

The Railcar Association News Bulletin



EDITORIAL

Welcome to Issue 121. Immediately apparent is the revised format which has been altered from A4 Portrait to A5 Landscape, with columned text akin to a magazine, in order to give a fresh look. This has been under consideration for some time but seemed fitting to introduce for Issue 121 as this is the 25th edition of the re-launched bulletin which has been provided every other month since January 2010 in the same format. It is scary to note that this period is actually four years, as it still feels relatively recently that I volunteered to reintroduce the bulletin during that year's convention meeting at the Ecclesbourne Valley Railway.

On the subject of conventions, details are already starting to arrive concerning the 2014 event at Llangollen. As 2014 is the 60th anniversary of the introduction of First Generation DMUs, hopefully it will be a successful and interesting year for the association.

Less successful is the ongoing issues with updating the preserved section of the railcar website. The webmaster is still waiting for reconnection to enable

site updates to resume, a process which has become rather protracted. Hopefully the New Year will bring a resolution soon.

In the meantime, I hope you enjoy the revised image of the bulletin, which needless to say will be retaining its tried and tested content, contributions towards which are always gratefully received. It would be nice for some recollections of the British Rail days of DMU's to be shared this year, any offers?

Chris Moxon

19th ANNUAL RAILCAR CONVENTION

The date for the convention, to be held at the Llangollen Railway, has been confirmed as the weekend of October 4th and 5th. As always, more details will be released in time.

RAILCAR OF THE YEAR 2013

Thanks to all of those who chose to share their choice of railcar for the second Railcar of the Year award. 214 people participated, which although wasn't as many as last year, was still a



good result. I am pleased to announce that Class 119 W51073 won the award.

Firstly congratulations are in order for the Ecclesbourne Valley Railway DMU team who returned this rare vehicle fully to service. They tackled a completely derelict interior and reassembled the unit mechanically as well as bodywork restoration and a repaint over several years. W51073 took to the rails in August 2013 and became the first Class 119 to carry passengers since the withdrawal of the last BR examples in the mid 1990's. It was nominated for the thoroughness of the restoration, the historical significance of an operating Class 119 in preservation and finally the low average age of the restoration team, which represents a bright future

for DMU preservation.

However the battle was only narrowly won. Whilst the 119 was in the lead during the first day of voting, the second day saw Class 108 M51566 take the lead in the votes, the two running virtually neck-and-neck for the remaining time voting was open. The two vehicles were tying for votes on the 10th, 16th and 30th December. New Year's Eve, the last day of voting, saw the two vehicles equal before final votes numbering just four pushed the 119 into the lead to claim the award. The pattern of voting was very interesting and was essentially a two-horse race this year. The final votes came out as follows:

- Class 127 51616 - 12
- Class 101 51189/51803 - 16
- Class 108 51566 - 91
- Class 119 51073 - 95

Once again thanks to all who took part, and hopefully the award will attract even more voters next year.

NEWS

North Norfolk Railway: The National Railway Museum's Class 101 M51192/ M56352 continues to provide for all the

railway's DMU requirements. The set has operated during weekends in November but has not been required during December, other than for a single private charter, due to ordinary services being suspended until February save for (steam hauled) Santa Specials. No progress has been made of the overhaul of the NNR's own Class 101, E51228/E56062. The powercar remains at Weybourne Works awaiting refurbished components while the trailer has been stored (serviceable) inside the carriage shed where it will remain until its powered partner is ready to operate again.



Mid Norfolk Railway: The defective No2 engine on 51503 had all the heads re-torqued down to the correct torque

settings, rocker gear correctly gapped and refilled with coolant and fuel. After a few attempts, the new engine settled down nicely, allowing L836 to operate on all four working engines once again for the first time in six years. The set was in operation for the Christmas Diesel weekend on December 28th, pictured near Thuxton (see below left).

East Somerset Railway: Class 108 51909/56271 is now owned by The Mendip Traction & Rolling Stock Group and has relocated to Cranmore. Some internal work has been carried out and both vehicles are scheduled for body repairs over the next 2 - 3 years. A full examination of the mechanical parts has revealed all to be in very good order having been overhauled by NSE not very long before being withdrawn from traffic, a full BR spec B exam has been undertaken along with replacement of all vacuum hoses and air pipes plus other work to ensure all is well. The livery is still temporary BR Green for now. The set is operational and will see some use while waiting overhaul.

