Reading Society of Model Engineers Charity Number 1163244

# **The Prospectus**

## April 2025

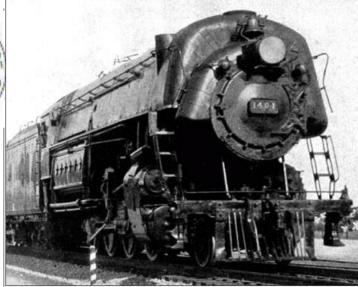


President John Billard

Secretary Stuart Kidd 07966 278968

Editor John Billard john@jegbillard .plus.com 01189 340381 07834 998971

Free to members 237



US Hudson and Delaware high pressure 2-8-0. See page 3. Photo courtesy Alec Bray

## SUBS RENEWAL 2025/6

PLEASE NOTE THAT SUBSCRIPTIONS ARE DUE NOW £20.00 SEE PAGE 11 FOR DETAILS

Club insurance applies only to paid up members.

## THE VIEW FROM THE CHAIR

As I write I have come home from running my engine at a birthday party where steam had been particularly asked for. It was a very busy morning and 7808 went well despite having been in storage from late last year. During the run the crosshead water pump started to leak so that meant an immediate repair on my return by replacing O rings. Access for this job varies from easy to very difficult but I have had plenty of practice! Just another part of steam.

The March trustees meeting was swift but business like. One of the details that comes up is looking after our finances in a proper manner and this means contacting the Charities Commission on occasion. We are seeking advice on our restricted funds now we have decided not to proceed with the raised track extension. We thank Stuart for keeping us in line on such matters.

It was pleasing to know that at the time of the meeting RSME membership stood at 118. This includes 12 junior members and 11 new members. Renewals have started to come in for 2025. To help this process for the future Donald Pickett is looking at setting up an online membership renewal system.

No significant projects are being undertaken at present with the limited volunteer resource being fully utilised on maintenance tasks.

Following the discussion on raised track bogies at the last meeting Mick Strain has agreed to take the lead on the project and all work will be carried out under his supervision. One cause of derailments is considered to be the increasing weight of passengers. The trend today is for supervisors of children to ride with them which is something not part of the original design of wagons. Food for thought and work continues.

Many visitors praise our raised track for easy running. However it has been there a long time and some further heavy maintenance is now required. This will include a survey yet to be undertaken. If any member is able to help us with this it will be greatly appreciated. Our regular Wednesday gang remains busy with much work around the site often just to keep it tidy.

Following some comments we are looking at our safety rules for drivers and these will be recirculated. Mick Chalmers, who is our safety officer, has been responding to inquiries by members about use of tracks during public running by others, and the use of high vis clothing for car park attendants. It is most important to have a safety culture understood by members who should also be able to challenge where they consider the rules are not being followed.

We're still looking for a bookkeeper for the club and such a person does not have to be a member, maybe a friend or partner, with some knowledge of the job. Our treasurer Jim Brown has been at this work for over 40 years and he is badly need of further help now. I hope this can produce a result. In the meantime a member has volunteered to help me with Prospectus which is good.

While it has been dormant for some time some members have expressed an interest in resurrecting the O gauge group. We have the makings of an excellent layout which has been in storage for some time and it would be good to see it out again.

We meet again on 14 April.

## **BOOK KEEPER WANTED**

RSME wishes to appoint a book keeper to assist the treasurer in maintaining our accounts.

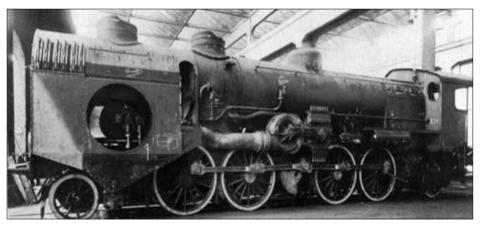
This will involve recording monthly income and expenditure into a Club Treasurer program that we would like to introduce shortly and to assist the Treasurer generally in their duties.

