

AUTOCAR

North Eastern Railway 1903 Electric Autocar Trust

Newsletter No. 42 — Winter 2020



The North Eastern Railway 1903 Electric Autocar Trust

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www.electricautocar.co.uk

Chairman	John Furness 8 Hartwith Green, Summerbridge, Harrogate, HG3 4HX. Tel - 07496 443302
Secretary	Dave Cullingworth 29 Beckett Close, Nawton, York, YO62 7SB. Tel: 01439 771 758 E-mail: dcull641@gmail.com
Treasurer	Peter Lund 41 Penfold Way, Chester, CH4 9NL. Tel: 01244 661 070 E-mail: pdlund47@gmail.com
Editor	Simon Gott E-mail: autocar.newsletter@gmail.com
Membership	Stuart Hiscock 2 Lairs Crescent, Snainton, Scarborough, YO13 9BQ.
Project Engineer	Steve Hoather M.A., C. Eng., F.I. Mech. E., F.I.E.T.

Front Cover: *The autocar and autocoach, on a brake testing run at a wet Bow Bridge Loop (the western end of the Embsay & Bolton Abbey Railway). (Dave Moore)*

November 2020

Welcome to the 42nd issue of our newsletter. I hope you and your families are all well and are able to have a good Christmas. There have been many words used to describe 2020 — tumultuous is probably one of the more polite ones — and we're all hoping for a less dramatic 2021. We hope to put the finishing touches to the restoration and if possible, start touring.

Like any railway activity, there will always be jobs to do, whether routine maintenance or special projects. If you can help, whether it's with practical work or 'back-room' support roles, do please let us know. As 2020 has demonstrated rather painfully, life's full of surprises and sometimes we lose people with very little notice, which leaves a big gap to fill.

Last issue's 'centrefold' has been well received and I've passed your comments and compliments to Alan. Several people have suggested we do prints of the picture — we like the idea but need someone to take it on. Any offers?

Email addresses — those of you able and willing to use email to correspond with us, could you email us as per the request on page 4? Thankyou.

Stay safe and best wishes to you all.

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Chairman's notes

John Furness

You might expect in these plague-ridden days there wouldn't be much to report. How wrong! The headline is, as you will read elsewhere, the trailer coach has now driven the autocar to Bolton Abbey. As the driver, I can state this was a somewhat surreal experience. You move the controls and in silence the world starts to drift by. No doubt main line drivers on the east coast main line are used to this. But once again in preservation we have probably created another first. Preservation's first DVT (driving van trailer)?

It is probably no surprise the AGM was postponed. We intend to have another go in January. But we'll have to go techy and use Zoom. One item which would have come up is the Trust's own shed. All I can say now is this is ongoing. Discussions are happening which could fulfill this dream. More later, when confidence allows.

Opposite: *John examining the NER painted sample of Rails' model of the autocar.* (Alan Chandler)

Members' email addresses

Could those members with email addresses please 'check in' with an email to autocar.newsletter@gmail.com ? So we know what your current address is.

To both save money on postage and minimise trips outside whilst the virus is widespread, we would like to maximise our use of email wherever possible.

Unless you've specifically requested you receive a newsletter by email, these will always be posted out, but it would be useful if we can send as much general correspondence as possible by email. Thankyou.



Autocar Trust Vacancies:

Publicity Officer, to publicise and promote the Trust, liaise with the media and engage with the public, including online through social media.

Fund-raiser, both to solicit donations & generate finance through sales.

Civil engineer, for leading a shed construction project.

Grant application lead, for the shed/museum.

Any **members of professions**, for technical advice when needed.

Volunteers/stewards, to assist with passenger PR work and staffing publicity/sales stands at exhibitions and/or when the autocar's 'on tour'.

Please contact us via the details given on the inside of the front cover.

Progress Report

Steve Hoather, pictures Alan Chandler

The Power Car returned from Loughborough on August 5th. As described in earlier newsletters, most of the work done there was electrical, to improve performance and to power the electric heating system on both coaches.

We tackled the heating first, since although the heaters had been tested at Loughborough, this was with temporary wiring and we had to fit permanent wiring by feeding the conduit and cable up from underneath and then running the conduit back to No 2 cab. This proved a bit easier than anticipated (most unusually on this job!) and by the middle of September the heaters were complete and ready for use. As will be seen from the photo below, they are unobtrusive and the length of visible conduit very small. Having the heaters makes the vehicle a much more attractive proposition for use in the colder months, and the Railway had already announced some running dates for November when the second lockdown was announced.



