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Free to members

The Prospectus

May 2022



Peter Harrison controls his B1 4-6-0 as it runs through the RSME party station on 3 April 2022 Photo John Billard

**CLAUD NEWS
WORKING YARD LAMPS
CLOCK WORK
THE MIDDY
INTRODUCING LittleLEC
WARRIORS AT WORK
THE AUCTION
TRAINS IN 1962**

THE VIEW FROM THE CHAIR

John Billard

I was not able to attend the April committee meeting because of an adverse reaction to a Covid booster jab. But better than the alternative! However looking at the minutes some useful work was done. Key aspects were dealing with the commission on card payments, consideration of an intruder alarm, problems surrounding the installation of a disabled toilet and a notification form the health and safety executive regarding safety on miniature railway passenger vehicles. This followed an accident elsewhere. It appears that RSME is compliant but this is being checked.

The April public running was slightly quieter probably caused by the simultaneous Reading marathon nearby. For those members running the event this was almost a relief! We are always pleased to see members help at this key these key events that provide a ready income for RSME. On the subject of income it was reported that we have no less than 45 parties booked or have been held this year.

Development of the website continues and consideration given to the category of day member of the club in relation to insurance. A cut off date for members renewing their 2022 subscriptions is being considered after which they will be removed from mailing lists etc.

Projects are continuing and this includes an extension to the ground level carriage shed in order to provide an additional vehicle. This is much needed during busy public running. We are considering setting up some visits for members in the summer and further details will be notified.

Turning to a key event for RSME this year a national efficiency trial is to be held on 18/19 June for small locomotives. Known as LittleLEC it will be supported in MODEL ENGINEER magazine. It is essential that we have sufficient members to assist in running this weekend and further details are covered in this issue of PROSPECTUS.

SUBSCRIPTIONS FOR 2022/3 WERE DUE ON 1 APRIL.

**AN APPLICATION OR RENEWAL FORM HAS BEEN
CIRCULATED SHOWING RATES AND FOR YOUR SIGNATURE.**

**PAYMENT SHOULD BE MADE BY BACS TO THE BARCLAYS
ACCOUNT IN THE NAME OF RSME
BANK SORT CODE 20-78-58
ACCOUNT NUMBER 70796077.**

**COMPLETED MEMBERSHIP FORMS SHOULD GO TO THE
MEMBERSHIP SECRETARY BY E MAIL
michael.manners2@ntlworld.com OR POST TO
257 LODDON BRIDGE ROAD, WOODLEY, READING, RG5 4BL**

IN SHOPS THIS MONTH—BUILDING A CLAUD by John Billard

Following completion of the boiler I have been considering the next steps in this long project. However I have been reflecting further on the boiler construction and there were a few points that I would like to emphasise as we learned as we went along. One of the first jobs undertaken was to make two wooden formers around which to create the inner and outer firebox plates. These became invaluable as construction proceeded to ensure that these plates retained their shape. Highly recommended.

The first soldering operation was to attach the boiler tubes to the firebox tube plate. According to the drawing these tubes had a rise $3/16$ inch to the smokebox end. It was vital that this was incorporated and that the tubes were suitably perpendicular. Not easy to fix later. Early advice was to make sure we had plenty of heat and used plenty of flux. How true that was.

Back to other construction, I have been drawing up the cylinders in relation to the frames and motion. In order to allow sufficient space in the valve chest I have had to raise the angle of the cylinders by one degree. Conscious of the potential effect on the valve events I have taken advice from our friend John Marrington to see that this is not a problem. All this increases my appreciation of designers of locomotives both large and small. I have however discovered that to the cylinder casting provided by a supplier does not meet my design requirement. Back to patternmaking!

Mike Manners has provided these pictures of the boiler of a Stanley Steam Car.



This was prior to a successful hydraulic test to 900 psi!

Simple Working Yard Lamps for 00 Gauge by Alec Bray

The room goes dark, daylight is fast disappearing. In the engine shed, signal boxes and station buildings the lights come on, twinkling in the gloom, making new shadows, creating an almost magical atmosphere...