Chinnor & Princes Risborough Railway: The railway, home of Class

121 55023, has recently taken delivery of ex-Sandite vehicle 55024 with a view to restoration to supplement 55023. Efforts on the new arrival have so far concentrated on fixing the external paint work with polymer to protect it over the winter months. There is a consultation out with their membership to determine how the vehicle will be restored, with a view to starting this work in April. The options being considered by the membership are as follows:

- Return it to as new
- Smarten it up as a Sandite unit
- Keep the seating at both ends as current, remove the sandite equipment, keep the 240v, 125 Amp generator and use as a p-way support vehicle.
- Restore as much of the original passenger seating as possible, leave the generator in place, open out the old parcels area as either wheel chair accommodation or an open saloon , or with additional seating.

Gloucestershire Warwickshire Railway: Services were operated on 149 operating days during 2013 using the Class 117 3-car and Class 122

single unit. The sets accumulated nearly 9000 miles with no trains being cancelled. 8 participants enjoyed driving experiences and 5 August evening cruises were operated. An estimated average of 30 hours per week was undertaken either directly or indirectly in support of the fleet maintenance, all by GWSR volunteers.

Recent work has concentrated on several fronts, one of which being replacement corridor connection bellows for new arrival 51360. Ian B has continued the manufacture of these, the Butler residence's living and dining room temporarily doubling as a workshop (Mrs B is not amused!). The pockets that will contain the steel former hoops have been formed using a strong adhesive tape on the rear of the pocket, and although this may suffice in service, the pockets will also be stitched in very much like the original. A rough calculation indicates that an estimated 600 stitches will be required for one corridor end.

Two leaking radiators have also been taken off site by a radiator firm. These will be refurbished, probably with brand new cores, and returned in January.



A Christmas themed headcode displayed on 51363 (I.Butler)

C exams have also been completed on all four of the operational vehicles.

Churnet Valley Railway: Work during the closed season has focussed on resealing the quarter lights and sliding lights in the main passenger windows on Class 104 powercars M50455 and

M50517. These had been discovered to be letting water in, and consequently damaging the veneered woodwork, so are being dealt with as a priority. Work involves stripping the windows out, thoroughly cleaning all the surrounding alloy strips, re-drilling a (larger) condensation drain hole through to the exterior and reassembly of the windows involving new sealing of the glass. Each window takes a working day to complete, and so far over the winter 15 of the 17 windows inside M50517 have been treated. The remaining 2 inside this vehicle, plus the 12 inside M50455 are still to be done, so the mammoth task is almost exactly 50% complete.

Nene Valley Railway: The first official scheduled passenger running dates for Y7 railcar 1212 (outside of galas) will be: Jan 19th, and 26th, Feb 9th, March 9th and 23rd. Whilst these dates are currently the planned dates, we would advise you phone the railway in advance to confirm before you visit to avoid any disappointment.

We are also looking at the possibility of a running day with ex.DB Kof 323 674-2, the newly acquired German shunting engine, on March 16th. This

event will be strictly pre-booked only however and more details will appear on The [International Railway Preservation Society's website](#) closer to the time.

On Sat July 19th, a photo evening is being run with 1212. This will include a 2 1/2 hour evening guided photo excursion using the recently restored award winning 1950's diesel Swedish Railbus 1212:

- An opportunity for trackside pictures, railbus pictures and scenic landscapes along the line on a summer evening!
- Pictures of the railbus at several trackside locations
- Stops at Wansford, Ferry Meadows, Orton Mere and Peterborough stations, plus additional stops.
- Photos from the "cab" in station and in transit (non operational end)
- Selected stops at picturesque vantage points.

This course is booking quickly and places are strictly limited. The cost is £38 per person and can be booked through [PM Images](#)

RESTORATION NEWS

Class 101 51512: Work on the exterior of 51512 has continued at the Cambrian Railway during the summer of 2013. The arrival of replacement window surrounds (cut to size) has enabled three bodyside windows on the driver's side of the vehicle to be removed and the rotten surrounding steel repaired. This has been followed by the refitting of the windows, cleaned up and with replacement rubber seals, and much sanding and filing to achieve a flat bodyside post-repair work. The work has been finished by applying a coat of *Trimite* grey primer down the drivers side and also to the cab end. Bodywork is expected to continue on 51512 into 2014, with the secondman's side next to be treated.

