



# The Railcar Association Bulletin July 2010



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## Introduction

As is always the way with the British weather, we have swung from one extreme to the other with baking hot temperatures dominating June making it difficult for lethargic volunteers to progress the various DMU projects. That hasn't stopped many however with several railways reporting progress.

One weekend which has benefitted from the sunny climate was the Llangollen Railcar Gala, hopefully many DMU supporters were able to get down as it was an excellent event, with visiting Railbus M79964 proving popular. Any other railways planning DMU themed events are reminded that this bulletin can provide a free advert in the issue before the event.

Many thanks to those who submitted Class 100 themed material for Issue 100 (you will probably have noticed the modified logo!). I would like to particularly thank Christopher Milnes, who has provided a good article about Class 100's in Norfolk. I hope you enjoy reading his article as much as I did.

If sufficient material is received, it is intended to "theme" the bulletins through the classes from 100-129. So for next issue (Issue 101), any Metro Cammell memories, articles and pictures would be gratefully received.

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## News



**Gwili Railway:** The privately owned blue/grey class 117 set (W51401, W59508 + W51347) has settled in well at its new home of the Gwili Railway, near Carmarthen. The unit was once again used on 2nd - 5th April, during the Day Out With Thomas event – albeit loco-hauled. The event organisers favour the use of the cl.117 over the traditional mk1 coaching set, due to its high capacity seating, and the amount of doors allowing swift turn-arounds at each end of the line.

During late May, the brake coach (W51347) was taken into the shed at Llwyfan Cerrig, for attention to its bodywork panels. A corroded section was cut away, with a new piece made to fit – see attached photos. The DMU's owners have been assisted in this work by members of both the Gwili Vintage Carriage Group, and volunteers from the railway's C&W department.



The unit's first booked passenger working (DOWT events aside...) is on Saturday July 31st, with departures from Bronwydd Arms at 1030, 1150, 1320, 1450 and 1610. The DMU is then booked to work every Saturday in August (7th, 21st and 28th Aug) to the same timetable. A day-rover ticket is £6, and HRA passes etc are valid for these dates.

On August 14th/15th, the DMU will be celebrating its 50th birthday in style, as it participates in the Gwili's first ever Diesel Gala. Supporting two visiting locomotives (D9521 and 08631) and a resident cl.03, the unit will play a full part in the weekend, operating frequent shuttles throughout each day. A rover ticket costs £7.50, or £6.50 if bought in advance, or on production of a valid National Rail ticket to Carmarthen. Further details are available in the railway press, or on the [Gwili Railway's website](#).

*Photos R. Voyle*

Finally, to welcome the DMU into service, the railway has commissioned a new limited edition postcard of the unit, which is available from the shop at Bronwydd Arms. Further details on how to purchase one are available from the railway, on 01267 238 213...or alternatively, come and visit us, to collect your copy!

**Bo'ness & Kinneil Railway:** Again, most work is being done on TFRB Sc79443. All panelling has been removed from No. 1 end. The last few inches of the main roof panel had also to be cut away to give achieve this. The first replacement end panel has been cut to size from new sheet and all of the end framework made ready to receive new panelling. Removed gangway timbers have been repaired and are being painted. One bodyside door has been refurbished and one sliding gangway door is almost finished. Work is underway on the other gangway door and another bodyside door. The badly bent step removed from the buffer beam has been heated and straightened.

DMS Sc51017's driver's seat is back in the cab and some minor electrical faults in DMBS Sc51043 are being investigated.

**Churnet Valley Railway:** Following a generous donation from a member the group is proceeding with rebuilding an engine removed from M50517 due to passing excessive oil. This engine, which some may remember as giving a firework display on the Railcar50 Fish & Chip Special(!), will be fitted to M50455 when complete, returning the operating power-twin set to 4 engines again. Work on M59137 continues, with brand new timber for the exterior doors coming together nicely. The roof of the vehicle has also been completely stripped and repainted light grey over a 5 week period of nice weather (see image).