The remaining work on the Power Car is relatively minor. Colin and his wife are working on curtains for the windows, and Alan on straps for standing passengers. Old photos show that these were fitted originally, and we are very grateful to member Martin Barker who offered to pay for them. The straps themselves have been ordered from the same firm who supply Crich Tramway museum and Alan is modifying some commercial brackets to support the wooden poles, which, as far as we can tell, are similar to the original – see photo below of the brackets in Alan's workshop. There are a lot of them as the supporting pole has to be in sections to clear the roof crossbeams. After that, the only other significant tasks on the Power Car will be to fit retractable blinds behind the driver for use after dark, and some extra steps to make climbing in and out a bit easier.



Having finished the heating on the Power Car, the two coaches were coupled together in the carriage shed to allow testing of the air and electrical systems which we had installed on the trailer. Most of the air and brake system worked well, with only a few minor leaks on the inter-vehicle hoses, but when we came to test the passenger alarm system we hit problems. The PA valve is an ex LNER

dual air and vacuum one, which had been recovered from a scrap coach body in the north of Scotland. It worked fine when I pulled the chain in one of the compartments, but would not reseal and continued to blow air. On investigation, it turned out to still have a leather washer as the valve seat, but even when I replaced this with a new rubber O ring, it still would not seal. As it is located high up on the end of the coach, it is very difficult to investigate in situ, so we have temporarily removed it and blanked off the connection. Dave Moore will investigate it as he has a bench with an air supply.

Next job was to test the trailer control system, and as so often, it was the simplest thing which caught us out! There are 36 control wires between the two vehicles, so each buffer beam is fitted with a 36 way HST style socket. Some time ago we had acquired an HST control jumper, indeed in newsletter no. 34 nearly three years ago, we proudly showed a photo of it. However, when we came to plug it in, I realised it was not long enough to allow for the side-ways movement between the coaches as they go round curves. It was, however, sufficient for static testing, with limited movement within the shed, just enough to tell us that the train went backwards when it said forwards – a matter of swapping two wires over. Apart from that, everything worked OK.

We were lucky to locate a surplus extra long cable which already had the correct plugs at each end, so Dave Moore was able to shorten it (see below). He



therefore came up on 29 October, when we had arranged possession of the line for some running tests. The aim was to test not only the brakes and control system, but the trailer in general, since as far as we can ascertain it has hardly turned a wheel (apart from short trips at Elsecar) since it was delivered to the NYMR in 1975. As it was raining constantly, we avoided heavy braking in case the wheels picked up and caused flats, but as far as we could tell (by observing the buffers between the two coaches) the braking rate of the two vehicles is similar, as it should be. The only problem encountered during the day was that the SSF operates when driving from the trailer above two mph – this is a safety system designed to prevent a driverless train running away, so clearly a circuit modification is needed.

In view of the new lockdown, we will leave the full brake testing (which needs to be witnessed by our independent engineer) until the Spring, but the day marked another major milestone in the project.

