

**Reading Society  
of Model  
Engineers  
Charity Number  
1163244**

# The Prospectus

**November 2024**



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Hydraulic buffers at London Waterloo made by Ransomes & Rapier, Ipswich, probably some ninety yeas ago.  
Photo 4 November 2024 John Billard

**2024 AGM REPORT  
THE GERMAN V3201  
NGRS VISIT  
SPIRITED LOCO  
ROB DENTON**

## THE VIEW FROM THE CHAIR

John Billard

I know that many members will be interested in the progress made in the club workshop. The refurbishment is just about complete and we are doing adjustments to the machine tools. This has consisted of providing a solid base for both for Myford lathe and the milling machine. In addition we are working on setting up the lathe to make sure it operates accurately. This is work in progress to be completed soon.

Like many members we were able to visit the Midlands show and as always there was too much to see, all at once! My favourite was the one eighth scale RC controlled Galway Hooker sailing boat of 1890 by Tony Judge. I'm not sure the judges knew what they were looking at.

While at the exhibition our eye was taken by a new tool and cutter grinder for sale at a show price making a considerable saving. Having consulted the two other trustees on site we decided to buy it for the club and it is now installed on the club bench. Already we're trying to get to grips with its versatility and I hope hope that many members can see the benefit and become proficient in its use.

The trustees meeting in October took place on the 14<sup>th</sup>. The main business was preparing for the annual general meeting including discussion on a motion to be put in the name of the trustees to terminate the ground level extension project. We also considered the number of trustees being re elected. The AGM has now left us with a vacancy. This is something we can fill by co opting a member. Such a co opted trustee has the full responsibilities of an elected trustee apart from the ability to vote at meetings. The period of co option ends with the succeeding annual general meeting. We would welcome any interest from members on this subject. At the same time we have always being happy to welcome observers from the membership two our meetings but for some reason this has never been taken up. We meet monthly in the club house at 7:30 and usually the meetings are over by about 9:00 pm.

Other details of our meeting included our monthly finances where we noted that the income from public running in September and October was down compared with the summer months. However considering the rainy weather we have not done badly.

Our membership level has been reported at 88. Slightly down on last year so we are always looking out for new members. Recent addition to the club-house has been a long awaited defibrillator which has been installed on the right hand side as you enter the clubroom. Work is carrying on maintaining the club Baldwin locomotive which has been running off beat for some time.

We were able to welcome a visit by the Narrow Gauge Railway Society at our club running on 12th October. The weather could not have been worse in the morning but we had several engines running including the editorial 7808 and the visitors said that they were very pleased at the welcome we were able to give them despite the soaking outside and what they had come

to see - some from considerable distances. We hope to welcome them again in the not too distant future.

There will be no public running in December because of our Santa specials on the 7<sup>th</sup>, 8<sup>th</sup>, 14<sup>th</sup>, and 15<sup>th</sup> of that month. Santa having given his notice over visit much work is being undertaken to prepare his grotto in time.

Last month's Prospectus referred to the future of private parties. It was decided at our meeting that the issue of how the club should approach these parties next year should be considered urgently in 2025. In the meantime, our appeal for assistance from our general membership remains very much live. Any inquiries should be directed to Peter Culham.

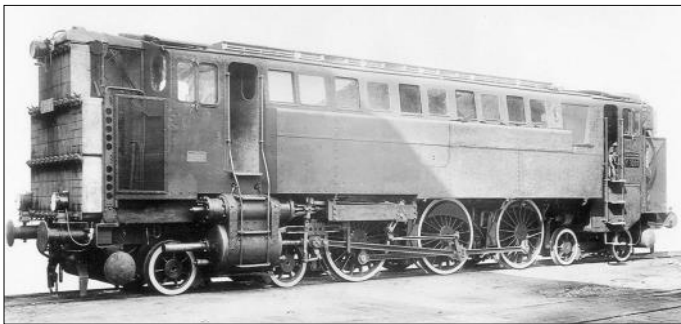
I'm very pleased to announce that Val and Richard Coleman have arranged a further Christmas lunch at the same venue as last year, The Southcote Beef-eater, on 19th December. Details may be found in the clubhouse including names to go on the list. (See also Page 11.)

