Reading Society of Model Engineers Charity Number 1163244

The Prospectus

January 2025



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Free to members 235



William Shakespeare is prepared by the Jones Bros for the Santa run in December 2024 Photo Mayank Yadov

> 00 GROUP NEWS AND PICTURES SANTA SPECIALS 2024 CHRISTMAS LUNCH BY TRAIN TO THE GHAT A GWR JOURNEY THE FLAT CONTROLLER

THE VIEW FROM THE CHAIR

Wishing all to do with RSME a Happy New Year and looking forward to events to come in 2025.

December is always one of our most busy months of the year making preparations for Santa Specials which then took place over two weekends. The first occasion was marred by very high winds and some of the sceptics said that there was no chance of being able to erect the usual gazebos in a in a Force 9 gale (I was one of them). But they were, due to the ever resourcefulness which we always seem to achieve. The weather certainly did not put off our customers and the feedback we've had has been absolutely amazing.

Once upon a time all the big shops in Reading made a very special and remembered effort to make a wonderful display - often with the assistance of RSME as it was then. All that seems to have disappeared but our club continues and now provides what many people think is the very best Father Christmas visit and the only one to go to.

So every thanks must be given to all those who braved the wind and the cold and the wet for the first weekend but were rewarded by some sun on the second. And that does not count all the days of preparation making bookings and making sure the grotto was ready for its special visitors. So my thanks again to all for what is a huge but rewarding effort.

The Christmas lunch on 19th December was so ably organised by Val and Richard Coleman. Val and Richard have made it a very special occasion and it was good to see so many members and friends enjoying the festive setting. So thank you Val and Richard - you did us proud!

These seasonal activities took priority over everything else and that included a trustees meeting. The next will take place on 13th January.



DECEMBER NEWS FROM THE 00 GROUP by TOM BIDDLE



The last 00 night group photo of 2024. L to R, Andy, Mike, Tom, Sam, Richard, Matthew, Ollie, Lawrence, Anthony, with Duke of Gloucestor on the layout.



Matthew very kindly donated a set of HMM Containers to the club for use on the 00 layout. Posing with club member Sam King Orry.

Photos Tom Biddle



In December RSME had a visit from Matthew Francis, Vice Chairman of the Slough and Windsor Railway Society and Event Organiser for the Slough Model Railway Exhibition, meeting the young members who will hopefully take part in the 2025 Exhibition.

Matthew also brought a huge selection of 00 models to sell, with most of them being sold to young Lawrence! Everyone had a great evening, playing trains as well as working on the extension. A lovely way to end 2024!

SANTA SPECIALS @ RSME 2024



Photos John Billard



Below - Santa arrives, driven by Sam

Left—In the Grotto with pixie helper Jenny

Left—Lighting Up time with Aleksander,Bill and John. Below left—Keith prepares for hungry crews Below– The tea bar is all go with Richard and Val







OUR CHRISTMAS LUNCH

Organised by Val and Richard

Photos John Billard and Richard Coleman









Where was Mayank in early November 2024? by Mayank Yadav

I was on 7am train, that chuffs through uninterrupted vistas, rumbling on 250 bridges and needling through 57 tunnels enroute !The feeling is like a 'layered cake' with an icing, flavoured with verdant lush coconut, areca nut, banana, coffee, tea, pepper, cinnamon and cardamom plantations and paddy.

An eight hours journey on Indian Railways, a fairytale route between Bangalore, a geographical (approx.) and business centre of Southern India to Mangalore, one of the largest ports on Western Coast (Arabian Sea) of India.

This was a nostalgia trip, to relive the experience of same train ride taken 12yrs ago (and one of many amazing journeys which me and my brother had the fortune to enjoy as army BRATS. GENESIS: The trip idea happened because new VISTA-DOME coach services were introduced by Indian Railways, for scenic routes in India a few years ago. VISTA-DOME is a special tourist coach with extra-large windows, glass rooftop, viewing pavilion, long foot space and fully articulated 2x2 seats, sofas actually. A pair of coaches is attached just behind the locomotive in the onwards journey and after the brake-van on the return journey.