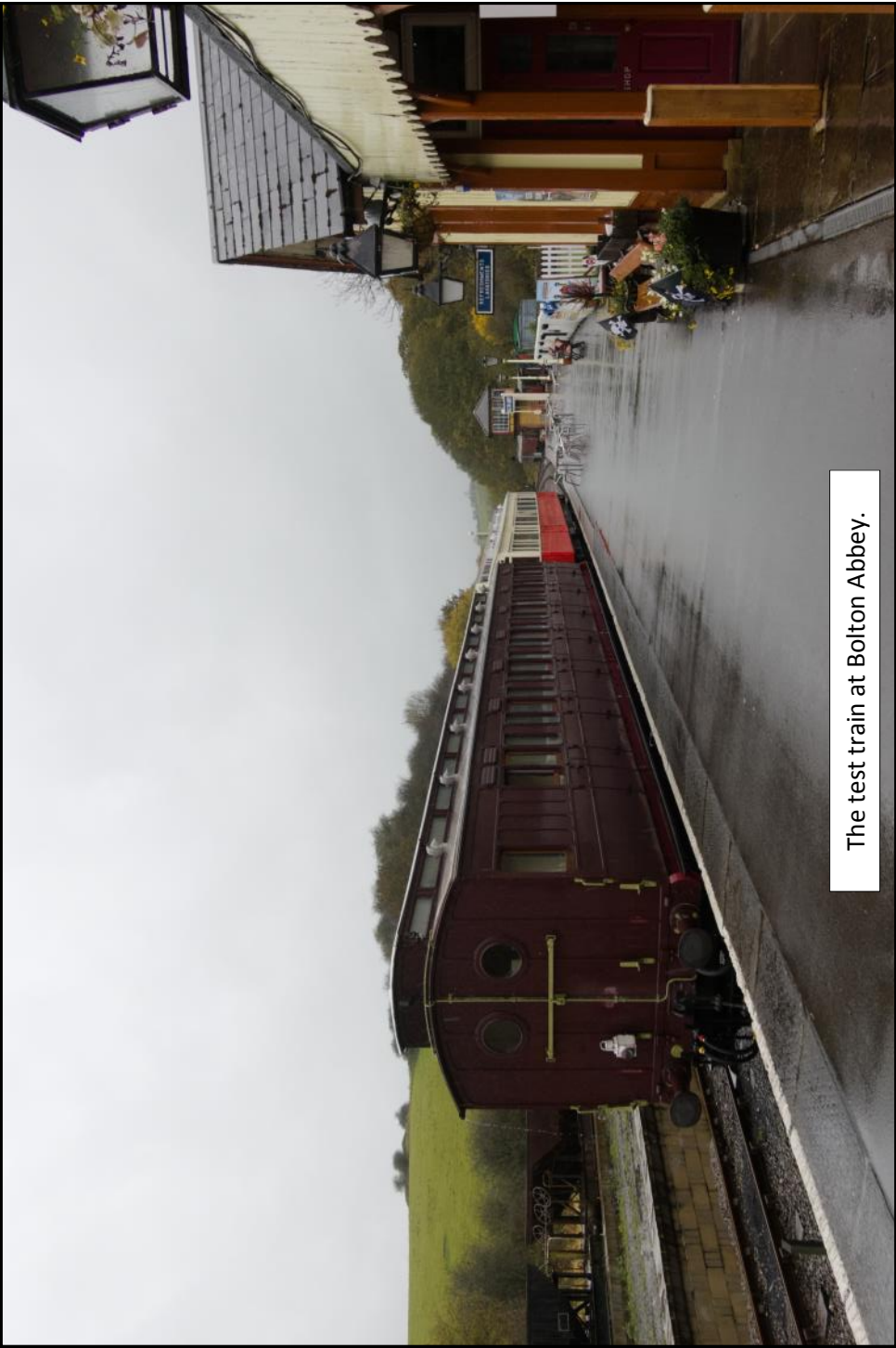
Geoff Wilson has been working on the luggage racks for the trailer – we have had some new aluminium brackets cast, and there is quite a bit of other internal work to do before the coach is ready for external painting next year.

Below: No. 3170 passes Embsay's signal box on the way from the carriage siding.





The test train leaving Embsay, with full control of the brakes and power from the trailer cab for the first time.



The test train at Bolton Abbey.



Above: No 1 power car cab with the new stepstool mounted on its bracket. This doubles up as a perch seat, and it's kept on the vehicle in case the coolant header tank needs topping up.

Below: Dave Moore in the trailer, checking the operation of the brakes and the illuminated gauges.



Annual General Meeting

Unfortunately, due to the second lockdown, the AGM planned for the 7th November had to be cancelled. As this had been arranged with members having to register their attendance, it was easy to contact them and avoid the need to do another full mailing to all the members.

The decision has been made to reschedule the meeting in January, but this time to have a virtual meeting only. It would make no sense to try and have another physical meeting as we do not know whether there will be another lockdown or what travel restrictions will be in place.

We are giving you the opportunity to join the meeting virtually or vote on motions using the postal ballot paper included with this newsletter. You also have the opportunity to ask questions that will be tabled at the meeting. If you want to be involved in the meeting that will be held using Microsoft Teams, please let me know.

Secretary's Role

I had previously taken the decision that I would step down as Secretary at this AGM, however as there have been no candidates forthcoming, I have decided that I will put my name forward for re-election. On reflection it would be good to still be involved to see the completion of 3453 and regular running of a two carriage unit.

Best wishes to you all. Have a happy and safe Christmas.

D. Cullingworth 12/11/2020

Wartime/1940s weekend autocar photos

Alan Chandler



Four views from Embsay on the 13th September.







Wet weather testing at Embsay on 29th October 2020. (Alan Chandler)