

**Reading Society  
of Model  
Engineers  
Charity Number  
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**Free to members**

# The Prospectus

**April 2023**



BR Mk 4 set on the 12 18 to Leeds at Kings Cross on  
26 March 2023. Photo John Billard

**RSME AND THE FUTURE  
FEDERATION AGM  
ANIMATED ENGINEERS  
ELECTRIC LOCO PROGRESS  
LOCOS 60 YEARS AGO**

## **RSME and the future**

The trustees had a special meeting on March 6th to give some thoughts about how we may operate into the future by continuing to recruit and retain our members. This would apply particularly to all those who do so much to keep the club running so successfully. With the introduction of our new membership system this month we have to put all our efforts into recruiting for our new membership year including follow-ups to those who have not renewed recently.

We'd like to emphasise that we are a model engineering society and not just a train operating company! Not interfering in any way with that but we think it would be useful to emphasise the engineering and model aspect of what we do to attract a wide range of members

To help this we would like to make our membership even more attractive in a number of ways. This includes improving our Thursday meetings. So for the first Thursday in the month we would like members to show the work they have been doing as a sort of "On the Bench Evening" starting on 6 April. The third Thursday I hope will consist of a speaker each month as far as this can be arranged. This has already started with a very interesting and well attended talk by an outside speaker on the history of Huntley and Palmers and more is in the pipeline. Other Thursdays will be as before.

We also wish to start visits to places of interest to our members. We already have some ideas about this and we will let members know well in advance what will be happening. We also think it is important to make contact local ME clubs so that we can learn from each other. For a long time we had a prize winning show stand for exhibitions and we would like to recreate this particularly for the Stoke Row rally in June.

This is not all but to move forward the trustees really would like additional help from members. This includes

**A Thursdays organiser**

**A visits coordinator**

**A show stand planner**

Please let me know if you can help with some of this. The trustees cannot do it all!

So, not so much a new chapter for RSME but maybe a new paragraph!

## **The Federation of Model Engineering Societies**

I attended the federation AGM on Saturday 25<sup>th</sup> March. It was a useful meeting and I am glad that we were represented. These are a few points of interest.

Prior to the meeting a workshop took place on the subject of recruiting and retaining members. There was some interest shown when I said that we issued a monthly newsletter and had reduced our subs! Otherwise, I didn't

think there was anything which we hadn't already thought of although it is important that we follow up new members immediately and keep them interested in various ways.

The meeting itself included the usual election of officers but I was pleased to note that Peter Harrison has volunteered in a non-official role to help the federation. The federation has about £60,000 in the bank which is regarded as a reserve in case of a requirement for campaigning. The federation uses a Sage accounting system for electronically recording all various transactions. One issue which I think is important is to keep track of are the various attempts to produce a substitute for the coal we use. Quite a bit of work is being done on this for full size applications but I'm not sure how much of this is happening in the model engineering world.

After the meeting closed there was a presentation by Walker Midgley, or there should have been if they had attended! So, their report was read by Bob Polley the chairman. This will provide some useful information for the trustees in dealing with our insurers.

Fortunately, I found myself occupying a table shared by the new owners of Polly Engineering, Andy and Jane Clarke. They responded readily to my suggestion of a visit to RSME. This is something we might wish to take up and will be discussed at the next trustees meeting.

The meeting took place at the National Coal Mining Museum near Wakefield. Well worth a further visit, but a bit far for RSME I suppose!

## **ANIMATED ENGINEERS Part 1**

**by Alec Bray**

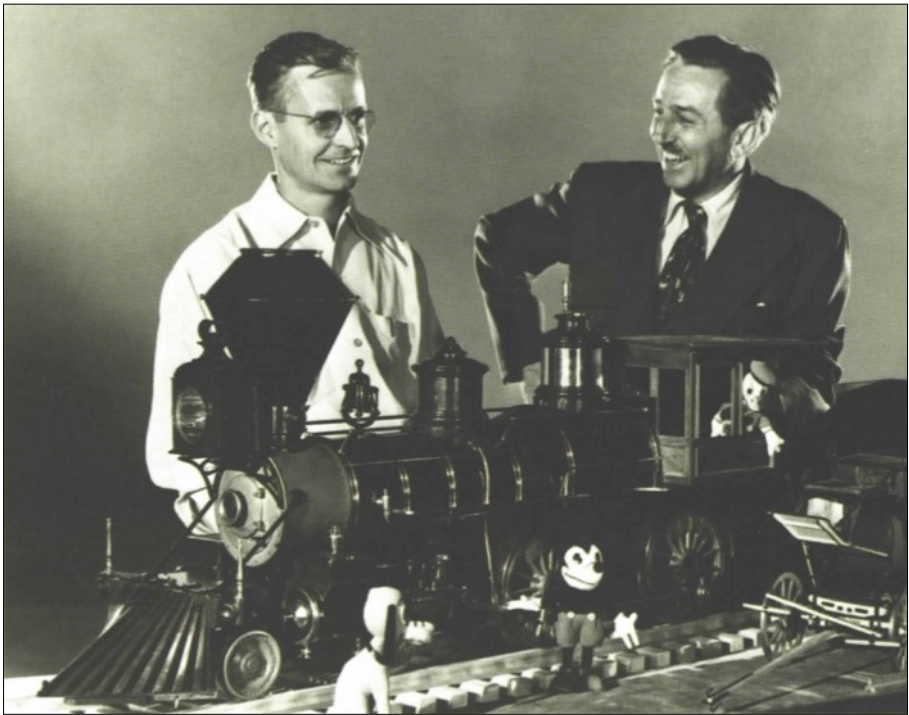
Y'all know of Walt Disney, the celebrated 7.25-inch live steam model engineer, I guess?

