

Reading Society of Model
Engineers
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Charity Number 1163244

The Prospectus

January 2020



President

Les Dawson

0118 969 4654

Trustees Chair

John Billard

01189 340381

07834 998971

Secretary

Peter Harrison

079720 833546

Editor

John Billard

john@jegbillard

.plus.com



Public transport in Tenerife on 14 December 2019

Photo John Billard

HAPPY NEW YEAR!

**A VIEW FROM THE CHAIR
GOING UP A SIZE
A WESTERN ON THE DOWN THROUGH 1974**

A VIEW FROM THE CHAIR

John Billard

Just before Christmas I received a very pleasing note from our secretary Peter Harrison that bears inclusion in PROSPECTUS:

As I have a moment I thought I would just say a BIG THANK YOU to everyone that helped at the Santa Special weekend. especially all those members who arrived early and left late to prepare and clear the site for our visitors.

I think a special mention needs to go to Peter Culham who has worked tirelessly to organise this year's event, well done Peter.

Finally, thank you to all members that have worked throughout the year to make our club what it has developed into.

I would like to wish you all a Very Merry Christmas and all the Very Best for the New Year and look forward to seeing some of you on New Years Day for a Club Run. Cheers, Peter.

The club is what our members make it and this is a worthy tribute. I was absent from the December trustees meeting and it was good to realise that this would not make much difference to what went on! We are already planning the Southern Federation Rally to be held on our tracks on 26 September this year. We will want a bit of help with this so, if you can, please put this in your diary.

At home I am making progress with my 5" Claud. 2020 will be the 20th anniversary of its birth. The theory is that I should be young enough to lift it when finished so had better get a move on. I am thinking about the boiler now having erected the frames. At least the tender is constructed. Maybe more later space permitting.

GOING UP A SIZE OVER CHRISTMAS

David Scott

Well it had to happen, and as one to now admit owning clothes that still fit after 30 years, this has come as a shock to many friends within our club. No, not me, we now have started in earnest to have a Jessie ready for next year. And to many not familiar with this model She is 7 ¼ inch gauge. Yes I cheated and got a part built one with a super boiler. All our other models being 5 inch and a couple 3 ½ inch gauge.

Jessie and her slightly bigger Sister Bridget (she is in fact longer with an extra pair of wheels in the shape of a trailing pony truck) were superbly designed and drawn by Ken Swann during the 1960s. Both using as many common parts as possible including boilers, cylinders and motion etc but ending up as lovely different models. I waited some time for the drawings but in the end they were

worth waiting for. Everything is clearly described and, in many cases, how to build up some pieces is explained. In fact on the last sheet all the pipes are listed as to length, size, diameter of nuts and olives, and numbered on all the drawings as to where they go.

I remember Ken from one of the Midlands Exhibitions when he was demonstrating his Koppel. A rack driven locomotive of impressive performance... Yes he was driving her up and down. A SLOPE of course, and one to scare health and safety well out of the centre of Birmingham should she and he topple. Such an easy exhibition to get to by train from Coventry while I was a student. As was Reeves, a staggering (With a heavy parcel) distance from the station on the same line.

FOR SALE one careful owner? A 95 built model, boiler never steamed, faded paperwork enclosed with links to The Cheltenham Club.

Her description on the internet must have put several people off as she was for sale quite some time. Stiff to rotate. And Mole grips used to try and rectify the problem on one axle. And hitting a hard stop on part rotation did not help her plight.

So easy to solve when she arrived when I discovered that the 4 BA bolts going through the leading wheels were too long. These fitted out into the horn blocks. A long drill to make a counterbore going through the opposite wheel is needed. Such a good thing that they are spoked! Then shorten the bolts that hold the connecting rods in place by the crossheads.