Here is a simple method for making working railway building lamps for 00 Gauge layouts. They are cheap, quick and simple to build. Two sizes of lamps are described. The larger lamps are not to scale, as they are somewhat oversize (2 feet 6 ins diameter instead of between 1 foot 9 ins and 2 feet in diameter) but placed inside buildings or at strategic points on the layout they do not look out of place – as long as you are not building a “Pendon” style accurate representation of a piece of railway. The smaller lamps are correctly scaled (they scale out at 1 foot 9 inches) but the “bulbs” unfortunately look a bit “out of scale”.

I was building a 00 gauge engine shed and wanted some interior lights. In the past I had occasionally used “grain-of-wheat” incandescent bulbs, but they can be difficult to replace when they burn out. My wife, for her birthday, had been given a garden lantern which included a string of LEDs: looking at these, it seemed possible to use these for the yard lamps. Amazon, for example, sell a string of 100 micro-mini miniature LEDs, battery operated and mounted on thin wire, for less than £7 (less than 7 pence per LED). The LEDs themselves are small, wired in parallel along the conductors, and covered with a blob of what looks like epoxy resin.

The first job for either size of yard lamp is to cut off the last LED close to the next LED in the string, so that you have one individual LED. This is a blob of epoxy with two long wires and two very, very short bits of wire. Carefully remove bits of epoxy from the “top” of the LED (the end with the long pieces of wire): basically remove stuff right down to the wire. Careful not to go too far down, as you must not damage the LED itself. The bottom of the LED epoxy coating is shaped to a sort of hemisphere, again going close to, but not damaging the LED. You should now have a much smaller blob enclosing the LED and it should look like a standard incandescent bulb (The LED and epoxy coating are on just one side of the pair of conductor wires, so the completed “bulb” will be a little lopsided at this stage). The next step is to make sure the LED works! This means scraping off the enamel which is used in each connector as the insulator. Dave Cole has a very useful tool for this job– it is a “V” shape ground into an old hacksaw blade. The wire is drawn across the sharp edges of the tool, and this strips the enamel. Thank you for the tip and the tool, Dave!

Once you have checked that the LED is working correctly (touch newly bared ends across the cables from the battery pack supplied with the LED string (one way will work, the other won't!)), the lamp housing can now be built up.

For the larger lamp, the housing is built on a M4 washer. On top of this is a slightly domed hexagonal “cup” sequin, and on top of this is half a plastic pearl used in jewelry making. The sequin and the plastic pearl come from Hobbycraft. Remove a plastic pearl from the string of pearls and cut it in half. Both the sequin and the plastic pearl have central holes, so it is relatively easy to mount the half-pearl on top of the sequin, then glue this onto the M4 washer. Best to use Superglue (cyanoacrylate glue) for this! Once everything is dry, enlarge the hole in the sequin and the pearl from the bottom using a cone-shaped grinder in a hand-held rotary tool, then insert the LED wires through the washer then through the holes in the sequin and half pearl and push the LED as far into the housing as possible. Glue into position (superglue) and check that the LED functions.

For the smaller lamp, the housing is built on an M3 washer (7mm diameter). Again suitably sized (5mm), slightly domed “cup” sequin from Hobbycraft is used: the top is a self-adhesive plastic pearl. These pearls come on plastic sheets and are useful for many things - they can be used, for example, as rivet heads on cool parts of a 5-inch gauge loco: saves drilling lots of holes in a precise line! Unfortunately, these half-pearls have no central hole, so a small hole has to be drilled through the hemisphere. The half-pearl is mounted on the sequin and the sequin glued to the M3 washer, the hole opened up from the bottom to take the LED. Glue into position (superglue) and check that the LED still functions.

The next job for both sizes of lamp uses epoxy putty: the best to use is Milliput as this can be smoothed and shaped with water. Coat the base of the half-pearl and the top of the sequin with Milliput and shape, using a blade and water) to give a smooth rounded top to the assembly with a lamp housing proud at the top. Leave to set.