Finally, I am sad to report that Tony Giles has died, another member with a long history with the club. Tony was active until very recently running his Galloping Goose at public running. We shall miss him. All members have been invited by his family to his wake on Tuesday 12 November from 1 to 4 pm at the Harvester, Prospect Park.

## **Unusual Diesel Transmission Systems- Part 3 Alec Bray**

### **THE GERMAN V3201 DIESEL-PNEUMATIC LOCOMOTIVE: 1924**

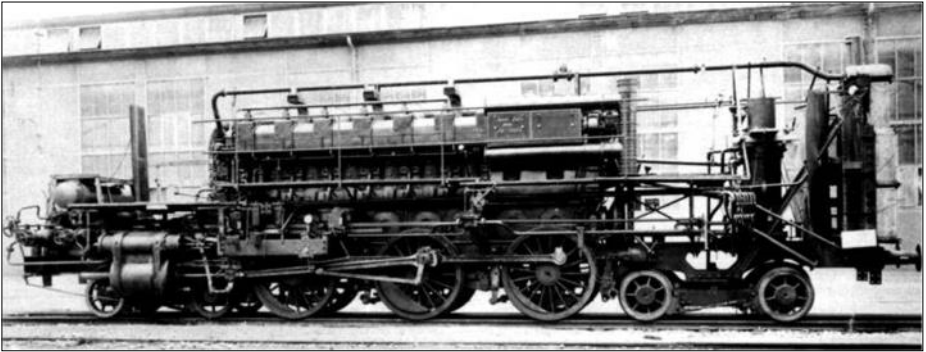
This German 4-6-4 diesel-pneumatic locomotive was designed to solve the



problem of power transmission between a diesel engine and the wheels. It was originally planned in 1924: a quotation was made on the 11th April 1924 and an order was subsequently

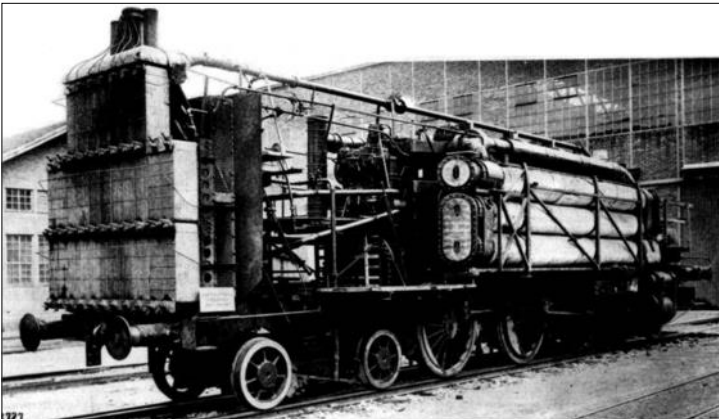
placed on the 18th September 1924 by the Deutsch Reichsbahn for the development of a powerful diesel locomotive to power the passenger train services on main and secondary lines. At the time, there was no consensus as to the best method of connecting the diesel engine and the locomotive driving wheels, and for this locomotive the solution was to use a pneumatic system – compressed air.

Construction of the locomotive took fully five years rather than the single year originally planned for, which possibly shows that there were some seri-



ous technical difficulties that had to be overcome. Initially completed in 1927, V3201 was actually put into service in 1929. It was the first high-performance diesel loco on the Deutsch Reichsbahn. It used the MAN Lo6 Vu 45/42 engine, originally developed for use in U-boats. This engine was a six-cylinder 1000/1200 hp engine directly coupled to a MAN 2-cylinder double-acting single-stage air compressor. Air was delivered at 102 psi. The design speed was 70 km/hr and the weight in operating condition 70 tons; the maximum axle loading was 18 tons. It was assigned to the Reichsbahn Directorate of Stuttgart and in 1930 it was renamed V 120 001.

