

Progress - 2009

Aim for 2009 - to produce by the end of the year a rolling chassis for 1014.

Strategic Intentions for 2009.

The Chairman has directed that procurement of the wheels proceed at best speed. It is our assessment that the work on the mainframe, including axle-boxes, for re-wheeling will cost about £11k which will be funded. It has also agreed to buy any suitable pieces of motion that become available, at risk.

We are also intending to facilitate an early meeting with Richard Watkins, from Crewe, to consider the boiler strategy.

Mike Cooper is also looking to see how we can put more effective time into the project by organising volunteers for works parties every Saturday.

January

A relatively quiet month, but progress was made on several fronts.

Frames:

Work continued to 'free' the rocker-shaft bearings.



17/01/2009 - working on oversize rocker- shaft bearings.

Oil-keep repairs - in-hand. Phosphor bronze inserts silver soldered on to the damaged section of the axle box keep.

They will then be shaped and machined to integrate them into the oil-keep structure. This is being undertaken 'in house'.



17/01/2009 - repaired section silver soldered into place.

Work on the drop valances beneath cab continued:



17/01/2009 - valance being drilled to take fishplate rivets.



17/01/2009 - valance fishplate bolted into position. Valance also drilled to fit frame angle 21 which supports the cab structure. Ultimately, valance, frame angles and running plate will be riveted together.

The fall-plate (between cab and tender) was derusted and painted prior to storage.



17/01/2009 - fall-plate drying off outside Didcot Works.

Bogie - Axle-box guides and horn block guides measured. Little wear apparent on horn guides, but axle-boxes need attention.

Furthermore, dumb-irons fitted and spring cotters completed.



17/01/2009 - Dumb-irons bolted in place.

Unfortunately, as a result of circumstances beyond the Project's (or G.W.S.) control, the visit to Barry to undertake removal of items from 5227 appropriate to 1014 (and 2999) in exchange for duplicate parts held at Didcot has been postponed.

Mike Cooper et. al. made a repeat visit to N.R.M. (along with the 6880 Project team) to examine the contents of more than 200 drawing boxes. More gems were discovered, 20 or so of interest to the 1014 Project (still approximately 80 drawing short, but they are 'on the case'). N.R.M. currently pricing the microfilming and digitising of the drawings.

Axle-sheaves removed to Riley's 31/01/2009 in readiness for fixing to axles.

February

Progress slow but satisfactory on a number of fronts, but some issues remain to be engaged and resolved. Orders placed for a number of small parts and a number have been received: oil underkeeps for bogie from Nova Cast (a good job), rebushed main spring links from FabTech, replacement bogie leaf springs from Owens and mudplates for bottom of exhaust box from Procut.

Rocker-shaft bearings - work continues to 'free' them. Slightly oversized bearings seems to be the problem - to be machined in-house.

Silver soldering of the oil keeps completed. Given new 1014 identity. Cleaning to follow.



14/02/2009 repaired oil keep - newly soldered pieces 'blended' into main body of keep.

Footplating adjusted to the drop valences. Areas to be removed identified and marked. Redundant Modified Hall-type frame-angles to be removed and new ones appropriate for a County (Lot 354) to be fitted.



14/02/2009 - derusted and primed spring accessories.

Remaining spring accessories derusted and painted (primer) and placed in storage.

Work on bogie axle boxes commenced. First attempt at white-metal ling hampered by inability to clamp bearing for machining.

While obtaining quotes for replacement County specification (Lot 354) bogie springs from manufacturers a number of potential bogie springs were produced from stores. Tests proved they were congruent with the specification and readings suggested they would only require re-tempering. This represents a considerable saving over the anticipated purchase of new springs - re-tempering 9 springs - £600, purchase of a minimum number of 16 newly made springs £5,500 from GB Springs in Birmingham - it speaks for itself!



14/02/2009 - potential bogie springs undergoing a Hook Test. to ascertain whether they are appropriate for the County specification.



14/02/2009 - newly cast letters 'o' and 'f' for name-plate.

Manufacture of new 'County of Glamorgan' name-plate progressing. Last two pairs of letters cast by Hunt Castings of Romsey. Rivets for attaching letters to back-plate (also in process of manufacture) acquired from Bradley Rivets of Solihull.