No? Let me tell you a story ....

In his early forties, shortly after the end of World War 2, Walt Disney's doctors suggested that he should find a less strenuous leisure interest than playing Polo. Walt loved horses, and he actually began playing Polo with a professional South American team known as the 'Argentines', but he was unfortunately hit by a polo ball and knocked off his saddle, and in the process shattered four vertebrae. So now Walt needed a new hobby to give him some time away from the pressures of running the Disney Animation studios. Walt had always loved railways (as a young boy, he had wanted to be an engine driver), and this interest was enhanced when he found out that two of his principal animators, Ollie Johnston and Ward Kimball, were also steam locomotive fans – they had come up to his office to see a Lionel model train set that Walt had set up for his nephew. Walt went out to see Ollie Johnston's miniature railway in Santa Monica a few times, too.

Walt went to the Railroad Fair in Chicago in 1948 with Ward Kimball, and following this, Walt decided to build a scale model railway (7.25 in gauge,

1/8<sup>th</sup> scale) in the garden of a new home he was building in the Holmby Hills neighbourhood of LA. After Walt asked Ed Sergeant to draft plans for a locomotive based on blueprints of an old Central Pacific engine, Number 173, a 4-4-0 steam locomotive which had been built by the Central Pacific Railroad in 1872, he asked for help from Roger Broggie in the Animation Studios machine shop – which at the time occupied one of the wooden “boxcars” located near the studios’ main entrance. Roger and the other machinists went to work. Early most mornings, Walt would stop by and check on the progress. Before long he told Roger, “I don’t want to interfere with what the boys are doing, but I don’t think it is fair that they’re having all the fun. I’d like to help, too.” The next day Walt walked in and saw an open workbench with a sign over it that read “Walt’s Workplace.” Walt spent as much time as he could learning how to use the various machines and tools in the shop. Roger later said, “I guess we made a pretty good apprentice machinist out of him. He surprised all of us. In many ways...he had a high aptitude for machine work.”



*Roger Broggie and Walt Disney*

In May of 1950, Roger oversaw the delivery of the “Lilly Belle” locomotive, named after Walt’s wife, from the studio to Walt’s house for its first

steam-up. Walt constructed some of the carriages and the gondola (an open wagon for loose bulk materials).



*Walt Disney and Lilly Belle*

Ward Kimball was an avid collector of model trains and collected old railroad ephemera. He also had a 3-foot gauge railway in his garden – the “Grizzly Flats Railroad. Kimball's engine shed also included two small steam engines that had been used on sugar cane plantations. At work, Ward Kimball was the Animation Director for “Pinocchio” and himself animated Jiminy Cricket (amongst many other animation credits).



*Walt Disney and Ward Kimball*

Kimball is credited in helping Walt Disney to imagine, design and construct the 3 foot gauge Disneyland Railroad at Disneyland in Anaheim, California. The inspiration for the Disneyland Railroad also partly came from Disney's own live steam garden "Carolwood Pacific Railroad", which Kimball had helped to construct. Kimball's "Grizzly Flats" train station served as the model for the Disneyland Frontierland Train Station. As a tribute to Kimball, Engine No. 5 of the Disneyland Railroad is named the "Ward Kimball". Besides being a noted trombone player (including at least 13 LPs made with his band), Ward helped match colors for the reproduction steam locomotives built for the National Park Service at the Golden Spike National Historic Site at Promontory, Utah, against an engine at the Smithsonian Institution, and he painted the artwork for the replicas of the Union Pacific No. 119 and Central Pacific "Jupiter" built by O'Connor Engineering Laboratories for the Park Service.

