Reading Society of Model Engineers www.prospectpark railway.co.uk

# The Prospectus April 2020

Charity Number 1163244



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Free to members



Still Life by David Scott.

SUBSCRIPTIONS DELAY ONE SPANNER! FROM MIKE'S WORKSHOP 2018/19 ACCOUNTS DON'T HIT THE BUFFERS! ANALYTICS

# A VIEW FROM THE CHAIR

# John Billard

Thank you to those members who have readily volunteered to keep the club site guarded and tidied during our enforced closure when there is a safe opportunity. The trustees will continue to review the situation according to official guidance. We shall resume activities as soon as it is safe to do so but at the moment there is no idea when that might be. In the meantime national instructions for every person must be followed.

We shall continue to publish PROSPECTUS on a regular basis so please contribute if you can.

On the 17 March—it seems a long time ago now—Peter Harrison and I attended the Southern Federation of Model Engineering Societies AGM in Swindon. About 50 attended. Apart from the usual formalities we had a wide ranging discussion on the management of the S Fed and Peter and I gave freely of our ideas. We then had an informative brief from Walker Midgely who provide much of our insurance and deals with wide ranging claims. The most important message there is that club insurance does not cover your engine, other than proof of boiler insurance, while on site or visiting elsewhere.

In the meantime continue to support RSME in our absence by renewing your subs when it is time for that and join me in looking forward to happier times ahead. There is more information below.

# MEMBERSHIP RENEWAL FOR 2020/21 Special arrangements

The trustees have been considering membership renewal due on 1 April 2020. They have decided that they cannot ask members for the full years subs as they are not in a position to provide facilities or activities.

It has been decided that that membership remains to be from April to March thereby staying in the financial year but membership subs are to be collected pro rata when the club recommences activities.

Any members wishing to pay the full amount will be asked to donate the difference between what's required and the amount that they normally pay, e.g. if we are allowed to restart in August members will be asked for 2/3rds subs. If they want to pay the full amount the remaining 1/3<sup>rd</sup> could be paid as a donation which can be gift aided. Membership will be regarded as continuous in the meantime.

The trustees hope you find this acceptable. Please stay safe and well.

**RSME Trustees** 25 March 2020

### SHE ALL COMES APART WITH A ONE SIZED SPANNER Part 2 by David and Lily Scott Jessie's progress in the Works

*(continued from March)* Very often on drawings, parts are drawn round the other way to what you are doing in the lathe, or built up into a unit. Ken has done many parts separately but several live at the tops of the drawings. A totally hopeless way of converting into use on the lathe or mill. You can fold them but they begin to resemble ancient parchment after a few months propped in the workshop. This is where all the used envelopes come in handy with parts now round the right way for turning purposes. And of course a sequence of events. Plus going through all the other sheets to check on similar parts. 5 B.A. castle nuts seem popular on the motion at the moment and make for a much more professional job. The home-made white lathe has a cross-slide multi stop and rear parting tool and a lever fed tail-stock, and a clutch. So is again perfect for these. On another sheet of paper ready for the next exhibition goes some steel hexagon!

A quick search on the computer to who will be attending and other ideas get banded about. 5 BA nyloc nuts spring to mind. Best of both worlds. Question is can we cut the slots in the tiny things? I do a search of the workshop and wonderfully, a collection of dome or acorn nuts plus grub screws are hiding in the back of a drawer so I could cobble something together. Another sketching sheet comes out and the complex hardened bearing tubes are replaced with some bronze with 5 BA threads on the ends. These can wear instead of the rod ends and are easy to replace at her 500-mile service. Make extra ones while set up as spares for the track box. And the two that will go down the back of the lathe

Now at the exhibition, Les Dawson and I bumped into each other at Noggin End where I was admiring a round bit of brass 3 inches diameter by 1 inch high. Yes it does sound like a village deep in Surrey or at a push a delightful rural pub. However this would go and make a crowning glory for the built-up chimney. Every so often you get to look through photos and, in the description, mentions Fitted with a Stroudley or Marsh chimney for example. As if upon his first day in office was spent creating the Perfect Chimney. What better way of stamping your mark. We tease at tea break about the livery of the tea, and Marsh Umber is the drinkable variety.