Within minutes, my brother researched availability online and booked return seats, an overnight stay at Mangalore... and the countdown began. On the eve of the trip, multiple alarms were set, taxi pre-booked, day pack ready with favourite nibbles (banana chips, fruit cake and more) and both hit the bed early. Two alarms muffled, on the third buzz, we kicked ourselves out of the bed, jumped into the taxi and zipped to the station.

This is a day journey and the train comprises of various classes of chair-car, (seating coaches) very similar to most coaches/ journeys in UK. As we entered the VISTADOME, excitement among the fellow travellers was palpable. Selfies, WhatsApp video calls, curious fiddling to twist and turn seats for "best view", as we all settled down. We brothers being smart, stuffed smartphones in back pockets, turned the seats parallel to the window, sunk cosy in red plush upholstery and ready to relish the live IMAX like experience.

The route is like a well-paced fantasy-adventure movie, the opening sequence is a mosaic of green paddy fields laced with small streams, then the plot gradually thickens.... and our train slows down to calculated 20kmph, battling a gradient of 1:50, scores of twists and dizzing viaducts through mist -covered hills and one of the world's most bio-diverse regions in the world-The Western Ghats !

The route is mostly electrified i.e. first 225km and final 100km, remaining 55km is only serviced by diesel locomotives due to dense forests, rocky terrain, and umbrella-thrashing rainfall during monsoons.

A single WDP-4D diesel loco, pulls the 24-coach train from Bangalore to

Saklesphur, which is relatively flat route dotted with numerous orchards and plantations, after which the main 50 km 'ghat' (valleys) section begins.

I was not satisfied being VISTA-domedso the moment the train halted mid-journey at Saklesphur for 'triple heading' locos, I did what I do best..... got down to see the shunting and "triple heading" up-close, then hopped back to do "safe foot-boarding". Most trains in India still have openable doors enroute, that gives common travellers an 'opportunity' for even better 'immersive experience' than VISTADOME ! And no....travelling on roof on Indian Railways is NOT allowed and extremely dangerous !

I spotted numerous butterflies, birds, cows, brave track maintenance crew waving or posing. But the best part was tingling in my toes when peeping straight down the viaducts and the pupils dilating as the locos got swallowed in the sooty dark throats of tunnels.

RAILWAY TRIVIA of this Engineering Marvel:

• Construction of the Bangalore-Mangalore Railway began in 1906 and became operational a year later, led by the Southern Mahratta Railway (SMR).

• 57 Tunnels, the longest tunnel is 615 meters, and many are more that 500m.

• Tallest viaduct is ~60m tall and the longest bridge, The Netravati Bridge near Mangalore, spans 830 meters and is built to handle monsoon floods. The entire route was converted from meter gauge (1m) to broad gauge





Photos Maynk Yadav

My Journey to GWR and further! by Jamie Perry-Giddings

Like most stories there is a start, a middle and an end. For me it's just a start and a middle... so far! My journey started way before I got my foot in the doorway of the Great Western Railway (GWR). I was essentially born into railways, with being a matter of hours or days old from birth my dad (Des



Giddings) would have me sit on his lap with a railway magazine in front of us. From the ages of 4 or 5 it was my dream to work on the railway, at that point specifically to be a train driver.

I never gave up on the dream of working for the railway, so I started getting the "ball rolling". When I was 11, I decided to Join the Reading Society of Model Engineers (RSME) here I could learn how to drive and maintain 3 1/2", 5" and 7 1/4" gauge steam and diesel locomotives, as well as maintenance of the track. It was here where I first

met the late, great Rob Denton. This man took me under his wing and regarded me as his so-called apprentice. It was from that time that Rob and I become great friends, or, as I put it, he was my 'Adopted Uncle' and he taught me a great deal about the railways. I even did work experience with the RSME for a year, when I was 15/16, and then went on to do an engineering course at Reading College. At this point my job plans had started to change from being a driver to becoming a railway technician.