Class 103 56160: The new hinge castings have arrived for the doors, and will be sent to a local machine shop to be drilled for the hinge pins and bronze balls shortly. The hinges will be slightly modified to take the shorter (but available as spares!) MK1 hinge pin.

Also received are sample lengths of VHB tape from Essentra tapes. The ventilator from 56160 is being repaired

and will be reattached using the tape as soon as the temperature improves!



This is the underside of one of M56160's roof ventilators. As can be seen the bottom is pretty corroded, so it has been cut out, which will also allow the hole in the side to be repaired. A new solid base, which will blank the hole in the roof, has been cut from a sheet of aluminium. This will be sandwiched between the ventilator and roof, once the ventilator has been de-rusted and painted.

Class 122 55009: At the recent Multiple Matters weekend it was noticed that daylight was visible through the guard's van floor area. Armed with chisel and hammer the top layer of a hard

bituminous mix was removed and significant corrosion and metal wastage was found. Work is now progressing to continue the removal of the bituminous mix throughout the guard's van floor area and to make a start on removing associated furniture to allow a totally new corrugated channel floor sheet.

MOVEMENTS

Class 141 141113 moved from the Midland Railway Butterley to the Weardale Railway during December where it has been required at very short notice to deputise for the line's own set, 141103. The latter had failed and was essential for transporting staff and equipment up and down the line during the Polar Express specials of December. As 141113 is booked to operate winter services on the MRB during January and February, it is expected to return from Weardale in January.

Class 108 51909/56271 moved from Midsomer Norton to the East Somerset Railway in October. See news section.

Class 108/101 50599/51505 have become the first DMU to run on Bluebell Railway metals, having moved there in early January on hire for winter

services. They have travelled south from the Ecclesbourne Valley Railway.

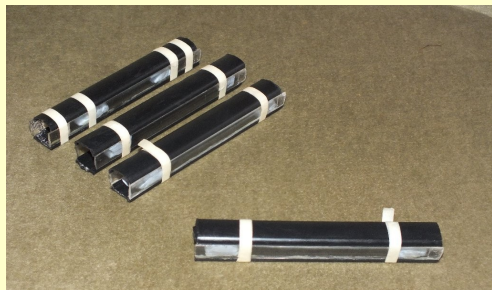
A CLASS 123 IN N GAUGE



It is most railway modellers' aim to recreate the real railway in model form, and DMU's are prototypical in that respect being sometimes overshadowed by the larger locomotive classes, particularly steam, which are more popular to model. Luckily there is sufficient interest to see DMU's represented in most scales, and kits of several types are available. N Gauge has a limited selection of DMU kits but one that is available is the Swindon Class 123 4-car, from BH Enterprises. Although an old kit, careful construction and the small nature of N means a very reasonable model can be produced.

Firstly the floors, clear sides and roofs

(standard Mk1 profile) were glued together and then filed and filled to remove some defects.



Next the cast white metal cabs, so characteristic on the Class 123, were fixed to the ends of the two driving cars, and corridors fixed to all the remaining ends. Whilst these were setting, a (roughly) 64ft Japanese EMU chassis from *Greenmax* was clad with British bogie side frames. The bogies for the Class 123 were supplied as BR B1 bogies in the kit, incorrect for the Class 123 which ran on B4 bogies but a compromise which was made this time.



The coach side overlays, supplied as brass etches, were then bent to the correct profile and sprayed in a suitable primer followed by two coats of BR green from the *Railmatch* range. These were then lined and roundels and numbering added from *Fox Transfers* which supply 1960's era DMU transfers in 2mm (N) scale.



The coach ends were also sprayed and lined and the corridor ends brush painted black. The underframes were then tackled, which was an easy task as the kit comes with one piece underframe casting which depict all the engines, radiators etc and were simply attached to the floors of the vehicles. Whilst not exactly over endowed with detail they are acceptable in N gauge. These were all painted out in black and other items such as exhaust pipes picked out with other colours before the bogies were attached to the trailing cars and the motorised chassis to one of the

driving cars. The brass etches were then glued carefully to the clear sides and the completed model treated to two coats of satin varnish.



Whilst the kit has been readily available for many years I have never seen an N gauge Class 123 in action other than my own. Do any other readers have any N gauge DMU's they could share pictures of?