Keeping track of our monies is on of the most important things that we do. A volunteer does not have to be an RSME member but some book keeping experience would be useful.

If your are interested, or know someone who might be, please contact the Editor, Prospectus, details shown in this issue.

## UGLY LOCOMOTIVES Continued by ALEC BRAY ITALIAN BELLUZZO BREDA TURBINE LOCOMOTIVE

Many of the experimental turbine locomotives could figure in this article: this example is from Italy, designed by Guiseppi Belluzzo at the Breda locomotive works and outshopped in 1931. Four turbines were compounded – exhaust steam from the first was input to the second turbine, and so on, and the four turbines drove a common jack shaft which drove the four coupled axles.



The Breda steam turbine looks odd, because the condenser was placed at the front of the locomotive (to save pipe runs). There was an additional turbine to power the fans in the condenser, all contained in a sort of box. The condenser is a critical component of turbine installation, as the condenser provides a vacuum that maximizes the energy extracted from the steam, and condenses the steam into feedwater which can then be returned to the boiler.

Unfortunately, this locomotive did not live up to expectations and never ran on the main line.

#### ST GOTTHARD COMPRESSED AIR LOCOMOTIVE

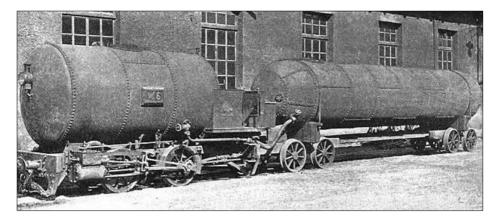


Many of the fireless locomotives are quite charming little locomotives - I remember with affection the little fireless 0-4-0 locos that pottered around the sharp curves of the sidings at Huntley Palmers and and round into the Great Western goods shed in King's Meadow, stopping now and

then to refill their boilers - or, rather, their pressure vessels - with steam from the biscuit factory steam generating plant.

There were, however, some really unattractive fireless locomotives. The ones used in the St Gotthard's tunnel construction used compressed air rather than steam under pressure: in fact, the St Gotthard tunnel was the first extensive user of compressed air locomotives for haulage. So why include them here – well, in model engineering we often use compressed air to check our steam locomotives – but whereas compressed air has no more energy after the pressure is released, steam will continue to expand as long as there is some heat still available. Movement of steam molecules is quicker than air molecules: so there are differences in behaviour of the locomotive when using steam or compressed air.

An advantage of compressed air in this application was that the cold exhaust air aided the ventilation of the tunnel. The photograph below was taken in 1875 and shows the locomotive number 6 – with a lamp on the front - towing behind it a much larger supplementary storage tank that appears to be mounted on two 4-wheel bogies. This "compressed air tender" was required to get sufficient range with a low storage pressure (so range anxiety is nothing new!). Here, form followed function entirely, with no embellishment. The result was a most unattractive combination.



#### Southern Q1 2'1C



Tucked away in a display cabinet off the beaten track in the National Railway Museum there is a wooden model

that used to grace the desk of a certain Southern Chief Engineer who had design ideas out of the ordinary.

Oliver Bulleid had by this time produced the Q1 goods locomotive. Some people find this locomotive ugly, but the Q1 exudes brute strength and certainly has "presence." It was very successful at its tasks.

The model on Bulleid's desk sought to apply the principles of the Q1 austerity design to a passenger-hauling Pacific. It has been suggested that this model may have been the original design for the light Pacifics – the eventual West Country/Battle of Britain class locomotives. The model is described in "Steam World" issue 19, October 1982.