Chris Vine who also built a Bridget has told of recommendations already on the internet forum where two other builders share experiences. I must ask if he can recommend a suitable colour to paint her. Or not! A lovely group of people on there and some of us have met, huddled over some lovely shiny bits of metal produced by the wonder of computers. Doncaster's meet up was great and we all contributed to the bits. Longest distance travelled went to someone from New Zealand. Who also happens to live close to a lost wax foundry as the crow flies. Sign of the times when parts can be sent as files to the other side of the world and return as fine parts to enhance your locomotive.

I had the Emco set up with the self-centring 4 jaw chuck, turning holding recesses into a set of wheels for another member. So swapped the jaws round and began boring out for some built up crossheads. My cunning plan is to bolt two side plates on and bore for the gudgeon pins. Then the front faces being milled with a shallow slot for the drop arms to fit.

This being a hobby I sat reading the drawings until a couple of bits caught my eye and we went down to make... Then of course we have the right thickness but it is far too wide. Let's burn off the last 200 Chocolate biscuits and trim 10 inches of cutting down each side for the connecting rods. Then you relax over a perfect drill found within your collection and chain drill both sides. Ten minutes of

exercise instead of two hours for cutting with your hacksaw. And still quite a curve created when releasing the stresses outwards.

It is often a good idea to go through the sequence or train of events prior to any mad to finish cutting. These rods have an open slot that could be finished in moments BUT! I have two blocks that can be clamped to the milling table with studs threaded in. These can be set to match the taper of the rods, and the 4 stops set to machine down to size. Again beware of creating bends so I clip thin spacers over all the stops. On the rods two holes, one at each end, bolt down and we are ready.

One disadvantage of chain drilling is that the first few cuts are noisy but we are soon turning the metal over and we are soon done. Do all four sides check for straightness then do a finishing cut on each having removed your collars on the stops. Friend Alan in our club told of a similar sequence on his CNC mill where they had to be straightened in a vice prior to the finishing cut. And these were in stainless.

I can't quite manage 5 a day! But two pieces seems possible if I make a list of easy bits to get on to, along with a more complex part. Often the complex part comes stuck together with two smokebox rings and the door? My plan is to swap the white lathe back from cutting fork slots, to using the big chuck and bore out and cut via the rear tool post. This goes towards explaining why rings are expensive. Yes, it is all the bits they have to remove from the centres of them! The lump of metal was cheap as it no longer fitted in the saw at the metal suppliers. My way round this in the past was to do the last three cuts first. Down to 95% and weld the tops of the cuts. Turn the block or rod round and cut to the third in, and a hacksaw finishes the job. Oh did I say that the metal is six inches in diameter with a five-inch bore! A new challenge could be to machine most of the model out of the solid.

Our neighbour cancelled the putting up of guttering together job, so I pondered a quick fill in. The sand boxes. Then the chain drilling drill gave me the confidence to quicken cutting 1 ½ inch square metal with ease. Drill in half way from top and bottom and cut with a hacksaw. Soon done and off to a lathe to machine the rectangular block all round. And the gutter? Heavy rain and son with chick-enpox!

You often get a complex part as a casting that then of course needs machining. The two motion brackets can be purchased this way but another ponder gave another possibility. What had put me off were the words "Braze a piece in place and tap two holes to secure!" While I was doing that I could accurately make up what is essentially a box. With a big hole in the middle rib, and a slot for the coupling rod to live in. It also holds the rear of the slide bars.

For all our music lovers some of the slots for locating pieces will be machined

at 3 degrees. Others marked and drilled from the frames which means that they will be dismantled.

Hints at painting while in this condition beckon. Mostly red and a lovely paint being tried is the brake calliper one. Very high temperatures, cooked on, and only £9.00 more than the Pound shop stuff, a spray tin. I am looking for scratch resistance at this stage. It goes onto bare metal well followed by a heat up.

I find that milling two ends square and marking and machining on the end of a strip helps enormously with holding. Also with filing parts once almost finished like the hooks. I am making three. One for the front. The rear for display also a hook... And a forked version for use at the track with a clipped in bar. Strong and safe. Today I milled the ¼ inch square parts by holding it in the large vice and holding the smaller bit in a smaller vice bolted down. Easy to get them even.