Chris Moxon

TIME TRAVELLER

Green Era

[Derby Lightweight M79187](#)
[Derby 23/6/64](#)

[Class 105 - Mablethorpe](#)

[Class 118 W51330 - Radley 4/4/65](#)

Blue Era

[Class 100 ADB975349](#)
[Whitby, 27/8/81](#)

[Class 115 - Gerrard's Cross 18/2/75](#)

[Class 122 SC55005](#)
[Inverness 13/4/77](#)

Blue/Grey & Later

[Class 101 E59084 - York 12/12/80](#)

[Class 114 E50006](#)
[Chinley East Junction 15/5/79](#)

[Class 123 - Kilnhurst Central 4/4/1984](#)

[Class 128 55993 - Newport 3/8/88](#)

ROOF VENTS

Since the days of BR ownership, there has been a problem keeping the

aluminium roof panels attached to the steel roofs of our railcars. In the case of the class 103's, the roofs were said to work loose and rattle. In preservation, a roof panel blew off M50397 whilst at Coventry Railway Centre, and M56160 lost a roof ventilator. In both cases the cause was failure of the rivets.

There are two aspects to the problem. Firstly when aluminium and steel touch, the dissimilar metals attack each other through the process of galvanic corrosion. Of course there should be a physical barrier between the two metals (no trace of any on M56160!) but it is not possible to isolate the rivets. Secondly, the two metals expand at different rates, an aluminium roof sheet can expand up to 2mm in length, further stressing the already corroded rivets!

Historically the solution has been to drill and re-rivet the roof. This only postponed the inevitable, and also resulted in a roof sheet with weaker edges, which are more likely to leak! Bonding technology has taken leaps forward in the last sixty odd years, particularly with the introduction of VHB (very high bond) tapes in the 1980's. These tapes consist of an acrylic foam

core impregnated with a very high strength adhesive. The foam physically separates the two metals, and allows lateral movement of up to three times its thickness. The use of a VHB tape therefore prevents galvanic corrosion; allows for differential expansion; and provides a weather proof seal along the joint, the thickness of the tape (up to 3mm) compensating for minor unevenness between the panels. VHB tapes are a proven technology, being used to attach panels in both the automotive and aerospace industries

We therefore decided to experiment by reattaching the errant ventilator using Duraco 472946 tape, a grey 1.1mm thick tape (their thickest) The areas to be joined were cleaned back to bare metal, and wiped with isopropyl alcohol to remove any grease, before the tape was applied. At this point we inserted a blanking plate cut from 1mm aluminium between the ventilator and roof as we wished to retain the external appearance. The parts were then carefully aligned and firmly pressed together, as the adhesive does not allow any repositioning, and bonded parts have to be separated with a cheese wire!

We hope the tape will be a success, and are considering using the tape on the roof panels (although this will probably be the thicker 3m tape) The experiment will be reviewed in the summer, and an update given in a future Bulletin.

Richard Thornton

FOR SALE

Class 117/121 power bogie. Contact [Bob Faulkner](mailto:Bob.Faulkner@live.co.uk).

6 in number A2 size wooden battery cases suitable for DMU Power Cars. Very good condition. Contact Robin Wallington 01833640461

SUBMISSIONS

Hopefully the contents of this bulletin was both interesting and informative. If you know anyone who could provide similar material found in this issue for future bulletins, please make yourself or them known to railcar@live.co.uk The following types of submission would be most welcome:

- Photographs of vehicles in service
- Restoration articles
- Reports on special events

- DMU modelling articles
- Articles on DMU history
- Recollections of DMUs on the national network.
- Requests for information
- News & images of recent DMU activity
- Anything that may be of interest to readers

Feel free to send submissions at any time to railcar@live.co.uk but no later than February 27th for Issue 122 (due out March)



Front Cover: Class 121 55032 arrives into Carrog during the Llangollen Railway's June 2013 Railcar Gala

Rear Cover: Class 108 M56492 tails a 2-car New Year's Day Service on the Dean Forest Railway (C.Walker)

GALLERY



SC51402, SC59511 & SC51367 at Boat of Garten, 21/7/13 (B.Faulkner)



50338 stabled on the Bary Tourist Railway, 8/6/13 (Unknown)



In crisp winter sunlight, Class 101 51434/59117/51503 passes Crownthorpe on the Mid Norfolk Railway during their Christmas Diesel Gala, 28/12/13