**Ecclesbourne Valley Railway:** Due to issues with other vehicles there hasn't been time to paint the roof of Class 101 M51188 yet and so it is back in service for now giving chance to run the engine which received new injectors and then didn't go anywhere. Now the engine does not emit so much clag!

Class 101 E51505 is in traffic, Engine No.2 (the new one fitted) was found to be racing a lot, particularly when idling. Upon investigation a small leak of the ATF fluid was discovered from the back of the flywheel. Upon further investigation, it was discovered that the flywheel still had enough fluid so the decision was made to take the flywheel off revealing a seized/broken bearing. A new flywheel has now been fitted. The vehicle has also had repair work carried out on the unloader valve.

Class 101 E59303's internal refurbishment is going well. With the ceiling being virtually completed (it has been put up and painted in gloss) it is very close to receiving seats. The luggage racks have been cleaned now and await fitting.

Class 117 W51360 has been in traffic working with E51505 in a hybrid which has given this vehicle some good running for a change (the two 101 vehicles have since been reunited).

Class 108 E50599 is out of traffic pending bodyside repaint and interior TLC. So far, the guards van has had a splash of Rail Grey, and much work has been done on the mechanics.

Class 122 M55006 has been in service, and its throttle motors have been stripped and cleaned.

Derby Lightweight M79900 has been in service, and its brakes have been adjusted.

Class 119 W51073's restoration work has taken a back seat to tend to other vehicles.

**M56160:** Further glazing has been done and we the timber for 56160's running boards has been obtained.

**Colne Valley Railway:** 141108 has recently been repainted into Blue/Grey livery.

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## Movements

**Class 141 Second Generation Unit 141113** moved in June from the Midland Railway Butterley to the Weardale Railway. This location has now become quite a hotspot for Class 141s with five out of the seven preserved vehicles located there. The railway is also home to operational set 141103 (which is currently providing the majority of passenger services) in Chocolate & Cream livery and also a vehicle from 141110 (stripped for spares, with one vehicle having already been broken up).

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## North Norfolk Class 101 Backdated

The North Norfolk Railway's class 101 power trailer set, which typically sees 5,000 miles of use each year, has been out shopped in BR Green livery in time for their Mixed Traffic event on the 5th/6th June. The set was previously running in BR Blue with full yellow ends.

However work has extended beyond a coat of paint. The DMBS, 51228, had previously been backdated several years ago with

shortened gutters (above the doors), tungsten interior lighting and yellow brake van interior. The DTSL, 56062, had only received a quick restoration. However this winter/spring has seen the same backdating treatment to 56062.

Of particular interest has been the reinstatement of the 4-light arrangement on the cab end, returning the exterior to original condition. 56062 is one of nine class 101 vehicles preserved built with the four light arrangement, and it becomes the first vehicle to have them reinstated.

As part of the livery change, 56062 carries speed whiskers while 51228 has a plain front end.



*Julian Davis has kindly allowed the use of these two images to show 56062 in action at the Mixed Traffic Event. The first shows the set arriving into Sheringham whilst the second shows arrival at Weybourne. See more of Julian's images [here](#).*

## Swanage Class 108 Completed

The overhaul work on the Swanage Railway's Class 108 set, undertaken over several months at Eastleigh Works, is coming to a close. 54504 returned to the railway on 28th May behind 30777 "Sir Lamiel". However 51933 remains due to a problem with the final drive preventing its onward movement.

The 108 set should now be suitably refreshed as it previously saw considerable use at the Swanage Railway who use DMUs throughout the whole season on off peak services and, unusually for a preserved line, Friday & Saturday evening diagrams.

The set rejoins other members of the Swanage fleet (consisting of 117 & 121 vehicles) which have been running services this year.



