

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

The Prospectus

March 2025



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Nigel the Pointsman at public running 2 March 2025
Photo Graham Bilbe

**CLUB NEWS
A BIG HORNBY
UGLIES
PUBLIC RUNNING
NEW MEMBERS**

THE VIEW FROM THE CHAIR

John Billard

Apologies for the late issue of this Prospectus caused by an e-mail failure. Thankfully my good friend and fellow RSME member Malcolm Andrew has come to my rescue.

Although we are on the eve of our next trustees meeting for March, to carry on the commentary, here is a brief record of our meeting held last month. We have noted that our income for February has been lower because of the poor weather at the January public running. (Thankfully this has returned to normal levels since.) We are continuing to develop our financial procedures including the use of a club treasurer program from the 1st April. Also we are looking for a bookkeeper to keep our daily expenditure on record taking over some of the duties that Jim has undertaken for so long.

We are pleased to welcome new members with some joining in January and this is continuing. We are considering an on line member renewal process for the coming year.

We hope to have a club open day and 14 June has been identified as a suitable date. This will coincide with a club running Saturday and we content to keep the organisation to a minimum but to invite clubs also with the help of the Federation.

We have continued our programme of monthly talks for February March and April. These have been very well received although attendance levels by members has sometimes been disappointing. Broadcaster and author Christian Wolmar has accepted an invitation on 17 April to speak about his new book on the reconstruction of railways after the D-Day landings in 1944. Do come to that! After that there will be a summer break.

After consideration of the circumstances we have decided not to exhibit as a club at this year's Stoke Row rally. However this of course will still be open to members to attend and we hope that they will take this opportunity to publicise the RSME.

We have already noted the next meeting is scheduled for 10th March.

I represented RSME at the recent annual meeting of the Federation of Model Engineering Societies. The aim of the federation is to look after the interests of ME clubs as a whole. A major role is organising insurance for which the federation receives a commission. This useful income has enabled money to be set aside to defend the interests over activities in the event that some campaigning is necessary. The federation also circulates a useful quarterly journal which I hope will now be circulated regularly to members.

This year's meeting was held at the Whitewebbs Transport Museum near Enfield. Situated in what was a derelict waterworks building this has an amazing collection motor vehicles, motorcycles, and plenty of memorabilia including a huge auto jumble. It is well worth a visit. (Tuesdays and the last Sunday in the month).

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

ASSISTANT EDITOR PROSPECTUS

While I have been editor of Prospectus for a long time I would appreciate some future assistance in putting it together and to do some proof reading. I am completely dependent on members contributions for articles and photographs and preparation is needed for these most of the time.

I would be most grateful if a member could come forward to assist. It won't want too much time each month, and the more the merrier.

Please be in touch with me if you can help.

A 5" HORNBY

by Terry Wood

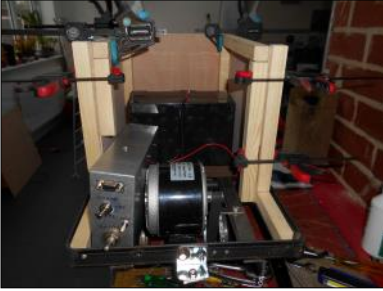
After building the chassis and sorting out the drive and how the loco behaved on the track it was now time to build the body using plywood and wood moulding. I deliberately made the chassis so that a wooden body could be placed on top without the need for any fixing so that if any problems occur with the drive or electrics the body could just be lifted off.



The first thing to be made was the bottom frame which was made by cutting 1"x1" wooden moulding to size then drilling and screwing it together. I left the rear of the frame out due to having to cut a rectangle out to clear the motor speed controller complete with its connector and on/off and reverse switches. I then cut the front and the two sides out using 1/4" plywood and two more strips of moulding for the inside corners and then clamped the

whole lot together after covering all the corners and edges with PVA glue and leaving it to set overnight.

The next day I cut another piece of ply wood for the roof and some 1" strips for the inside corners and also cut some strips in order to extend the width of the cab from the engine part of the body and again I clamped this all up after



gluing and leaving it overnight.