When at college, I was still learning on my days off! I would go to Rob's and work in his workshop, enhancing my machining skills using his lathe and milling machine and I even helped rebuild and reset the timing on a 5" gauge steam locomotive! After college I continued to work with bicycles. However, I still had the fight in me for a railway career and so after I am failing for five years to get an apprenticeship with GWR, I applied for a job to work the gateline at Reading Green Park Station, which was then brand new. I was invited for an interview and some weeks later I was told I had got the job, but there was a twist: instead of working at Green Park I was offered a job to work the Gateline at Newbury station!

My first day with GWR was July 24th, 2023. Here I learnt about the station and what the job would offer. This involved checking tickets at the barriers, selling tickets using a handheld device connected to a portable bringer. via Bluetooth! It's crazy the stuff technology can do, right? Very quickly my determination and passion for becoming a driver came back home.

In January 2024 I applied as a trainee train driver, based at Reading Depot.

It was here that I sat three computer exams, all multiple-choice questions and I had to get 90%, or higher, in all tests to move on to the next stage. Just after a year of being with the company I got the heads-up to say I made it to the next stage of the driver application, the video interview.

On the 28th of September 2024 I received an email invitation for my driver Psychometric tests. This email was sent to me the day after Rob passed away and I felt this must have been a message from Rob - the man I will always call my tutor! I accepted this and knew I had to push through these tests knowing they are the hardest part of the application process.

On the 15th of October 2024 at 05:15 I set of on my way to Watford for the psychometric exams. There are three sections you must complete to go any further for the job. Stage 1 comprises three tests using pen and paper.

In the first test you are presented with five blocks of dots in 25 rows of dots in different configurations. In each block there are groups of 3, 4 and 5 dots and you have to work as quickly, but as accurately as possible, and identify all the groups with 4 dots. The time allowed is about one minute per block, which may sound easy, but by the time you get to the third block of dots your vision becomes somewhat blurred, and it gets challenging.

The second test was reading a paragraph and taking notes and then answering 14 questions based on the paragraph without having your notes or the paragraph to assist. This is to see your how good your memory is.

The final paper test was circling pairs of matching shapes / symbols while listening to a sequence of beeps of mixed high and low tones and you have to count the number of low tone beeps at the same time you are circling the matching pair of symbols which are hidden within a list of information on a page.

You only make it Stage 2 of the exams if you successful passed Stage 1 and in this stage, you sit the next set of computer exams. The first exam in this stage is the Grey Square test, where you stare at a computer screen for 30 minutes with a grey square flashing at you and every time it changes to a



darker shade of grey you must press a button as fast as you can (testing your reflexes). What makes this hard is that the time between each flash changes: it could be 1 second, 5 seconds or higher. This requires a lot of concentration.

The second exam of Stage 2 is the picture memory test. You have an image flash at you on a screen for 1 second and then you must select one of 5 possible answers about what you saw in the image. Again,

you must be as accurate as possible when answering these questions.

The third and last part of this stage is the two-hand coordination test. You have two joysticks, which have a very high sensitivity, and you have to navigate a red circle around a track without leaving the track. This is like the game we played as kids with the bent metal track and hook. However, one joystick (your right hand) would only move up and down the other (your left hand) would only move left and right.

Now sadly I didn't pass this stage, as I failed the grey square test, but successfully passed all the other exams. This means I now have to wait at least six months to resit the one exam again. This is GWR policy. The great thing is once you pass the exams they stay on your record for 5 years!

The third stage of this process will be a face-to-face interview with an examiner which gives them the opportunity to ask you some questions so they can assess your concentration and mindset it take to be a train driver. Sadly, I couldn't progress on to this stage, but who knows what the next time will hold.