Two major problems have to be addressed when using compressed air transmission; Firstly, the compression cycle generates a considerable amount of heat – and then, when the compressed air expands, it cools and can freeze up components in the flow path. The overall process is very inefficient. To overcome this problem, the air leaving the compressor on board this locomotive was heated further, using the diesel exhaust in long tubular heat exchangers, and this very hot air, at 320°C, then drove pistons exactly as if it was steam. This very hot air would have been extremely dry, raising some interesting lubrication issues.



Despite this measure to make the air hot when it reached the cylinders, it was still necessary to cool the compressor cylinders. This was done by injecting water directly into



the cylinders, which meant that there would have to be water tanks on board and which needed periodic filling. Because of this water injection, there was a certain small proportion of steam in the

working fluid, but it would not qualify the locomotive as a hybrid diesel-steam engine. According to one source there was no water-jacketing of the compressor cylinders at all, but other sources contradict this and it appears that water-jacketing *was* also used.

On 22 November 1929 a long test run was done with a 233-ton train from Stuttgart to Augsburg on a fast passenger timetable, over the 6 km long, 1 in 40 gradient at Geislinger. At a speed of 20 km/h the diesel engine was not even fully opened out. In heavy conditions, with severe curves on the 'hill', the train could pull away from standstill faster than a steam locomotive of the same size. The cooler fan motors were not needed on this test run and the water was cooled by the passing air. Initially cooling radiators had been placed only at one end of the locomotive, but by the time it had all its external cladding added for service testing, it had coolers at both ends of the chassis.

On 10 April 1931, the British journal *The Railway Gazette* reported that the locomotive had successfully completed twelve months of testing by November 1930, during which it exceeded its design speed by 25 mph for long periods. On stripping it down there was no significant scaling due to the compressor water injection. It was reported that the officials of the Deutsche Reichsbahn were thoroughly satisfied with the trial results, and that the locomotive was being transferred to the hilly district around Stuttgart, and put into service for further test observations.

Nonetheless, it appears not to have been a total success: five years after it was delivered to the German railway, it was taken out of service, and the design was not repeated, possibly because the compressor was prone to overheating despite the water injection. It was also more expensive to build compared to the current steam



engines. The locomotive was withdrawn and apparently scrapped in 1935 (some sources state 1933).

A completely “Pointless” piece of information – except for those readers who are also stamp collectors! This German diesel-pneumatic locomotive appeared on the 5c stamps of Tuvalu:

In 1995 Märklin produced a model of the V3201 in a black livery (and later in a dark blue livery).

## THE 2023/24 ANNUAL GENERAL MEETING

The Annual General Meeting of the Reading Society of Model Engineers Charitable Incorporated Organisation (CIO) took place on 24th October at 7.30 pm in the club house. The Chair was taken by John Billard acting at the direction of the meeting, not as a trustee.

Having dealt with the minutes of the last meeting and matters arising the



President presented his report and thanked the membership for their continued dedication and hard work that has ensured that RSME a has had a successful year. This has put the club in a strong financial position. In addition the long term future

of the club at its present site has been secured by putting in place a 10 year lease with Reading Borough Council.

The Chair thanked Stuart Kidd who had done much work behind the scenes that is required of a charitable organisation. He also thanked Nigel Penford and his team of volunteers for all the work managing and doing the installation of lamp posts and the workshop refurbishment. These thanks were extended to all members who gave their time to the various activities to keep the club running.

There was a warning nevertheless that we needed more members to assist with private parties next year and over time the existing trustees will have to be replaced on age grounds if nothing else. He would not like to say that this year was looked back as our finest hour! More to come, we hope!

Having accepted this report those present also accepted reports from the Prospectus editor, who put out a plea for more contributions, the 00 Section, who would welcome more members to join this group and the Parks and Gardens department who again were not getting any younger.

Next came the financial statements and accounts for the year ending March 2023. Jim Brown, the longstanding treasurer, was unable to attend but wished his thanks to be passed on to everyone who helped generate income for the club. The accounts having been accepted by the trustees these were then put to the members at the AGM and these were again accepted.