Back home and most of the brass would be bored out and wasted.

The brass and I looked at each other and I reached for a hole saw thus saving about £7.50 worth in a lump. This got turned and bored with a cheat as the middle tube was a bit short on the drawing and will now go in a third of the top. This was done next from mild steel with most of it like the top ending up in the swarf tray. 2 degrees of taper inside and out plus a hot press fit for top and bottom. ( $1 \frac{1}{2}$  inch bore at the top 1 5/16 inch choke by 4 inches high is quite impressive). I had already part turned the base so got it just to sit in the top of the hole. Lathes with clutches are superb!

One thing to watch out for when removing lots of metal ready for a fit is the heat generated. Even on a cold day in January will grow and give false measurements. Tea break time for it to cool! Could I get the heat in February for the brass? I then resort to the gas stove and we are close. The last 3/32 defeats me and its a mad dash down to the bench vice for a final squeeze. It cools down over lunch and beyond. Then we clean up, check on curves, blend some more with a just the right sized half round file and polish up. Adding the top to the middle tube section gets it a nice distance from the chuck jaws. Lily has now adopted it as a dry plant vase so it is currently stored in the sitting room with the smokebox door looking like a polished desert island.

We had a slight mix up in Metric and Imperial. A 150 mm diameter tube via the internet store that sells *everything!* So another ponder at cutting it slightly smaller then jamming the end rings in place to reshape. Now the two pipes for steam in and exhaust out, call for a curved washer each at the base. So instead, a butt strip filed to fit the curve and riveted in place would make a lovely alternative. 150 mm would have been so useful as advertised! 5 7/8 inches instead of the six inches diameter they sent.

We have a final total from machining the two rings, smokebox door, and a saved wheel... two carrier bags of swarf and a very messy workshop! No hacksaw blades were harmed during parting off.

The sheer number of completed smoke boxes and chimneys sat on running chassis, awaiting a boiler. Must run into the hundreds. And so often seen at exhibitions all over the country. But again impressive and an encouragement to go on to complete your model. Or not, in the case of a friend down in Plymouth with a Twin Sisters. He counted up the number of free entries to various exhibitions he had with his family over the years and found that she had well over paid for herself. One day he will get round to the tanks and cab but she still runs well without and you can see at a glance just how much water you have got left for another circuit in the clear plastic gallon container

behind. 1986 they visited my parents garden with a railway in it of course. Plymouth Model Engineers had just got their new site, bare and windswept. How time flies and trees grow into an impenetrable forest. Same size as Reading but over a 1,000 of them... Oh they do love Autumn!



Photos by David Scott



Smokebox rings





Smokebox door cut out.

The quadrant gets its curve



# FROM THE MIKE MANNERS WORKSHOP

First left Mike's production line of replacement lamps for the club signals.



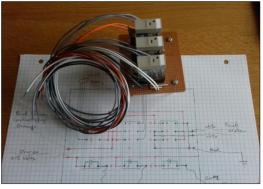
*Below and left* is his production line of the new type of reed relay train sensors we are trying out. They should be more robust and last longer than the old wooden blocks.





Mike is also doing some experiments with motorising the points at either end of the

ground level station. Picture *right* shows the point control relays and designs on his workshop bench. These have now been installed in the signal control box behind the wall at the East end of the station. The actual point motor and mechanical linkages have



all been designed to be removable as they would be an easy target for the local brainless bipeds. This also enables a quick disconnection and manual operation in the event of a system failure. The point can be controlled by a simple removable switch at the end of the platform or by remote control using a simple key fob. The whole system was connected up and tested at the last public running session and worked well. It was possible (though not de-

sirable) to control the point from as far away as the West end of the platform. There are a few small things to tidy up but in general it looks like we have a workable system. I now have a whole load of work to do to set up the same system at the West end of the platform. Picture *left* shows the remote control box and key fob. *Below and right* the on-site temporary installation.