A striking running model of the Q1 Pacific has been made by Matt Wickham of Vectis3D-Models: the model and photograph are both by Matt Wickham and used with permission:

Like the Q1, the Pacific's boiler cladding is segmented, but



instead of being a firebox cladding segment and a boiler cladding segment, the boiler has two cladding segments of different sizes – it looks as if the forward section could telescope into the rear segment. Whereas the Q1 0-6-0's boiler cladding had what seems to be almost a tumblehome, the Q1 Pacific's cladding is distinct-





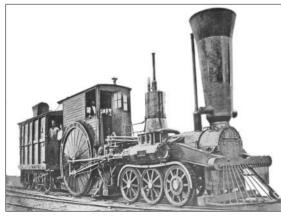
ly flared: this is especially noticeable at the firebox and smokebox. The resulting appearance is quite different to the Q1. Would we have grown to love the Q1 Pacific? It could possibly look

quite good in the Southern Sunshine livery – the ugly duckling turned into a good-looking duck. But we will never know the answer, as the locomotive was never built.

The exterior design of the Q1 Pacific has something in common with the US Delaware and Hudson High Pressure steam locomotive "John B Jervis" 2 -8-0.

# CAMDEN AND AMBOY RAILROAD 620 LOCO NUMBER 30 ELCAZAR LORD

And so we come to another locomotive from the land of the free, from the early days of railroading. A locomotive with a garden shed stacked on top of the firebox, and pulling what looks like a horsebox. Connecting rods built like bowstring girders, pistons with a very long stoke (as much as 38 inches), and a grossly oversized chimney which looks more like the smokestack



from a local salt-caked coastal steamship.

This shared similar design concepts to the "Crampton" locomotives, in that it used very large drivers to get the speed but with the boiler mounted exceptionally low to keep a low centre of gravity. The result was a narrow, lowslung boiler with a large anthracite-burning firebox, itself installed so low down that the fireman stood just 18 INCHES above the roadbed, and he had to throw coal into a fire hole which was at the height of his ankles. These locomotives had much trouble starting (with the large drivers and that leading three-axle bogie taking more weight than the drivers) and had difficulty making steam : the grate area was much too small, particularly in view of the anthracite fuel being used.

Its function was poor, and some functions were not correctly worked out. Form did not follow function, and the form was extremely poor. Why have bogie wheels of different designs? Why is there a dish in the centre of the bogie splashers? One could go on and on ...

Surely this must be one of the ugliest steam locomotives ever built?

#### REFERENCES

Web sites

https://www.youtube.com/watch?v=dMpk0rHTLLw http://www.douglas-self.com/MUSEUM/LOCOLOCO/locoloco.htm https://www.steamlocomotive.com/locobase.php?country=USA&wheel=6-2-0&railroad=ca

#### WOLVERTON PUG GOES TO CZECHIA 13<sup>TH</sup> TO 23<sup>RD</sup> SEPTEMBER 2024

#### Part-1 Benesov Steam Festival 14<sup>th</sup>-15<sup>th</sup> September 2024

Shortly after I had lost my wife Anne to cancer in April, I told my railway enthusiast friends that if they were planning any trips here, or abroad, cut me in on the action. And so, it was back in May a former colleague Nigel and Martin an ex-Weights and Measures Inspector, with plenty of amusing tales from that enterprise, gave me a list of upcoming rail tours they were planning, several involving the preserved English Electric Type 4 (class 40) D345.

Another adventure involved a 10-day trip to Czechia on 13<sup>th</sup> to 23<sup>rd</sup> September, for a festival of steam hauled trains based on a place called Benesov southeast of Prague. This would take place over the first weekend. It was then put to me thus "would I like to stay in Czechia until the following weekend in order to partake in a Grumpy tour"! I know the diesel fraternity have nicknames for most diesel and electric locomotives, and I am aware of most of them in the UK, such as "Duffs, Rats, Goyles, Vacs, Wizzos, Gronks, Sheds, Slugs," and the like. But I don't know many abroad, except "Ludmillas", which were Soviet locos mainly built for use in East Germany and "Pig Taxis" a small German railbus! The locos in the Czech Republic have not escaped this, so a "Grumpy" is a heritage Czech Bo-Bo dieselelectric loco built at the CKD works in Prague between 1964 and 1971. It gained the nickname because when looked at head on they appear to be frowning. There are also locomotives called "Goldfish Bowls" due to the shape of their windscreens and "Goggles" again due to the appearance of the cab windows.