If the light is to be suspended from a ceiling, the LED wires can be carefully twisted together to represent flex. If the lamp is to be mounted on a wall, the supply wires can be carefully bent to shape and stiffened with Milliput or 2-part fast-setting epoxy resin glue.

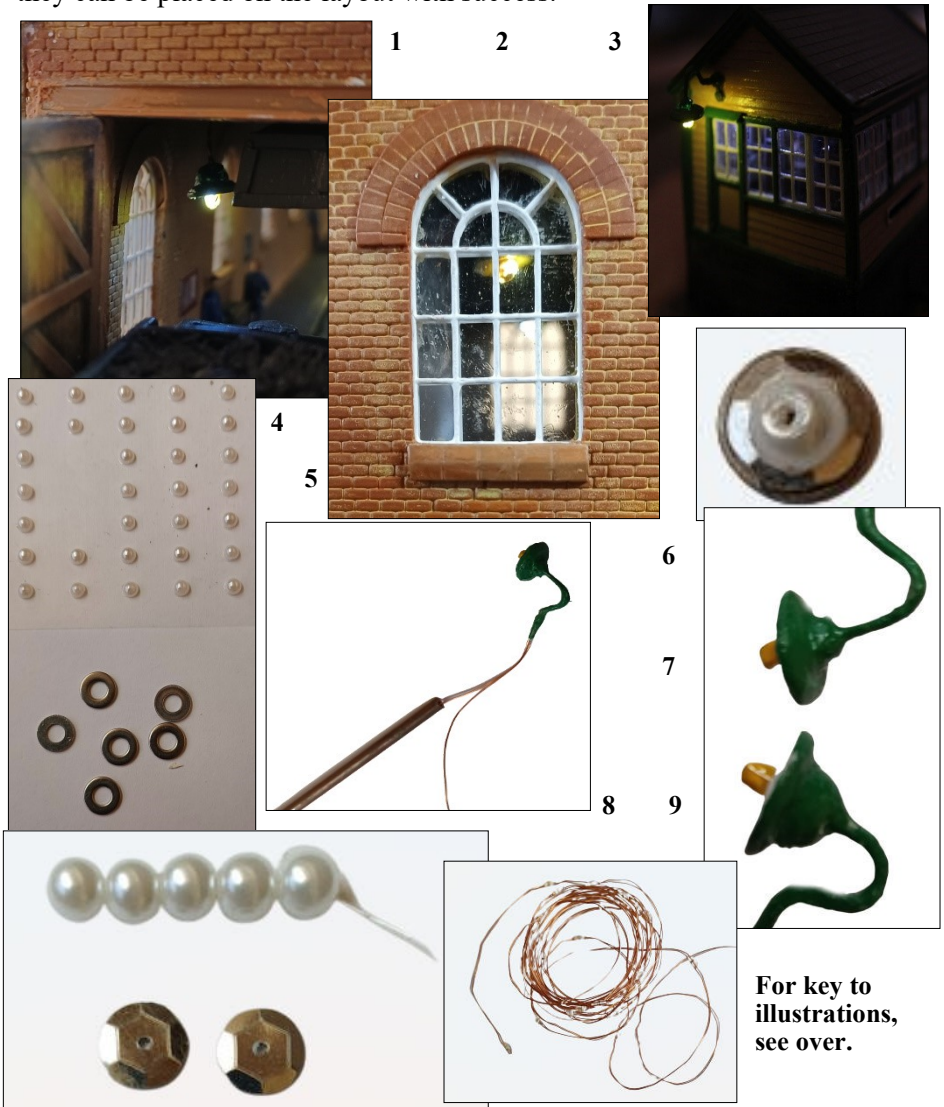
When all is dry and solid, carefully clean up the various surface, and then paint. The LED itself needs a relatively thick coat of yellow paint, as the LED gives a bright white light and it needs to be toned down. The underside of the M3 or M4 washer is painted bright white, and the top and sides are painted a medium shade of green (or any suitable colour for the layout). I used some old Humbrol paint – several years old – so it was thick and gooey, and acted as a filler.