All pictures Mike Manners

#### **ANALYTICS** Where WP looks at some photographs taken by the editor



Park Royal DMU passing Northwick Park LMR in 1963

#### **DMU at Northwick Park 1963**

Your editor has once more produced a very interesting photograph. This time we have a two car Park Royal DMU set. These were part of an order for twenty such units which were built between November 1957 and October 1958. They were built by the ACV group at the Crossley Motor Works in Stockport. The first few delivered went to Llandudno Junction to assist with a DMU shortage in that area, but by the end of 1958 they were all at Walsall Ryecroft (3C) working West Midland services between Birmingham New Street, Walsall and Rugeley (TV), Also Learnington Spa, Coventry and Nuneaton; Wolverhampton (HL), Walsall, Lichfield and Burton on Trent and Walsall and Dudley. Also between Walsall and Birmingham via Sutton Park on and from 17<sup>th</sup> November 1958.

However four sets were sent to Watford to work the Watford to St. Albans and Harrow and Wealdstone to Belmont services in December 1958. These were to replace the original ACV experimental units. John's picture shows one of the Park Royal units near Kenton. It is loaded with people so I guess some of the Watford services ran through to Belmont in the 60s. Possibly a rush hour service. The headcode B3 indicates Euston and Rugby area (B) Watford –St Albans and Harrow and Wealdstone-Belmont (3), so is correct.

These units had all been withdrawn by 1983. The Watford eight vehicles (M50411/12/13/14, 56166/67/68/69) were withdrawn in May 1972 (50411/12 56166/67 from Reading!) and (50413/14, 56168/69 from Laira Plymouth) in December 1972.

Of these 50413 and 56169 are preserved at Helston in Cornwall.

The other four units were broken up at A. King of Norwich (50411, 56167) and Bird's Long Marston (50412, 56166).



DMU for Marylebone 23<sup>rd</sup> April 1963 at North Harrow

#### DMU for Marylebone 23<sup>rd</sup> April 1963 at North Harrow

John's picture shows a Derby 4 car DMU on the southbound Metropolitan fast line, also used by Met Line trains not stopping intermediately.

The DMU is one of the fleet of 35 x 4-car units built at Derby Works between February and December 1960. They had BUT Leyland 6 cylinder engines giving 230 bhp Each. The sets were formed as follows :-

Motor Brake Second, Trailer Composite (Lavatory), Trailer Second, Motor Brake Second. This gave 156 second class and 30 first class seats.

The first set appeared in February 1960. But because of problems with the new Derby built Rolls Royce 4 x car units (class 127) the first 4 Marylebone sets went on loan to Cricklewood for the St. Pancras to Bedford suburban service. Some of the new Marylebone units also went on loan to Leeds Neville Hill and some worked the Cheshire Lines route between Liverpool and Manchester for a while.

In Autumn 1960 five Marylebone sets were loaned to Stratford, East London to provide services between Chelmsford and Shenfield whilst the electrification was converted from 1500 volts dc to 25kv ac.

The Marylebone units were planned to be introduced in connection with the electrification of the LT services to Amersham. They finally took over the weekday suburban services between Marylebone and High Wycombe, Aylesbury and Banbury on 23<sup>rd</sup> January 1961.

During the run down of the Great Central Main line in 1964-1966, some Marylebone sets were used on three through services between Marylebone and Nottingham usually running as 8 or 12 car formations.

These units continued to run the suburban services, latterly based at Bletchley, until they were replaced by the Networker Turbo class 165s in 1992 based at the new maintenance facility at Aylesbury. The last service from Marylebone worked by class 115s was on 29<sup>th</sup> July 1992. Some worked for a while in the Birmingham area based at Tyseley.

The headcode 2C74 indicates class 2 stopping service. C denotes Marylebone service, 74 Marylebone and Aylesbury Town via Amersham in the London District (Midland Lines) of the LMR.

11 Motor Seconds and 6 trailer composites are preserved.

#### A MESSAGE FROM THE EDITOR

In these unusual days I would like to keep PROSPECTUS going as normal and to keep members informed. We shall be using e mails to covey urgent messages.