# E51505 – The tale of the racing engine!

E51505, a north facing Class 101 DMSL, arrived at the Ecclesbourne Valley Railway back in June 2007 from the East Anglian Railway Museum where it had been stored since withdrawal from mainline use around 2003. The majority of the vehicle is as it left service, with ex-Regional Railways seats. Upon arrival, it would join DMBS M51188 which is completely refurbished, to form a power twin set.



Shortly after the set entered service (about October 2007) a large amount of oil was spotted coming out of the back of number two engine. Without the time to investigate, the engine was simply isolated and the set ran happily with three out of the four engines until December 2009 when the team decided to investigate the fault with the engine and either rectify or change the engine for a reconditioned spare. It was noted that crankcase pressure was the likely cause of the leak but then it is hardly surprising considering that this engine looked to have been on the vehicle for many years (the metal plate on the underneath said 1991). The decision was made to change the engine.

One cold winter's day the engine was disconnected from all of its supplies and the vehicle was moved to the car park at Wirksworth – the only place suitable to get a forklift truck up to the vehicle. The old engine was removed from the vehicle and now awaits refurbishment. This took nearly all day and with the light drawing in, the team decided to run up the replacement engine on the ground to check all was in order. It seemed to be.

The following week, the team reassembled to hang the new engine. It was another bitterly cold winter's day with howling winds blowing up the valley but the team soldiered on with the goal of having a power twin for use on the Santa Special Days. The extra engine would provide the much needed power boost for the 1 in 27 incline. It frustratingly took all day to jiggle the engine in position. It didn't seem to fit. After around four hours of trying, it was noticed that the bypass filter on the back of the engine was fouling some pipes and the team suddenly realised that this was because the engine dropped was a 680-1 and the replacement was a slightly different 680-1595. With the offending article removed, the engine simply fell into position. It would be left to yet another day to connect it up.

Having connected the engine up and performed a successful full line test, there was much excitement at having a power twin again – something which they did not have at the time with the 117 power car being coupled to a 108 trailer. The engine seemed to happily run the Santa Special trains on some extremely snowy Peak District days. The vehicles were then stored throughout January, February and March as the railway were not operating passenger services – the only mileage being from test runs and training.

After performing admirably on several service days into April, including our very own DMU Gala, it was noticed that the 'new' engine suddenly wanted to race at full throttle when it should have been idling. Of course, this is a big problem because transmission damage can occur through changing gear when the engine is at high revs. As before, the engine was hastily isolated to much disappointment of the team. The first port of call was the throttle motors (if it had been an EP valve then both engines would be doing the same). If the throttle motors were dirty or worn then it could cause the problem so they were carefully dismantled, cleaned and returned. A short successful test run was done and the vehicle was placed back into service.

A few service days later the same problem occurred again and the engine was isolated. After much groaning, the team began to investigate again. It was noticed that there was a leak on the back of the fluid flywheel and it was assumed that the engine racing was being caused by lack of transmission fluid due to the leak. However, when it came to draining the remaining fluid from the flywheel, to much to the team's surprise, nearly a whole flywheel's full came out. It was, on the other hand, brown and not red as it should be. This pointed to a potentially more serious problem. Therefore, the flywheel was quickly unbolted and opened to reveal a shocking surprise.

Inside the flywheel, the shaft had somehow broken and some of the small bearings had clearly been whizzing round inside. The internal metal was scored and marked where this had been happening and the brown transmission fluid was full of metal filings. It was revealed that the leak had been caused by nothing more than a poor seal between the flywheel and the engine and it was by pure coincidence that the bigger problem



was discovered. Luckily, another refurbished engine that was in stock had a new flywheel attached to it meaning that the team could get the vehicle back into traffic quicker because they didn't have to wait for the damaged flywheel to be rectified. The team were grateful that it was now nearly 20 degrees and not 0 as it had been before.

The vehicle was placed back into traffic, following a successful test run, with a new flywheel attached that had been hung using a winch hanging through the inspection hatch. It had been a difficult and time consuming task and the team breathed a huge sigh of relief when it was completed.

However, this was not the end of the saga...