Next job is to mount the lights in and round the building, wire up each individual lamp in parallel and connect to the battery supply! In many buildings, a couple of “bus-bars” - made from spare lengths of 00 rails - can be mounted in the roof, and the individual LEDs soldered in parallel to these before the roof is fixed in position.

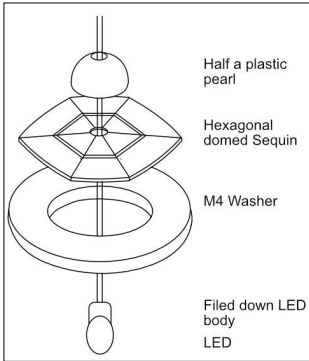
If you need free standing yard lamps, the copper tubing (OD 2.5mm ap-

prox.) sold for the “wire-in-tube” method of point control can be used for the mast: one leg of the LED supply can be passed though the tube (as there is enough wire to do this and it is insulated), the other leg soldered to the top. A wire soldered to the base of the tube provides the connection to the supply.

So, for some 12 pence or less for each lamp (compared to £1.50 to £2.50 per lamp on the Internet), and a bit of labour, you have lighting for the railway buildings on the layout. Yes, they are very rough and ready, but with care they can be placed on the layout with success.



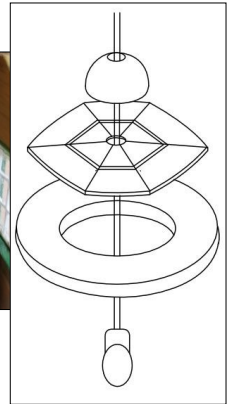
For key to illustrations, see over.



10

11

12



Key

1. Light in the engine shed. 2. Looking through the engine shed window. 3. Small light outside the signal box. 4. M3 washers and half pearls. 5. Making a standing yard lamp. 6. Part assembled larger lamp. 7. Size comparison larger M3 and smaller M4. 8. Pearls and sequins from Hobbicraft. 9. Strip of LEDs. 10. Yard lamp assembly. 11. Single lamps in signal box – a rather harsh interior shot 4mm scale. 12. Yard lamp assembly

Clock Making and Screw Head Polishing by Mike Manners

I can hear all those locomotive builders out there asking why would anyone bother to polish screw heads? Well anyone who has ever had a close look at any high class clock would see that the clock plates are usually polished and lacquered brass and any screws used in the movement are usually highly polished and blued.

I am in the process of building a clock and have been doing so, with many long breaks, since 2007. Over the years I have learned a lot and my engineering skills have certainly developed. I am now building things to a much higher standard than when I started building the clock.

I have now got to the point where the basic clock is working and my thoughts are turning to the finish of various components. I have decided to polish and blue all the screws. This can be a time consuming and frustrating process. Having suitable equipment can certainly simplify and speed up the job. To this end I some time ago made myself a bluing box. This is basically a well-insulated box containing a heating element and an accurate temperature controller. The box is capable of accurate control of its internal temperature to well up to and past the temperature at which steel turns blue. So the bluing process just needs a little rack to hold the screws.

So all I have to do is turn on the bluing box, set the temperature to say 280

degrees, pop the polished screws in the rack, the rack in the bluing box, close the lid and walk away for an hour or two. The end result should be a nice even and consistent set of blued screws. The quality of the end result is however very much determined by the quality of the polish on the screws to start with.

When trying to polish screws I was very much influenced by a number of articles in the "Horological Journal" (The house magazine of the British Horological Institute). I recalled seeing an article about making a little tool to simplify the process. Having looked at the design in the article I decided it was far too complicated and had features that appeared to be totally unnecessary so I designed and made my own version. It's a simple three legged tool designed to hold brass inserts. The inserts are a nice sliding fit in the tool and each one is threaded to hold one of the various sizes of BA screws used in my clock. I made a few extras in case of future needs. The three tripod legs are silver steel and hardened right out to glass hard.