The meeting was asked to consider a motion from the trustees which recommended that the raised track extension project should be formally terminated. This was on the grounds of insufficient resource available to make it happen and to maintain it; and significantly it would have a major effect on our car park which it is an invaluable part of the site.

There was a good debate and when put to a vote the motion was carried 14-6. The meeting was assured that should an opportunity arise to extend tracks in the future there was no reason why this should not take place if this was the wish of members and the appropriate resources were available.

Moving to the election of trustees the chair announced that nominations had been received for three trustees who were due to retire in rotation at this meeting. There being no other nominations Jim Brown, John Billard and Mick Chalmers were duly elected. This meant that there were seven serving trustees which left a vacancy. However this might be filled by co option. Miriam Farley has been acting as a co opted trustee to provide legal advice when required and if it was her wish this would be continued.

The Presidents Cup is awarded to a club member to recognise meritorious service given to the club by a member over the previous 12 months. As a recap the President referred to all those members who had received the cup in the past. He said that this was a pleasurable duty but onerous. There were so many members who deserved recognition. After long consideration he decided that there were two members who qualified for the award this year and rather wait a year for the second he decided that it shall be a joint award. Accordingly, he awarded Mike Sinclair and Alan Thatcher the President's



*The Present's Cup was awarded by John Billard jointly to Mike Sinclair (left) and Alan Thatcher, who was unable to be present on this occasion.*

*Photo Richard Coleman*

Cup for the coming year.

A number of items were raised at any other business. It was announced that a Christmas lunch is being arranged for the 19th of December. A member raised concern about non attendance because of the dark evenings. A possible solution was to have the AGM at the weekend during the day. A straw poll of members present show a favourable response and this will be considered by the trustees.

A member asked if some form of lighting could be provided at the entrance to assist without the enclosing the site in the dark and this will be considered by the trustees.

It was asked if it was possible to arrange weekend working parties. While this has been tried in the past it would be considered again.

There was a question about disposing of club assets and the process to be employed. This would have two purposes, to alert members of the availability of such an item, and to offer such a thing at a fair market price. This would be further considered by the trustees.

Again the trustees were asked to consider improvements to the raised track unloading ramp and also to deal with the problem of cars parking making loading and unloading difficult.

There being no other business the meeting was closed at 8:58 pm.

## **A VISIT BY THE NARROW GAUGE RAILWAY SOCIETY**

RSME was privileged to receive a visit bt the Narrow Gauge Railway Society on 12 October. The NGRS is a national organisation and its definition of the gauge appears to include our tracks. The visitors were from all over the country including Cheshire and South Wales.

Unfortunately they did not bring good weather with them and the morning was particularly wet. However this did not put them off and they were pleased to make use of the trains provided including going up a few sidings!

A generous donation to club funds was provided and their time was completed by tea in the club house.

A special thanks to all members who turned out to assist on the day. All were a credit to the club.







Words—John Billard, photos—NGRS Members

## A SPIRITED LOCO

by Terry Wood

After Nigel Penford kindly provided the boiler for me I now have to fit the water gauge, safety valve and steam outlet. I will also have to cut a hole in the side of the cab in order to fit the pressure gauge and some kind of secondary means of filling the boiler.

The first thing I carried out was to modify the clamp at the front that supports the boiler because it is a smaller diameter than the original by cutting a piece of it out then bending it round to a smaller diameter then bending a tab with a hole in it for a bolt to go through to form a clamp. Unfortunately the tab broke while I was bending it so I decided to weld it back on, whilst I was



welding I suddenly realized I had set the rubbish bin on fire which was directly below the vice so I quickly ran out of the workshop and tipped the contents of the bin into the yard fortunately it was raining at the time so it soon went out.

I then had to make the front hole of the meths burner smaller as well for the same reason which I did by cutting a hole in a piece of 1mm

sheet steel bending the corners round and pop riveting it to the front of the burner which was a lot safer than welding it.

Then I cut the hole for the pressure gauge in the cab in order for the water gauge to sit vertically. I had to make it a lot bigger than I thought and had to take the engine and crank out in order to gain enough clearance for the jigsaw. I then cleaned up the hole using the linisher. I then discovered



that when I reassembled the engine the top girder supporting the valve chest was touching the pressure gauge so I had to cut the hole even further back in order for the pressure gauge to rotate in order to turn it into the right position so that the safety valve sat upright.

