round the axle. This was a wonderful electrical concept but has the distinct disadvantage of adding significantly to the unsprung mass of the wheelset, making its control very difficult. The ride was to say the least, interesting. I am not sure how far the Japanese have got with the concept, but I have great regard for their long-term view of technical development. They do not give

up easily!

For me, I was supposed to be at work but was riding round a circular track in the middle of the American desert and enjoying very minute. What a great career railway engineering can be!

As a footnote, just 20 years later, the same BR Research product bundle that gave us such good control of wheel condition has been successfully sold to a New York suburban railway by the same guy who started the process with me all that time ago. Persistence does pay off! The worrying thing is that for that 20 years and more the New York commuter has put up with a very sub-standard autumn performance, well below what will now be achieved.

On the matter of energy absorption, if the reader goes to YouTube, and enters "FRA Crash energy Management collision tests" you will see the American repeat of the very same tests that BR Research had conducted in Derby some 20 years earlier, and with the same results. The benefits of energy absorbing for passengers is clear even when the obstacle is pretty unmoveable, even more so one might think. Not for the first time, BR was some 20 years ahead of the world in understanding this principle which has become, since the 1980s experimentation, the foundation of the European approach now built into train design standards.

ANALYTICS
Where WP looks at some photos taken by the editor



When British Railways sailed freight ships.....

Freightliner had two 4,000-ton ships - built at South Shields - "Sea Freightliner I" (launched 2.10.1967) and "Sea Freightliner II" (launched 15.3.68). They worked between Harwich and Princes Margrithaven Rotterdam. They both became Sealink owned in 1979. SFI was broken up in May 1987 at Kaohsiung, Taiwan and SF II was broken up in January 1987 on Gadani Beach, Pakistan.



A pair of Class 20s passing Oxford

The two Class 20s in John's picture are on the Up Through Line, i.e. heading towards Didcot. The leading loco is 20175. It was built by the English Electric Vulcan Foundry at Newton Le Willows in November 1966 and went new to Toton where it remained until withdrawn in 1991 and scrapped by Harry Needle at Carlisle Kingmoor in September of that year. It was renumbered 20175 in Feb 1974

The second loco is quite interesting in that it is just possible to make out that it has the cabside recess which as far as I can ascertain was only ever fitted to those sent new in 1961/62 to Glasgow Eastfield and Polmadie for working freights on the single lines in and around Glasgow and the Central belt. They were built by English Electric, Robert Stephenson and Hawthorns Limited at Newcastle upon Tyne and Darlington. (numbers D8070-D8127). Twenty three of them came south to Toton in 1968. Some returned to Glasgow in the early 1970s, to replace the Clayton Type 1s (D85xx) which were withdrawn due to poor reliability. It is fairly safe to assume that this loco is one of the 15 remaining at Toton in 1974 and 1975. They were all renumbered between February and June 1974.

Class 20s in pairs were not uncommon in the London Division of the

Western Region. Toton depot in Nottinghamshire ran their fleet thus for flexibility, additional power and visibility for the drivers. They worked coal trains mainly out of the then many collieries in Notts. and North Warwickshire. So they the appeared for a while in the 1970s working household coal south via Oxford to West Drayton etc and occasionally MGR coal trains into Didcot Power Station. It is possible these two have worked south to Didcot and have just been back to Oxford stabling point for fuel or are running light from the LMR to collect some wagons at Didcot or Reading West Junction. 8D81 headcode indicates an unfitted train was one of its last workings, though it should be showing 0V00 if light from the LMR.

On the left is a road trailer belonging to National Carriers Limited, NCL. The company's history dates back to the nationalisation of the British Railways inn 1948. Each of the pre nationalisation companies had formed a local delivery network, based on lorries and vans, to extend the railway to the customer's door, thus enabling parcels and light freight to be delivered in the control of the railway company.

In 1955 these services were amalgamated to form a division of British Road Services, known in its shortened version of BRS Parcels. National Carriers was the name given to the amalgamated companies that concentrated on rail transport, while BRS Parcels became Roadline. The Conservative Government of Margaret Thatcher privatised these services in 1982. National Carriers and Roadline were merged and operated briefly under the name National Carriers Roadline\_before settling on the name LYNX Express Delivery Network. This remained the company's full title, although it was popularly shortened. It was taken over by UPS in 2005.

Just behind the trailer on the left is a chimney. This was part of a factory where from 1903 until after the Second World War Frank Cooper's Oxford Marmalade was made. It is now a listed building.

The editor adds—All in a photo I took very casually in 1974. If any reader would like to submit a photograph for analysis please send them to me!

## DIARY

## January 2019

Tuesday	1st	Club Running	11:00 onwards
Sunday	6th	Public Running	13:00 onwards
Saturday	12th	Club Running	11:00 onwards
Monday	14th	Trustees Meeting	19:30 onwards
Friday	25th	Young Engineers	18:00
Saturday	26th	Young Engineers and	
-		and Club Running	11:00 onwards

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.

Please note that the February issue will be slightly delayed. Contributions before 30 January please.

Contributions from all members are greatly welcomed They may be submitted in hard or soft copy to the editor. John Billard Old Station House Twyford Reading RG10 9NA 01189 340381 john@jegbillard.plus.com

Please note that because of editorial commitments the February PROSPECTUS will be published during the first week of February or shortly after.