I then made a simple guide to hold strips of 3M polishing film and guide the tool while it is moved to and fro. The final stage of polishing is done using strips of the hard surfaced card from a breakfast cereal box with a smear of Autosol chrome cleaner. So far I have been quite pleased with the results although I need to experiment with the bluing box temperature a bit as the blue colour looks a bit grey to me so a few degrees one way or the other may improve things.



Left
The start of cutting the pallets out of 1/8" gauge plate.



Above
The finished pallets together with the escape wheel.



Right
The clock back plate with the various arbours fitted.



The holders for different sized BA screws.

Above

The screw head polishing tool together with some polished and one blued screw.

Right

The screw head polishing tool on the guide.



Photos
Mike
Manners

A SEVEN MONTH WAIT FOR A NORFOLK HOLIDAY

The last day David and Lily Scott

I was up early, and armed with the camera re traced our steps of the evening before down the lane which ran beside the railway in a tunnel of trees. The opening widened into a field and I tried various shots. We had in fact walked up to the intended end of the line. Then returned for a Lidl breakfast. Weeks before a guy we follow on YouTube had advertised the event. He parked beside us. LMM or Lawrie's Mechanical Marvels was exactly as he was on film. He dashed off to Po lish some coal.



We kept ourselves amused with rear-arranging the back of the car while the MIDDY awoke from her very sleepy slumber. It was going to be a very slow and in keeping day. Built under the Light Railway Act it meandered over the fields between various villages looking for custom. Most of the wished for hardly materialised.



Various vehicles began arriving while we waited for the first train of the day. Laurie in fact owns an 0-4-0 Ruston which needs new tyres on one of the sidings. And a Fire Engine... boys never grow up, their toys just get bigger. Not any old Ruston, but one he in person purchased from Sir William Mc Alpine. A 48 as in 48 horsepower, number 294266 three

years ago having promised a friend "Not to buy any more CARS!" They share a storage barn full of projects!

And then we were in line with eager passengers for the first train. The staff were trying a new approach to rid us of various diseases by getting us to walk through a thick black cloud of smoke. Lawrie's face had changed livery to match the loco and the smoke. They are extending the line but we just did under half. Wonderful as the original intention was just to preserve the station building... then the platform... Then someone turned up with some third hand track. Then it grew. Someone had a very black saddle tank looking for a home and more track arrived. We got out on the temporary platform, walked up and down, and returned to the rattly carriage. Then did another run.



A Top Hatted Gentleman wafted in and introduced himself as the man in charge. We missed out on the next train in return of a guided tour. Which also included the workshop and another saddle tank being overhauled. "Stuff just keeps arriving!" he informed and told the worrying tale of gift horses. The ancient carriage was FREE... "But the railway had to arrange transport, a base to rest it on, quite a bit to restore, and a special company to remove the asbestos roof. No change out of £7,000!"

We returned to the next train. And the next. The next saw us in First Class together with very appropriate companions. Waitrose shoppers. He quickly folding a Lidl bag and sitting on it! They told of a teacher in the family, very private School with its own small railway. MMM. Must look it up. Wow.

Introducing LittleLEC at RSME 18/19 June 2022

RSME will be hosting the prestigious national efficiency competition for small steam locomotives of under 50 pounds dry weight on 18/19 June and we hope that as many members as possible will be able to assist in running this event. This follows the highly successful Federation rally held last year as organised by Peter Harrison.

Each driver competing will run their engine on our raised track for a timed 20 minutes. The engine's load will be measured together with the amount of coal used. This will produce a figure that will determine the winner. This will be the driver of the locomotives returning the highest thermal efficiency and will receive the Small Locomotive Challenge Trophy, £50 cash and a one year subscription to the Model Engineer magazine. There will be other prizes for the runners up.

RSME will be responsible for assisting each competitor, providing coal and water, for the efficiency calculations and the declaration of winners. We shall ensure that coffee and biscuits will be available for those present and to be our usual good host. There will be the opportunity of camping overnight on site.