To their dismay, the engine began racing again during an event weekend in June, less than a few weeks after the new flywheel had been fitted. It was back to the drawing board with the team quickly realising that the flywheel problem had been a mysterious coincidence and was not actually the root cause of the original problem.

Attention was turned, almost by accident due to the manual throttle becoming difficult to operate, to the throttle arm on the back of the engine. It was discovered that the arm was slightly bent (somehow) and therefore when power is shut off it did not quite return to idling because it was catching on something else. It is unbelievable to think that it is quite a simple issue that has only been discovered after all this time and that the flywheel problem was something completely separate altogether.

A new arm is being fitted and the story continues....



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## Stourton Saloon

Here is an image sent in by Garry Luck, showing the "Stouton Saloon" at Newcastle in 1986.

This 2-car unit, formed of DB975664 (ex DMBS 51122) & DB975637 (ex DTCL 56300), carried the colourful Provincial livery (as applied to sprinter units at that time) and was one of the last 100s to be seen moving around the BR network.

It was in use as the Eastern Region inspection saloon, and went to several unusual locations as part of its duties. It was scrapped in August 1990.



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## Norfolk Class 100 Memories

*Chris Milnes of South Wooton, Norfolk, remembers the Class 100's from 1968 to 1980 in Norfolk. He has kindly offered this article in response to the appeal for Class 100 material in the last issue.*

As a boy of 11 we lived at Heacham next to the Kings Lynn to Hunstanton line. The line was reduced by 1968, to nothing more

than a very basic railway, no staff in attendance, all sidings gone except a few at Hunstanton, signal boxes all closed, and one train working in use. Trains were a mixture of Gloucester, Cravens, and Metro Cammell units. The 100's, had arrived, to replace the Derby Lightweights, and original Met Camm units, The 791 etc series, in 1967. Living in a bungalow estate we were next to the line separated by a building site. They were building new houses but axing the railways at the same time!

Saturday 3rd May 1969 was the day of the last train, and 2 car Gloucester and Cravens sets were in use. The very last train was 8 coaches and had at least one 100 vehicle in it as from the picture in the local paper. I saw the train arrive Heacham from the Front Bungalow window, it was dark and flashbulbs were flashing, the train was full. it was about 10.30pm.

The line quietly started to fall apart, thieves stole all the telephone wires, between Heacham and Snettisham, the signal boxes were stripped of anything that was of use I still have a shovel! There was a preservation attempt, by local rail Enthusiasts, but in those days, little expertise, or money and in February 1971 removal of the rails began, and it was the end.

I wasn't really going to see much more of the railways until we moved to South Wootton in 1976, and I started working in a local factory.

After moving to South Wootton Kings Lynn in 1976, I was able to make use of the Railway from Lynn and My new camera, a Prinsflex 500 slr. In those days there was a very good offer on day rovers East Anglia for £2-00. Most of the trains from Lynn were worked by class 31's, but only a two hourly service in those days. The first train was a DMU, and another odd one at about 0825, which went through to Doncaster via the Joint Line (GN& GE) from March. I spent many Saturdays ambling around East Anglia in the slow stopping service trains, Not very quick, but cheap! The Norwich fleet was in those days about 65% Cravens 25% Birmingham RC&W, and 10% Gloucester RC&W.

So it was interesting to photo something that did not turn up very often, and there were at the time only 7 Class 100's on the books. These were E50346, E51115, E51124, E51127, E56100, E56307, and E56316. These last few power cars worked with Cravens Driving Trailers, The 3 class 100 trailers didn't seem to be seen out on the road, and were spare on shed, nevertheless, the 4 power cars were out and about all the time, The reality was according to BR at Norwich, was since the 1976 fuel crisis, and the rising cost of petrol, local area passenger traffic took off, and BR was forced to strengthen diagrams; ultimately the Gloucester fleet which was being run down, was suddenly in demand, and these 4 vehicles were sent to Doncaster, and given a C3 exam, There was a fleet of withdrawn vehicles as well, in store, and these yielded all their spare parts to keep these 4 going, in fact E51115 had actually been in departmental use, and got put back into passenger traffic again.