Kimball continued to work at Disney until 1974, creating animation for "Mary Poppins" and directing the animation for "Bedknobs and Broomsticks", amongst other works.

Ollie Johnston also had a garden railway around his home.



*Ollie at the regulator of his new one-inch scale Pacific*



Ollie liked the appearance of the Baltimore and Ohio Pacific that was first built in 1927. Plans were made available to the model maker soon after by Baltimore and Ohio Railroad public relations department employee Larry Sagle, and that was why so many half inch scale locomotives built in the 1930s were 4-6-2 Pacific types.

Ollie's engine had a copper boiler, was coal fired, and equipped with cylinders of 1 11/16 inch bore by 2 5/16 inch stroke. Her drivers were 6 9/16 inches in diameter and could go as fast as the track and terrified passengers would allow for in each situation. Although based on the Baltimore and Ohio Pacific, it was largely a freelance design.

*To be continued*

## A NEW 7.5" ELECTRIC LOCO

by Terry Wood

### Building the control cab and fitting the speed controller

In order to build the control cab I purchased some 1mm sheet steel from



Berkshire Metals and then proceeded to first build a mock up using discarded cereal boxes in order to get a rough idea of the shape and scale. I then copied this to the sheet steel cutting the shape using a jigsaw, I also cut two curves on the side of the sheet to produce two side windows for the cab which would have been a lot more difficult to carry out after the sheet had been bent. The sides and roof

of the cab I cut in one long strip in order to get a clean shape by just bending

at each corner and because the sheet wasn't very wide managed to do this using the vice and some scrap bits of angle Iron clamped at the other end using mole grips.

The roof of the cab was a bit tricky bending being a curved shape but by using a suitably sized tree trunk in the garden I was able to get the right diameter. I then proceeded to make the front of the cab which had to be cut slightly



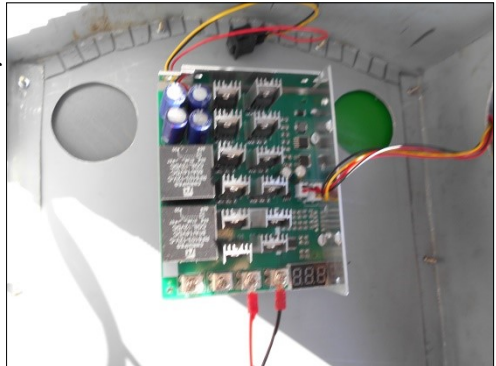


bigger than needed in order to bend some "ears" over in order to bolt it to the sides of the cab to give a ridged structure, the curved top I cut with many tabs in order to bolt the rear to the curved roof. I also cut two holes to produce the two spectacles in the front of the cab also. Two tabs were bent at right angles at the bottom of the cab in order to

mount it to the chassis using M6 nuts and bolts.

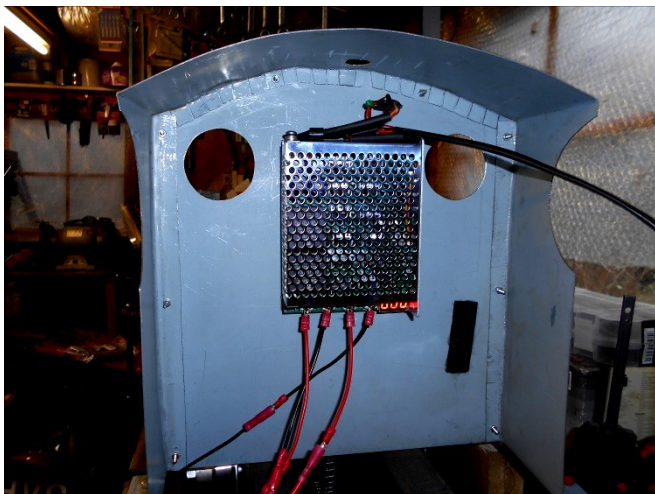
Although I made a motor speed controller at the beginning I have decided not to use it because it was generating a lot of heat when the motor was running and this was before it was pulling any load so instead I have opted to use a PWM (Pulse width modulator) speed controller that can handle a 100 amps without giving off too much heat because being a digital device its either on or off and not somewhere in between as in a resistive analogue device.

The controls for this device had very short leads so I had to extend them in order to fit them into a control box and I also wired in an LED to indicate that the loco was switched on. I wired the LED into the on / off switch that came with the PWM but when I switched it on the LED wouldn't light up so I started checking that I'd wired it up correctly with a DMM but being a Chinese device none of the wiring made any sense the red wire going to the switch was in fact the negative supply and the black wire going to the on / off switch was the positive supply!