The next day I cut the sides of the driver's cab and the rear making sure that the cutaway for the controller was in the right place. I made the cutaway using a jigsaw with a metal cutting blade so that it wouldn't rip the edges of the ply wood which would have occurred if I had used a wood cutting blade. Again, I glued all the pieces together and left to dry overnight. The whole structure

was so rigid that I never bothered making up a strip of wood for the base at the rear and it worked ok when it was placed on the loco and driven around the track. The only problem was that's just what it looked like, a wooden box going round a railway track, so the next thing to do was to round off the corners so that it looked a lot better. This was done using a sanding disc which made quite a mess so I made sure I carried it out on a windy day because all the sawdust went every where and I also wore a mask just to be on the safe side.



After I got the shape, I roughly finished it off with glass paper but until I start detailing it and painting it will still look like a wooden box on wheels!

To be continued.

Is there an UGLY Steam Locomotive? - continued by Alec Bray

“Beauty” in design is when “form follows function” - this is an idea that came from 20th-century modernist architecture, and it suggests that an object's appearance should be subject to the object's intended function or purpose. “Form follows function” was popularised by the American architect Louis Sullivan and it has had a considerable influence on modern design in all spheres of design and engineering, not just architecture – to the extent that designers have often seemed to forget about “beauty” in favour of something that is purely utilitarian. When “function” has become the driving force behind design, beauty is increasingly considered inefficient, of little worth, even excessive.

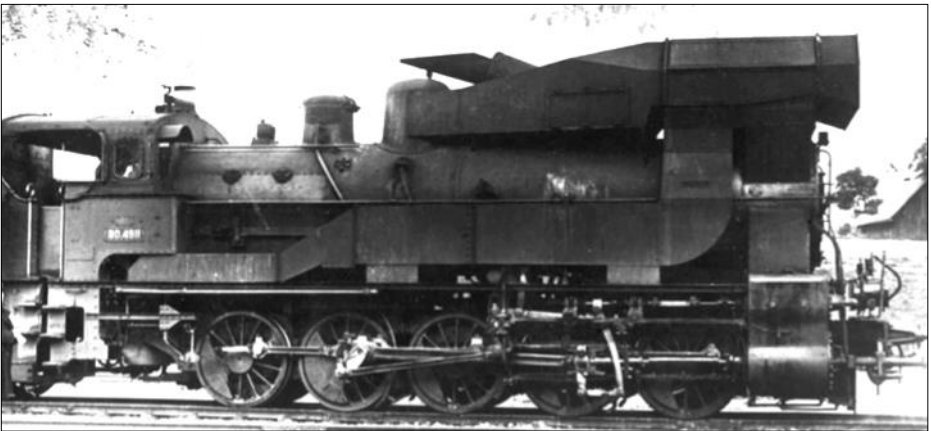
This is surely a mistake. “Form” – the shape and appearance of something - must be allowed to progress naturally into something that is both beautiful

and functional. One feature of our human evolution is our ability to infuse some “beauty” into our creations. Design becomes a key component in shaping the first impression between the product and the consumer.

So designers should try to create products which are both beautiful and useable: as an example, the Western Region “Western” (class 52) diesels’ overall appearance was tidy and symmetrical in every dimension - the epitome of good design. Humans are attracted to beauty and while standards of beauty differ across cultures, people prefer to look at a beautiful item, be it a website, car, another person - or indeed, a steam locomotive. Unfortunately, “Beauty is in the eye of the beholder,” so one person’s “beauty” is another person’s “beast”.

Where designers or engineers have not considered how an item looks, but have instead just concentrated on one or other part of an item’s functionality, the outcome is not usually “beautiful”. So here are some contenders for the title “the Ugliest Steam Locomotive” in the world...

AUSTRIAN FEDERAL RAILWAY (ÖBB) 80 SERIES WITH HEAT EXCHANGER



This locomotive boast another type of preheater – in this case the heat exchanger preheats the intake air used for combustion before it enters the firebox, again using waste heat from the exhaust. (It’s a heat recirculator working in a similar manner to the feed water heater of the Franco-Crosti boiler.)

Wiener Neustadt Lokomotiven Werke built the 80 series locomotives, designed for freight and heavy passenger trains, for the Deutsche Reichsbahn from 1900 to 1918: after the Great War, 178 of them were immediately transferred to the various railways of the states derived from the old Austro-Hungarian Empire. Between 1919 to 1922 the Austrian Federal Railways purchased 20 additional similar locomotives: five of them received Lentz valve gear. The Austrian Federal Railways had a total of 213 locomotives of

this series in operation.