I hope that members will continue to let me have articles to support our usual contributors. We have wide ranging interests in the club (and it doesn't have to be all railways).

If you wish to include photographs (2.5Mb max) please send these as separate files away from the text. Pen and Ink can be accepted (if it is legible!).

#### John Billard

# RSME 2018/19 ACCOUNTS SUMMARY OF THE REPORT OF THE INDEPENDENT EXAMINER

All charities with a gross income of more than £25,000 must have their accounts scrutinised by an "independent" person.

As notified to the last AGM the trustees arranged for the 2018/19 accounts to be examined and for a summary of the examiner's report to be included in a future edition of PROSPECTUS.

A report on the 2018/19 accounts has been received from the independent examiner.

The examiner found no material issues with the accounts for the year 2018/19.

The examiner made two recommendations:

- 1. That a list is prepared of the cash received for all birthday parties and subscriptions and that is checked against the actual cash received. (Note: almost all payments are made by cheques or BACS—cash being an exception. During 2019/20 no birthday parties have been paid in cash. (The trustees do not wish to withdraw the facility to pay annual subscriptions by cash).
- 2. A set of simple rules/policies should be considered to help all members understand what is required of them when they claim expenses. (The trustees will prepare an update to the existing guidelines and a copy of these will be placed on the notice board).

#### **RSME Trustees**

March 2020

Merchant Navy 4-6-2 appears on the next page but here are two views. *Right* shows the engine at Woodhams in 1981. *Below* with restoration almost compete at Toddington. Miraculous!





Photos, *above* by WP *Left* John Billard

# PLEASE DON'T HIT THE BUFFERS!

# **By Peter Jennings**

The buffers of steam locomotives can get rusty very quickly and thus require cleaning before the loco can go into service looking decent.

I am a member of the team that looks after 35006, Peninsula & Oriental Steam Navigation Company, the rebuilt Southern Region Bulleid Pacific preserved on the Gloucestershire Warwickshire Steam Railway up near Cheltenham and we were giving it the once-over recently ahead of what was anticipated to be a long Covid induced rest. I was given the job of doing the buffers...

Given the chance and damp conditions, rust will take hold of steel quickly and take a lot of removing and, as you can see, so it was on 35006. Fortunately, we have the means to take appropriate action and so, armed with several cotton rags, White Spirit, steel wool and two different grades of scouring pads, I set to on the loco's front buffers...

First, shift the black grease (the result of being attached to a train while running tender-first) with a spirit-soaked rag and then attack the rust first with heavy-grade scourer liberally dampened with spirit to get the worst of the surface rust off and start to get through to the steel surface. Then steel wool and finally lighter grade scourer. Some would suggest using a power drilldriven wire brush, but that would almost certainly mark the buffers to an unacceptable degree and is a method discouraged by the Team Leader. who is a professional railway engineer. So ... rubbing in small circles for quite a long time .... 30 minutes or so in this case. Then on to the second buffer.

The result can be seen. The next step will be to quarter each buffer. This really adds the finishing touch and is easy to do, using quite light grade emery paper or cloth or perhaps light grade wet-and-dry paper. First, draw a cross on the face of the buffer, dividing the whole into quarters. Then rub the top left quarter vertically, the lower left horizontally, the lower right vertically and the top right horizontally.

Prior to going out to join the train, the final touch is to apply a coat of lubricating oil to the buffers' surface, making is beautifully shiny as well as providing an element of protection from the elements ... until the loco is attached to a train ...! Photos below by Peter Jennings.



(The eagle-eyed of you will recognise that the right picture is an LNER Group Standard Buffer. But the effect is the same...) Ed.

#### DIARY

All events have been cancelled for the duration of the health emergency.

Comments by RSME members on any subject appearing in Prospectus are welcomed by the editor.

Opinions expressed in PROSPECTUS are the personal views of the contributor and cannot be taken as reflecting the views of the club committee or editor. **The deadline for the April issue is 18 April. This is the final date.** Contributions may be submitted in hard or soft copy to the editor. John Billard Old Station House Twyford Reading RG10 9NA 01189 340381 john@jegbillard.plus.com