

The Bluebell Standard

Newsletter of the Bluebell Railway Standard Class 2 Project

Issue 21 Summer 2016

Locomotive Report

This is the twenty-first issue of our news-letter for supporters of the project.



Driver's Pedestal trial fitted.

The best is being made of fine weather to advance pipework installation and complete the preparations for setting the frames on its coupled wheels.

The driver's pedestal was delivered from Pentacraft, a local firm, as a pack of laser cut and, where needed, folded pieces. Nick produced .dxf files for the profiling, thereby saving money and making sure that the shapes we needed were delivered. Brian has stitched the main parts together and trail fitted some of the controls when the image above was taken. Since then door hinges have been made and attached. Fitting the pedestal is key to providing the accurate terminal points for pipework installation we need. Inside the pedestal it is already competing for space.



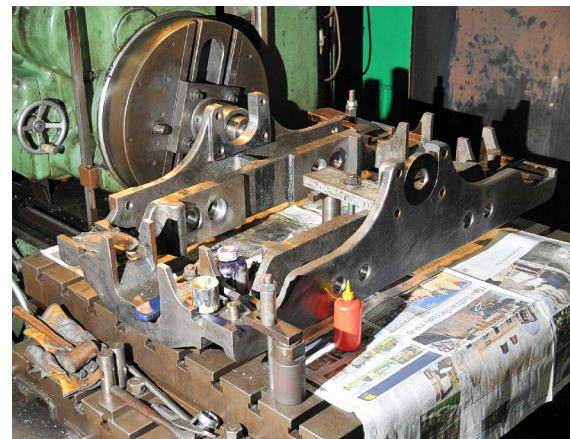
Checking a horn guide liner against a frame button.

It seems a long while ago that Stan and I checked the frame horn buttons from the hind faces of the cylinders. More recently checks have been made on the

alignment of the horn faces with respect to the frames centre-line as well as their flatness. Each horn block has been blued and high spots removed. The survey, the first since the frame extension was fitted, has revealed an unexpected lack of alignment at the trailing set which has been confirmed by painstaking measurements of the trailing set horn buttons. At the same time, the correct alignments of the leading and driving horns were confirmed. We have speculated about the reasons for this but decided that our priority is to ensure the horns are correctly aligned in order to deliver the prescribed axle box positions. This is now nearing completion.

Steve has completed the machining of the bearing surfaces of all six coupled wheel axle boxes, which as we have reported had been re-metalled. Some additional work on the trailing pair is needed.

Peter has nearly completed work on the keeps for these boxes and will shortly make a start on the truck keeps. We have all the necessary castings.

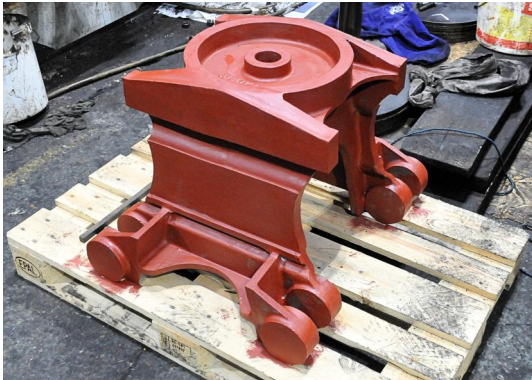


Hind Truck Frame in the Works.

Derek continues with the machining of the hind truck frame casting, subject to other priorities in the works. As may be seen in the image above this is a complex task. The mounting faces for the Side Motion Restraining Gear will need some special attention.

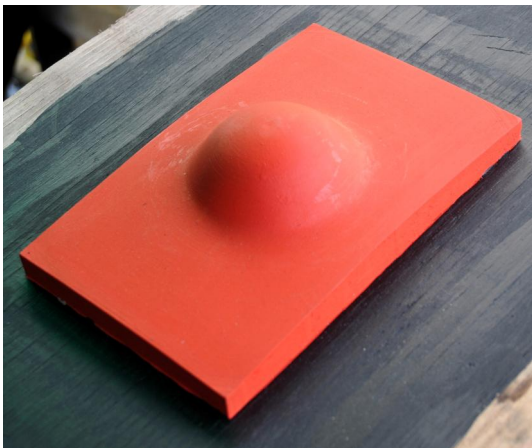
Furniss & White have been very helpful in dealing with the defective truck cradle casting delivered in 2013. As the result of detailed discussions, the pattern set was altered by Roy to deal with the

unexpected casting behaviour on cooling and a new order placed without any significant additional cost to the project. The resultant casting has been found to be satisfactory and now awaits machining. We understand a second casting has been taken for 82045.



Cradle Casting awaits machining.

Roy has also made patterns for the cradle thrust washer and the axlebox bearing spring yoke pivot plate, which are being cast by Maybrey Reliance, who are also making those the four spacers needed for the cylinder cocks. Only the BR Standard Class 2 uses these.



Pattern for Axlebox Bearing Spring Yoke Pivot.

We are also preparing to order a Pony Truck Radial Arm for the hind truck. At present the plan is to make the frame from a single piece of plate which will also deliver the Bearing Spring Yoke side plates that happen to be the same thickness. Sketches of the plates and a nesting sketch have been prepared from which Nick has created .dxf files to enable numerically controlled profiling.

Work on all the hind truck swing links has been completed which now need to be sent off for gas-nitriding.

The exchange of return crank forgings with Mid Hants Railway took place as planned and we have received the cast

iron sand box lids and the gunmetal castings for the cylinder cock end connections and sieves that we ordered from them. David has been machining the cylinder cock bodies and internals.

We have also ordered castings for the Driver's Brake Valve using patterns kept by the Bluebell Railway.

Roy also has in hand the pattern set for two cast iron lids for the leading sand box. Any doubts about the correct type of lid were put to rest by seeing those on the Standard 2-6-0's on the Great Central and confirmed by drawings. Sheena at the Carriage & Wagon Works has been good enough to offer assistance with some wood turning for this.

The installation of lubrication pipework has slowed in favour of preparations for getting the engine on its wheels.

A scheme to extend the present line of gabions and back fill with hard core to create a level area alongside Atlantic House has been agreed and it is hoped that this will start in the near future to improve our work area. Our container will be repositioned and the "Poly-Shed" erected above a length of track parallel and alongside Atlantic House.

Fund-raising

We set up our stall at the Toy and Collectors' Fair at Horsted Keynes in April and collected a useful addition to our funds. Our thanks are due to those who give us books and other items to sell. As ever, thanks are due to Barry Jones for his generosity and interest in the Project and to others on the Railway who are good enough to allocate funds from events.

A donation from the Brighton Branch of the Locomotive Club of Great Britain to acknowledge a talk to their meeting on 23 May has also been added to our funds.

Thanks also to the working volunteers, some of whom come a long way to help, to workshop staff and to those on other projects for their willing help and advice.

We are particularly grateful to all our regular and occasional donors, to whom this newsletter is really addressed, and to those who help in so many ways in support of our publicity and fund raising efforts.