BR 57 was originally the Austrian locomotive number 80.4911, constructed by the Wiener Neustadt Lokomotiven Werke in 1922, works number 5694. It became Deutsche Reichsbahn number BR 57, number 57.305 and was fitted with this exhaust gas heat exchanger to preheat the combustion air; this system being used between 1933 and 1937.

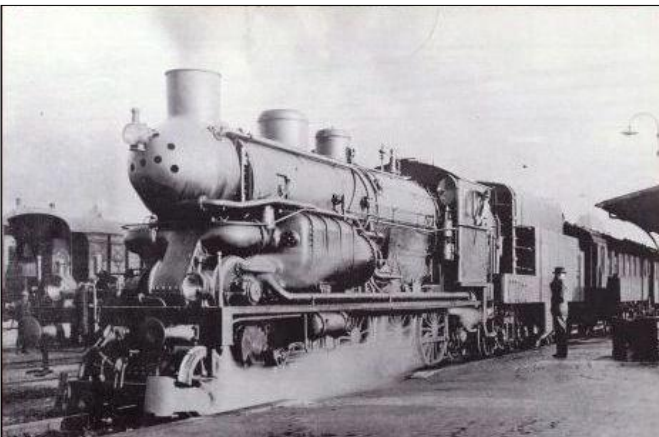
This locomotive was the only one of the 80 series to be equipped with this feed air heater, and so it is reasonable to assume that the 80 series was successful enough without this encumbrance. That has not stopped a commercial model being made of it (a hand-assembled HO model by Micro Metakit) !

SWISS ZOELLY TURBINE LOCOMOTIVE



Another engineering “solution” which produced some spectacularly ugly locomotives was the steam turbine locomotive (with possibly the singular exception of the LMS Turbomotive).

As with many of the turbine locomotives, an older conventional steam loco-



motive was converted to try out the steam turbine idea (in some other cases, new locomotive frames were built to an existing design for the turbine experiments).

One interesting fact about this locomotive was that the main fan was originally placed under

the firebars in the firebox, where the fan sucked in cold air (oh! see the Austrian series 80 number 57 above!). The fan blades pressurised the firebox, so it had to be turned off before the firebox door was opened, otherwise flames immediately blew out through the firehole door – so the crew’s lives were in mortal danger. There was no solution for this, so the fan was next tried in the smokebox, where it pulled through the hot gases – but the fan blades were quickly eaten away by the corrosive gases.

The Zoelly main steam turbine with two steam inlets was placed transversely, with a six-speed, 1200 hp action turbine working the locomotive, complete with a two-speed reverse unit. The 7500 rpm of the forward turbine was stepped down with 28:1 reduction gearing driving a jack-shaft which in turn drove the wheels through coupling rods. The turbine exhaust was fed through a pair of condensers and returned to the water tanks. The Zoelly locomotive consumed half as much water as a steam locomotive with the same power, without a condenser. *To be continued.*



Above: Mick Strain’s NB Atlantic competes with Chris Jones’s Schools



MARCH PUBLIC RUNNING

A nearly record breaking
afternoon for RSME

Photos Graham Bilbe



Above: The youngsters like driver John and Bill Piner’s *Herdwick*.

Left: It may have been a nice day but as evening drew in the sun left us.

DIARY

MARCH 2025

Sunday	2nd	Public running	Setting up from 09.30 onwards
Saturday	8th	Club running	10.30 onwards
Monday	10th	Trustees meeting	19.30
Thursday	27th	Club Talk Graham Bilbe Trolleybuses, Inside And On Top	20.00
Saturday	22nd	Club running	10.30 onwards

APRIL 2025

Sunday	6th	Public running	Setting up from 09.30 onwards
Saturday	12th	Club running	10.30 onwards
Monday	14th	Trustees meeting	19.30
Thursday	17th	Club Talk The Liberation Line Christian Wolmar	20.00
Saturday	26th	Club running	10.30 onwards

CLUB TALKS

Thursday 27th March by Graham Bilbe (rescheduled)

After some 50 years maintaining and driving trolleybuses there is not much that Graham does not know about these electric vehicles.

Thursday 17th April by Christian Wolmar

For our last 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 restore vital railways in France after the D Day landings.

RSME welcomes the following new members, Glen Barker of Calcot, Adrian Gordon of Tilehurst, Jonathan Murby of Calcot, Paul Phillips of Wheatley, Daniel Rees of Tilehurst and Matthew Francis of Slough.

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 March issue is 20 March

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

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