On a visit to Whitemoor Yards in 1978, several withdrawn vehicles were there, E51114, minus all it's window glass, and sliding ventilators, and not much left of the interior, then there was E51120, E51125, and E51126, missing all there underfloor equipment, engines etc, and all the seat cushions had gone, but the seat frames were still there.

At Norwich, at the back of the old Shed, could be seen E56094, long out of use, and full of old seats, E56316, was out at the old fuel sidings, still on the stock list but obviously no longer in use.

### **Class 100's and the Railway Invigoration Society special trains**

From 1976 the RIS, was able to hire in DMU specials to highlight and prove the validity of running services on lines that were freight only. These lines were Cambridge to Swavesey, Wymondham to Fakenham, Wisbech to March, and Wroxham to Reepham, on two occasions, Gloucester vehicles turned up in the consist, E51115 on a Wisbech to Lowestoft special, and on April 8th 1978, the first train to Dereham since 1969, had E50346 leading three Cravens units into the station at Dereham (illustrated).

By 1980 the 4 remaining 100's were on borrowed time, and eventually got Transferred to Longsight, However several vehicles remained dotted around the Eastern region, notably E51122, and E56300, which were called the Stourton Saloon and was quite a plush unit, having tables and swivel chairs, and a smart two tone blue livery. It was used as a mobile classroom and training unit, also used as a hospitality vehicle. In 1985 it hosted the BBC radio Cambridgeshire road show.



*E50346 leads into Dereham 8.4.78*

Eventually all the withdrawn units were disposed of, E56303 and E56307 probably being the last two to go from March, to Meyer Parry at Snailwell, and then the departmental units fizzled out in the late Eighties, the class was more or less forgotten about! By now the Cravens were rapidly depleting, as electrification spread, and class 101's from Chester, were drafted in. Things were changing rapidly, especially on the freight side, as lines closed and routes were rationalised.

In many ways the Gloucester units had quite a long stay in East Anglia, from 1967 to 1981, and proved to be worthy

performers, they rode better than the Cravens, and suffered less body side vibration than the Cravens, I think the main reason for withdrawal was simply, line closures, and being a small class they were a bit non standard body work wise. The class was in right at the end, of so many axing's, The Kings Lynn to Dereham line, Kings Lynn - Wisbech - March; Wymondham to Dereham, The much missed Kings Lynn to Hunstanton line; The once Trunk route Yarmouth South Town-Lowestoft. Perhaps, the biggest loss of all to the Region was The Cambridge to St Ives line, now the 'ill fated' and Un-opened Cambridge Guided Busway! This makes the 100's historic vehicles in a way, and quite well photographed at the time.

### Preserved in Norfolk: E56301

The Mid Norfolk Railway only started to get going in 1994, when the first few rails were laid into the station at Dereham. There were big plans at the time for a railcar museum at North Elmham, and several motley DMUs, were assembled on a short stretch of rudimentary track, These were a class 119, a two car 108, some Metro Cammell cars, plus Gloucester driving trailer E56301. This was an ex Norwich car, and was part of a batch that were sold from Norwich in the early 70's. Norwich were particularly good at squirreling away items for resale, and two steam locomotives were held here as well which were eventually preserved. Most of the cars went to the North Yorkshire Moors Railway and got away before asbestos was an issue.

E56301 spent a long time at the Chasewater Railway, before falling out of favour and then being acquired for the proposed National Railcar Museum, but this project failed and the MNR became owner. The unit was moved to County School station, other DMU's went to other railways and were replaced by others (e.g. the two car 101 from Shoeburyness, now in smart green livery).

E56301 was tidied up and used as an additional seating area to the tea room and as display coach. I have had the job of doing minor repairs and painting on the car over the last 2 years, but it is mainly a holding operation until the time comes to fully repair the car, when the line is connected up to Dereham, but this is still many years away yet.