For now, I will continue working on the gateline at Newbury. I am sure that every RSME member will wish Jamie all success for his chosen career. Ed

CLUB TALK 23 JANUARY 2025 8 PM CLUB HOUSE

Do you remember the trolley buses in Reading? Or if not, would you like to know how it all worked?

Did you know that London had the biggest electric bus fleet in the world? And what happened it and why was it all scrapped so soon? Come and listen to Graham Bilbe who is probably knows more than anyone about trolley buses "on top or inside".

A FAULTY SPEED CONTROLLER by Terry Wood

I was given a faulty speed controller by Mike Manners which I think came out of the club diesel loco that he was working on in last month's issue of Prospectus and I was going to take all the electronics out of it bin it and use the diecast box for something else.

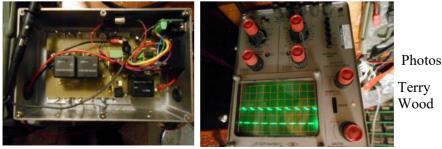
Then I decided to try and get the thing running just out of curiosity so I took the board out and roughly wired the multiway connector fixed to the board up to a switch and a potentiometer to simulate the hand control then connected the unit to a bench power supply and there was no sign of life so after much head scratching I then looked underneath the PCB (printed circuit board) I noticed that there were 2 dry joints on a resistor so I resoldered them there and then.

Reconnected the power supply and the relays made a click so there was life but no signal appeared on my oscilloscope. Also when I increased the volts to 24 which is what it supposed to run on, this resistor started to get hot because it was limiting the current to the relays which were 12 volts this resistor ran so hot that it must have melted the solder on the PCB causing the dry joints. In the end I fitted a large old resistor from an old valve radio and wrapped it in an aluminium bracket then bolted it to the diecast box in order to conduct the heat away then wired it to the PCB.

After all that there was still no pulse coming off the board so I had another look underneath and noticed there was a track that seem to come to a dead end and showed signs of being broken and so I soldered a wire link to where I thought it should go and Bingo I got a pulse which varied when I turned the Potentiometer. The controller works on the PWM (pulse width modulation) principle just like in a cordless drill or a electric bike where a pulse is widened to increase the speed of the motor or narrowed to decrease the speed of the motor. This means that it has no resistance because its either on or off and has the advantage of not generating much heat unlike a power transistor or rheostat. Once I had got the controller going I tried to find out if it would go into reverse or make a horn sound but as yet no joy but a least it will now drive a train if only in one direction.

I then wired up a multiway "D" type connector to it and attached it to the diecast box so that the box could be bolted to a testbed train in my workshop and a hand controller could be plugged into it, the hand controller I used I built myself and I used a potentiometer that had a switch on it just like the on/ off volume control on a radio. I had never used this potentiometer before and I naturally assumed that it started off with a low voltage to begin with and increased as you turned it clockwise but it did the opposite this meant that when I turned the switch on the test bed train went flying across the workshop at maximum speed luckily the batteries powering it were only sitting there and not fixed otherwise the train might have gone straight through the work shop!

I have since replaced it with another one that I know is the right way round.



DIARY

JANUARY 2025

Sunday	5th	Public running	Setting up from 09.30 onwards
Saturday	11th	Club running	10.30 onwards
Monday	13th	Trustees meeting	19.30
Thursday	23rd	Club Talk	
		The Trolleybus	
		By Graham Bilbe	20.00
Saturday	25th	Club running	10.30 onwards

FEBRUARY 2025

Sunday	2nd	Public running	Setting up from 09.30 onwards
Saturday	8th	Club running	10.30 onwards
Monday	13th	Trustees meeting	19.30
Saturday	22nd	Club running	10.30 onwards

Speaker tbc

Meetings are held every Thursday at 19.30 in the club house.

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

The deadline for the February issue is 20 January Contributions may be submitted in had or soft copy to the editor. John Billard Old Station House Twyford Reading RG10 9NA 01189 340381 or 07834 998971 john@jegbillard.plus.com