Now we have cleared that lot up I'll move on.

Our flight was booked with Easy-Jet from Luton, and I set off from Wakefield to Kings Cross at 07.54 on Friday 13<sup>th</sup> September. Nigel joined at Newark. Motive power was 91114. A far more comfortable journey than a "Satsuma" 80x unit. We duly crossed the road to St Pancras International in good time to catch the 10.15, consisting of two 4-car East Midlands Railway Siemans class 360 Desiros to Luton Airport Parkway. From there we caught the DART shuttle rail link to the airport. It is electric, cable worked, and automatic. There are two 4-car sets, one on each of the two lines running at 5 minute (peak 06.00-09.30 and 14.00-18.00), 8 min. off-peak, and 15 min 22.00 to 04.00. It takes 4 min to travel the 2.3 km to the airport, with a 150metre covered walkway to the terminal buildings. The units were built by Doppelmayr Cable Car, carry 170 people in each of the 2 units and travel at max speed 31.3 mph. It costs £5, card only by tapping in at the gate, though there is no sign telling you the cost! Concession pass holders and Blue Badge



holders are half price but must book on-line 72 hours before travel. It is possible to book through rail journeys which include the DART price.

The plane (Airbus 319 G-EZDK, if anybody is interested!) left on time in bright sunshine, and as expected we arrived in pouring rain.

It then proceeded to rain continuously for 4 days! The effect of this was felt more severely in Austria and the East of Czechia and into Slovenia, to the extent that the planned "Grumpy" itinerary for the following week-end was in tatters as most of the lines were

either under water or washed out. This was particularly bad around Ostrava and Olomouc, a main part of the itinerary. Also wrecked was Nigel's plan for the midweek travel via the Alpine passes into Austria.

However Russell Sedgwick the extremely capable, "Rabbit out of a Hat " puller, with less than a week to go, his whole weekend now impossible, went into overdrive. Burning the midnight oil and via his contacts in Ceske Drahy the Czech railway organisation (CD) re-arranged the weekend with a full itinerary, concentrating on main and secondary lines in the south and west of the country. Cesky Budejovice, Kolin, Pilsen and the German border. Motive power was 751-149. These have not worked booked services since 2004, but many now work freight trains and are being overhauled/refurbished as class 749's.

After checking in at the Arkada Hotel in Prague on the 13th, we had dinner at Usumavy, an old wood-panelled brew pub frequented by locals. There, we

met Neil Taylor, a former DB Schenker colleague of Nigel's, who has extensive knowledge of food and beer locations in Europe.

Saturday  $14^{th}$  We are off to the Benesov steam festival.



On platform 1 at Prague Main Station (Hlavni nadrazi) is a poignant reminder of what this part of the world went through in the 1930s and on until independence from the Soviet Union in 1993. There is a bronze statue of Nicholas Winton and two young children of the 669 saved from the Holocaust through his actions in 1939. Even more poignant there were fresh flowers draped on the bronze suitcase that accompanied them.

Our first move was thwarted as the 08.38 special to Benesov behind preserved 1959 GM 1400 hp Bo-Bo diesel no 2050 04 had been cancelled. We were there in good time so caught the 08.17 service train (EMU) in-

stead and made it onto the 10.10 Benesov to Olbramovice, with two Ludmil-

las, (Russian built diesels) one each end. The first steam we came upon was at Cercany, where we boarded a set of four. hauled single, branch line units with cabs each end, hauled by an ancient Czech (1917) 2-8-0 no. 434-2186 with domes and pipework everywhere and of course a tall chimney. This took



us back to Benesov. Then a service train to Olbramovice, where in an adjacent platform stood German Kriegslok, 2-10-0 no. 52.100, previously 50-3144, which ended up in Yugoslavia and carried the number JZ 33 044. It was certainly heavily covered in grime and not the pristine polished versions you often see, with bright red underframes and running gear!