Generally speaking the design of these vehicles was quite good really. The roof is alloy and fixed sturdily to the sides incorporating an alloy gutter strip, no rust here, unlike 116s! The doors are also 'bombproof', being aluminium, and there is quite a bit of body side stiffening below the windows. Below the floor is a corrugated steel frame, which while having surface rust, is strong. The biggest weakness on these trains is the front end panel work and lower body side panels, but should all be replaceable or patchable in time. The interior is mostly complete on this car but is minus the toilet bowl and some interior panels, the floor coverings have also split and would need replacing. Gangway end would need replacing. Seating is quite good, but would benefit from a new trim and paint in the future.

It would be nice to see the 2 car class 100 on the Midland line restored, as these units are equally as historic as the Wickhams; (another ex Norwich rescue). Perhaps one day it could visit the MNR and work with E56301, though a lot of sleepers and rails would be needed before that could happen!



31/3/1979, The day of a special from Cambridge to Swavesey. 51124 was on 08.24 Lynn to Ely



51115 at Norwich in 1978. The Sheds at the back were the old dmu depot

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## Class 100 Images

Roger Sutcliffe captured several Class 100's during the early 1980's, both in passenger and departmental service.

FA99900, the driving trailer for the weed killing train, was seen on Lostock Hall shed in May 1984 (see right).

Below there are views of blue units: M50351 at Sheffield in July 1982 (left), and Craven-Gloucester set (leading a Derby lightweight set) passing the shed at Lostock Hall in August 1983 (right).





## Fictional Liveries

A few fun images produced by Garry Luck, depicting some well known DMUs in different liveries, thanks to the power of computer image editing software.



The first two show the Keighley & Worth Valley Railway's W&M Railbus 79964 having gone backwards & forwards in time! The image on the left is a GWR Railcar inspired Chocolate & Cream livery (if the GWR had favoured lightweight 4 wheelers instead perhaps). The image on the right is the very plausible possibility of an early blue livery being applied, which would almost certainly have been the case had the Railbuses survived into the 1970's.



The second two show the North Yorkshire Moors Railway's 101 E51511 with 4 lights on the cab end. The left hand image is the unit in early blue livery, while the one on the right shows the LNER "Tourist" livery that the railway painted its Class 100 units in many years ago, which was reminiscent of the LNER Sentinel steam railcars operated over the same route in the 1920s and 1930s.

## Llangollen Railcar Gala

The Llangollen Railway held their annual gala over the 26th & 27th June. Waggon und Maschinenbau Railbus M79964, visiting for one weekend only from the Keighley & Worth Valley Railway, was a popular visitor. Also in action were resident 104, 108, 109 & 127 sets, the latter having been repainted for the event to match new arrival Class 108 trailer M56223 which will be replacing Class 105 trailer M56456 for a few years. A steam Auto-Train was also in service. Below is a selection of images



from the gala.





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## Gwili Class 117



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## Forthcoming Events

Date	Railway
September 11th & 12th	Midland Railway Butterley
October 8th-10th	Severn Valley Railway

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## Class 101 Material Appeal

Do you have any memories or accounts of Metro Cammell Class 101s?  
Do you have any images of Class 101's either in BR service or any of the vehicles that see use on preserved lines?  
Have you ever been involved with any of the vehicles in preservation?

Hopefully we can gather as much information as possible on these units to put together in a feature for issue 101. Any submissions, no matter how small or unusual would be welcomed before the next bulletin.

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## 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](mailto:railcar@live.co.uk) The following types of submission would be most welcome:

- Photographs of vehicles in service
- Restoration articles
- Reports on special events
- Requests for information
- News & images of recent DMU activity

- Anything that featured in the pre 2004 bulletins
  - Anything that may be of interest to readers
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Feel free to send submissions at any time to [railcar@live.co.uk](mailto:railcar@live.co.uk) but no later than August 30th for Issue 101 (due out September)