After finally wiring up the control box and fixing the PWM to the front of the cab it was time to see if it would actually run so I placed the loco on a Workmate with the battery removed then fitted the battery to it and then placed two wooden blocks under the chassis so the wheels were able to turn





freely and then powered it up and checked that it would run forward as well as backward, it was then that I noticed the chain that runs from the front axle to the rear was occasionally touching the two bars that hold the battery in place which meant raising the bars slightly higher in order to stop the chain touching it. This may prove to be a

problem when I finally build the bodywork to cover the battery in the future.

After sorting that little problem out it was time to find out whether it would run with a passenger sitting on it, seeing as I had no trolley to sit on I had to sit on top of the battery with a piece of carpet on top and put my feet on the chassis whilst trying to hold the control box steady. I gingerly switched the control box in the reverse position because the loco was facing the front door of the workshop and if something went wrong I would have crashed into the doors. I then carefully turned the control knob and the loco moved slowly across the workshop floor and I quickly turned the control knob back to zero before I started to accelerate to the other end of the workshop. so the loco now pulls away with a passenger on board over a mixture of carpet and wooden flooring which is a much greater rolling resistance than metal rails. How well it will perform with a trolley behind it on the track is a different story that can only be discovered in the future. *To be continued.*

## THURSDAY CLUB NIGHTS

From April it is planned to make the first Thursday in the month as an opportunity to show whatever it is you have been making in your workshop, bench or kitchen table. (6th April to start). Let's have a look!

For the third Thursday we hope to have a presentation by a speaker, whether from RSME or outside. This follows our very successful talk last week on Huntley and Palmers. For 20th April the editor will be showing more of his pictures of the 1960s.

Other Thursdays in the month will be unchanged as before. However should any member wish to make specific use of such an evening for our members let us know and we'll fix it!



## WINTER AT THE CLUB HOUSE, even if it is Spring?

Work on cladding the building is coming on well, despite the cold and wet.



Photos  
Mike Manners and  
Nigel Penford

## SIXTY YEARS AGO

Photos by  
**John Billard**  
March 1963

The year started with a new camera funded by my Willesden earnings. This was a medium format Zeiss Super Ikonta and the quality of my pictures improved immediately.



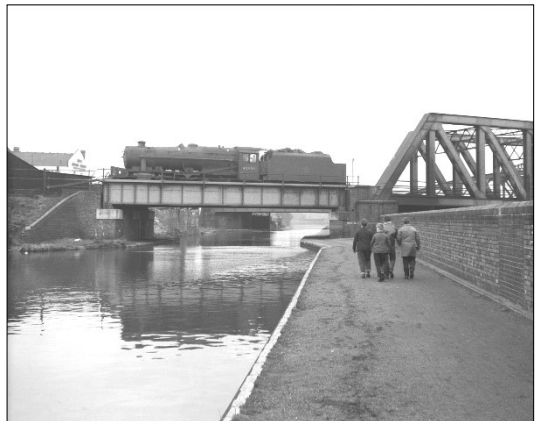
**Above** 7004 *Eastnor Castle* with a classic entry into Paddington on the 16th March.

**Right** 7012 *Barry Castle* storms past what is now the IET depot at Old Oak on the 23rd. I wouldn't want to stand there now!



**Above** Adams 4-4-2T 488 stands at Horsted Keynes on the 31st taking over a special train from London Victoria.

**Right** LMS 8F 48456 stands over the Grand Union Canal near Old Oak Common on the 23rd.



## DIARY

### April 2023

Sunday	2nd	Public running	12.00 Setting up from 09.30
Thursday	6th	Club night On the Bench	19.30
Saturday	8th	Club running	10.30 onwards
Monday	17th	Trustees meeting	19.30
Thursday	13th	Special needs	13.00-14.30
Tuesday	18th	Club running	10.30 onwards
Thursday	20th	<b>Club night illustrated talk by John Billard</b>	20.00

### May 2023

Thursday	4th	Club night On the Bench	19.30
Sunday	7th	Public running Setting up from 09.30	12.00
Saturday	13th	Club running	10.30 onwards
Monday	15th	Trustees meeting	07.30
Thursday	18th	<b>Club night talk on the Lynton and Barnstaple Railway</b>	20.00
Tuesday	23rd	Club running	10.30 onwards

### WEDNESDAY WARRIORS EVERY WEEK FROM 09.30

For club running enquiries please contact [mikesinclair118@yahoo.co.uk](mailto:mikesinclair118@yahoo.co.uk)

**Note from the Editor. Please provide photographs as separate files and not embedded into the text. No pdf files please.**

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 hard or soft copy to the editor.

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*Please write for Prospectus. Photos welcomed.  
Comments by RSME members on any subject appearing in  
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