What happened next was fairly spectacular. The train with the two Ludmillas (one each end) duly arrived back at Olbramovice. Then at exactly 11.53 the Kriegslok and the two Ludmillas departed simultaneously on parallel



lines.

Soon after they had gone 464.102 a hefty Czech 4-8-4 tank locomotive arrived on a rake of four wheeler carriages. However we decided to have a ride behind the Kriegslok 52100 to Ledecko but the line beyond Sazava was blocked by a fallen tree! Only thing to do was repair to the local brewpub for a beer. We managed to purchase a tasty dark beer called



Volba Sladku. There were no seats available as they were all taken by families out for Sunday lunch.

Unable to proceed further the Kriegslok ran round, and we headed back to Cercany.

To be continued

## PLEASE NOTE THAT SUBSCRIPTIONS ARE DUE FROM 1 APRIL 2025

### Just £20.00 for all members over 16.

#### Payments may be in cash, or cheque to a trustee, or electronically.

Payments in cash should accompany a payment slip available in the kitchen area in the club house.

Payments may also be made via a club card reader in the club house.

BACS payments should be made to the Barclays account in the name of RSME (or Reading Society of Model Engineers if your banks security rejects RSME) using the following account details:

#### Bank sort code 20-78-58. Account number 70796077

*Please use your surname as a reference on any BACS payment* Membership application forms now apply to new members only

email <u>michael.manners2@ntlworld.com</u> or by post to *RSME Membership* Secretary, 257 Loddon Bridge Road, Woodley, Reading, Berks, RG5 4BL

#### Donations

If you wish to Gift Aid a donation to the club, in addition to your membership subscription, please contact Jim Brown, <u>jmebrown655@gmail.com</u> for a Gift Aid Declaration.

## LES IS 90!

Les Dawson, our previous long serving president, is 90 on 13 April. To celebrate with us we are inviting him to our Club Running on the 12th.

Les has helped so many members over the years and I hope all possible will be able to join us all on that day.

## **Painting locos**

# RSME has received the following enquiry that may be of interest to members

I hope this finds you well. I'm just reaching out as we have recently done some work, painting locos for Guildford Model Engineering Society and wondered if this is something that would be of interest to Prospect Park?

We have full spraying facilities with a low bake oven and can happily do all range of spraying on Locos and engines from single colours, to elaborate stripes and details.

*Î'm* happy to share some photos of the previous work we have done and discuss any projects you have.

Kind regards,

James Cutting

B&C Coachworks <<u>manager(a)bc-coachworks.com</u>>

#### DIARY

APRIL 2025	<i>(</i> 41,	D-11'	C
Sunday	6th	Public running	Setting up from 09.30 onwards
Saturday	12th	Club running	10.30 onwards
Sunday	13th	Les is 90!	All day
Monday	14th	Trustees meeting	19.30
Thursday	17th	Club Talk	
		The Liberation Line	
		Christian Wolmar	20.00
Saturday	26th	Club running	10.30 onwards
MAY 2025			
Sunday	4th	Public running	Setting up from 09.30 onwards
Saturday	10th	Club running	10.30 onwards
Monday	12th	Trustees meeting	19.30
Saturday	24th	Club running	10.30 onwards

Wednesday Warriors every week at the club site from 09.30

## **CLUB TALKS**

#### Thursday 17th April by Christian Wolmar

For our final talk of the season RSME welcomes a well known author and broadcaster to introduce his latest book *Liberation Line* that tells of the amazing feats to repair vital railways in France after the D Day landings. I hope that many members as possible will be able attend on this occasion.

The March talk by Graham Bilbe on trolleybuses was very well received. Almost standing room only!

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 May issue is 20 April* 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