*To be continued*

## **Rob Denton – a personal memory**

### **John Spokes**

I first made Rob Denton's acquaintance about 15 years ago when I joined RSME. It was a passing acquaintance; I was primarily involved with the ground level line and Rob with his pal Tony Giles were preoccupied with the raised track. I recollect these two, and many other existing and past members of RSME, driving a medley of 3 ½" and 5" gauge steam and diesel outline loco both during Club Running and Public Running Days. At that time Rob and Tony were active in the arrangement and running of birthday parties and Rob, by virtue of his physique was a natural choice for Santa in the club Grotto.

I could not relate much information about his earlier life, but I knew he was a signal engineer and a railwayman. Whenever Rob met a fellow railwayman, and there are many in our hobby, it was like a coming together of a secret society with its own customs and bonds. Often, I was witness to these meetings and walked away – not wanted here mate!

Rob was physically and metaphorically a larger-than-life character and with no disrespect, you always knew when he was around. I was surprised when his eldest son, Arron, during his very emotional funeral eulogy remarked that his dad was a complex person. To me Rob was always straightforward, sometimes more direct than one would wish, and excuse the cliché, what you saw is what you got.

I don't intend to give details, but a few years ago Rob departed RSME and joined the NWMES at Coate Water Park, Swindon where he contributed much to Public Running and on some Sundays his fleet of exquisite 5" diesels were the only locos available; such was their reliability. He also participated in the annual NWMES Halloween Event where, together with friends Tony Giles and Des Giddings, all suitably attired, he ruined the slumbers of many a sensitive child.

Rob was a very skilled modeller in a variety of gauges from 5" to 00, although he did purchase from a Swindon member a lovely Bo-Bo Warship 'Daring' in 71/4" gauge. Employing skills learnt in his trade, he constructed a fully signalled 00-gauge layout, complete with signal mimic board. However, the greatest examples of his craft were his builds of some of the classic BR diesels, beautifully detailed and complete with sophisticated electronics, including authentic sound. These diesels would be transported *en masse* to meetings, rallies etc and when not in use would be parked up with their

sound cards operating. All very irritating Rob, but you knew that! My acquaintance with Rob steadily grew into a real friendship, especially as I got to know him better from Swindon get-togethers, but he had a very broad deep knowledge of modelling and I was always picking his brains – usually something about painting an item or wiring up some electronics.

He bore his long illness with much fortitude and optimism, and he passed away far too young. He leaves a fantastic modelling legacy and although I know little of how this tangible estate will be passed on, I trust the ultimate recipients will appreciate the skill, time and love that went into their creation.



Photos courtesy Author

## **2024 RSME CHRISTMAS LUNCH**

**Thursday 19th December 2024 12.45**

**Southcote Beefeater**

**Two Course Starter/Main £20.95**

**Two Course Main/Dessert £20.95**

**Three Course Starter/Main/Dessert £24.95**

**Drinks payable at the Bar**

**Please add names and menu choices to the notice  
in the Club House**

**Payment to Richard/Val Coleman before 28 November**

## DIARY

### NOVEMBER 2024

Sunday	3rd	Public running	Setting up from 09.30
Saturday	9th	Club running	10.30 onwards
Monday	11th	Trustees meeting	19.30
<b>Thursday</b>	<b>14th</b>	<b>On the Bench Night</b>	<b>19.30</b>
Saturday	23rd	Club running	10.30

### DECEMBER 2024

Saturday	7th	Santa Specials	Setting up from
Sunday	8th	Santa Specials	<b>08.00</b>
Saturday	14th	Santa Specials	Setting up from
Saturday	14th	Santa Specials	<b>08.00</b>
Thursday	19th	Christmas Lunch	12.45
		Beefeater, Southcote	
Saturday	21st	Club running	10.30 onwards

There will be no Trustees meeting in December

*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 December issue is 20 November***

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

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