We hope it will be possible for many members to make this a highly successful weekend as always. Please make a note in your diary to assist on the weekend and for the necessary preparations to be made in advance.



CARRIAGE SHED EXTENSION

Work done by Peter Culham, David Scott, Peter Harrison, Dave Cole, Nigel Penford and Mike Manners.



Lily got to pose with Lawrie on the station seat, I have a rival. Beard and long hair!
 Perfect days with lots of sun and great things to do soon come to an end. We caught the last train and did an-

other circuit of the road transport. A pair of tiny vans with a bonnet up got a look. Could this be the way forward by returning to history and tiny vehicles to get us a few miles from the local station?



We headed for another go on the M25 a very hot afternoon and the sun in just the wrong direction, or was it just reflecting off the brass?

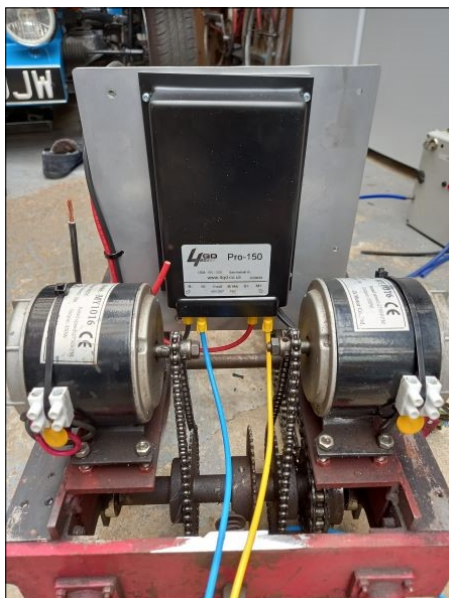
Photos David Scott



WEDNESDAY WARRIORS REPORT

Page 11 shows work being started on an extension to the ground level carriage shed. This will be able to accommodate an additional three carriages although just one is planned for construction at this stage.

Not only this but Mike Manners and Alf Cusworth are rebuilding the club 08 shunter with new motors and transmission. This is a complete job together with a repaint and further detailing. It will be a great addition to the ground level fleet being simple to drive and by the look of it very powerful.



Photos
Mike Manners and Nigel Penford



Improved loading
arrangements for the
raised track.

(This photo was held
over from April)

THE RSME AUCTION



Many members left the sale on 21 April with light pockets and heavy boots after this highly entertaining and successful event on 21 April.

This took £2394.50 in total with £1560.55 being donated back to the club. Huge thanks to Peter and Carol Harrison for their hard work.

Photos John Billard

SIXTY YEARS AGO
Pictures by John Billard
May 1962
On the LMR and Southern



Prototype diesel DP2 at Northwick Park. A Class 50 in a Deltic body shell.



Above Scot 46167 *The Hertfordshire Regiment* at Northwick Park probably on an ECS train.



Above 46201 *Princess Royal*, now preserved, tears through South Kenton



Above LBSCR E4 0-6-2T 32473 shunting stock at Clapham Junction—now on the Bluebell Railway.



Left A scoop!—Nelson 30861 *Lord Anson* at Clapham Jc. shortly before withdrawal for scrapping.

DIARY

May 2022

Sunday	1st	Public running	12 Noon onwards Gates open at 0930 for setting up
Saturday	7th	Club running	10.30 onwards
Monday	9th	Trustees meeting	19.30
Tuesday	17th	Club Running	10 30 onwards

June 2022

Sunday	5th	Public running	12 Noon onwards Gates open at 0930 for setting up
Saturday	11th	Club running	10 30 onwards
Saturday	18th	LittleLEC	Times tbc
Sunday	19th	LittleLEC	Times tbc
Tuesday	21st	Club running	10 30 onwards

Note from the Editor. Thank you to all contributors. Please remember that the copy deadline is now 20th of the month and material, unless previously notified, can be held over if received after that date.

Please provide photographs as separate files and not embedded into the text.

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 June issue is 20 May

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
Prospectus are welcomed by the editor.***