So there is progress at the moment with a weekly release on Wednesdays for club projects, natter and loads of tea. We are all gearing ourselves up for a re-



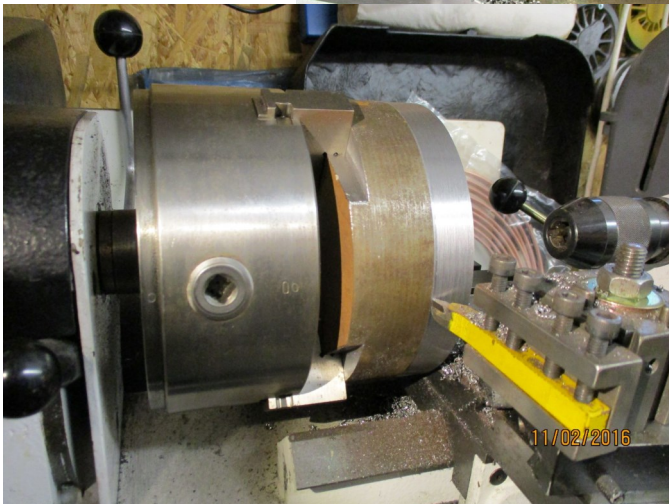
All Photos David Scott



enactment of The Great Escape when we dig ourselves under 2 tracks, lots of concrete and masses of car park to get the cable to the fourth light. The 7¼ steaming bays will never be the same after dark.



Illustrations from David Scott's piece "Going up a Size"



ANALYTICS

Where WP looks at photographs taken by the editor



Western on the down through line at Reading General station circa 1974.

The headcode 7V67 indicates a freight train not fitted with continuous brake. They appear to be empty stone wagons returning to the quarry at either Cranmore (Foster Yeoman) or Whatley, near Frome (ARC). the wagons I think are former ironstone four wheelers fitted with oil axle boxes. These were used when the stone quarries of Wiltshire started sending Mendip stone to the South East for road and house building. The wagons were prone to running hot due to the intensive use and oil axleboxes, so odd wagons usually still full of Mendip stone, having been detached at sidings en route, could be seen all the way up from Wiltshire, West Berkshire and into the London area. The situation became more serious as these hot axleboxes had caused several spectacular derailments including one on the 10th November 1971 which resulted in the demolition of the signalbox at Hungerford! The signalman survived-only just-, being left suspended on what remained of the operating floor.

The wagons were replaced during an urgent building programme in 1972 of roller bearing 51 tonne air-braked Procor wagons (PGAs). These were subsequently replaced by large 80 tonne bogie hoppers the like of which, though bigger, can be seen today.

ANALYTICS (continued from page 7)

John rightly points out that virtually everything in this scene has gone. Obviously the station itself is now an international style multi-platform modern affair. To the left of the train the tall office block was the Thames Water office building now replaced by a modern circular building. In front of that is the boiler room chimney and brick base of Reading MAS panel signalbox, with the operating floor just visible above it left. In front there appears to be a four-wheel vanfit for general merchandise, though by 1974 is possibly in use as an S&T stores vehicle, bearing in mind the signal works behind Reading panel box was still functioning in 1974. On what was then platform 5 is at least one BRUTE (British Rail Universal Trolley Equipment) used for moving mails and parcels about the railway and often to be seen in several numbers being towed by the ubiquitous battery operated platform tractors. All long gone also.

DIARY

JANUARY 2020

Wednesday	1st	Club Running	11:00
Sunday	5th	Public Running	13:00
Saturday	11th	Club Running	11:00
Monday	13th	Trustees meeting	19:30
Saturday	25th	Club Running	11:00
Thursday	30th	Evening Talk	20.00

FEBRUARY 2020

Sunday	2nd	Public Running	13:00
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*** All times subject to alteration

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 February issue is 18 January. 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