Pooley van now in position where we need it! Cleared of rubbish and assessed for necessary repairs - starting at the end of March, by the Project Group. Measuring-up for shelves etc. in process.

March

Right hand rocker-shaft bearing now free. Left hand bearing damaged and replaced - machining will take place in April.

Oil keeps given new 1014 identity, prior to sand blasting and cleaning.
Wiping pads to be replaced - currently estimates being sought.



14/03/2009 - repaired oil keep, showing new identity.

Step back plate received. Positions of rivet holes measured, drilled and then trial-fitted.



14/03/2009 - Step-plate being drilled.



14/03/2009 - trial fitting of the step-plate beneath the cab side under valance.



14/03/2009 - trial fitting of step-plate and measurement for rivet holes for attachment to valance/footplate.

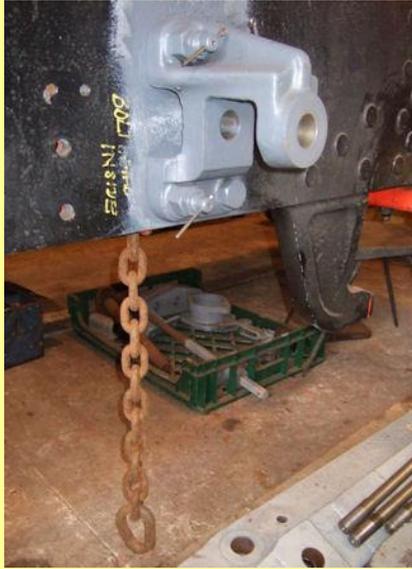


28/03/2009 - measuring-up continues.



28/03/2009 - Step-plate temporarily bolted to undercab valance - will eventually be riveted into position, when footplate is secured. Later steps (already delivered by FabTech) will be fitted.

The running plate has been marked out for riveting, a complex task which also involves riveting the cab sides, under cab valance and the running plate. However, before that can begin an assessment of the positions of existing rivets linking frame angles is required, as some need to be removed and replaced to fit into the Lot 354 specifications, as they will have an impact on the clearances required by the 6' 3" driving wheels.



Derusting and painting (primer) of all spring accessories complete.

Swaps - a set of pistons and rods has been swapped for the Modified Hall-type smokebox saddle. Another impending 'swap' is the production of a pair of cross heads suitable for 2999, in exchange for a set from 4942 (the basis for the recreation of the Saint) which is compatible with the County specification, but not with the Saint's.

14/03/2009 - Checking suitability of a sample required as brake cross beam suspension chain. Suitability proved, five more ordered and delivered (by 28/03/2009) from Hirsts.

Bogie - one axle-box has been remetalled with white metal. Machining has started, but is a slow job.



14/03/2009 - Machining bogie axle-box bearing.



28/03/2009 - One done! Three more to go.



28/03/2009 - Bogie axle-box springs delivered and prove satisfactory.

Work completed on restraining pins on countersunk screws on wearing plate - a small, but essential job.



14/03/2009 - restraining pin in place on head of countersunk screw.



14/03/2009 - task complete - restraining screw level with head of countersunk screw and rubbing plate.

Pooley Van - the Pooley Van is where it is needed and work has started to ready it for its role as the Group's secure store.



28/03/2009 - Assessing the exterior work needs on the Pooley Van.

Work will be minimised, so long as the van is weather-tight and reasonably secure. Much of the work will be undertaken by the 1014 Group, but the Didcot Railway Centre Carriage & Wagon Department will play a significant part too.



28/03/2009 - the interior of the Pooley Van - remarkably clean! One of the benches has been stripped out and the floor plan has been measured. In addition, measuring-up for suitable storage shelving has been undertaken.

In general, progress during March was satisfactory.

April

Overall, another satisfactory month's progress.



11/04/2009 - newly manufactured steps ready for fitting to cab step plate.

Work concentrated on cab step plates and steps - these were assembled and fitted.

By the end of the month the steps had been bolted to the cab step plate and the latter bolted to the undercab valance in readiness for final riveting during the August Work Week.

In this same general area the foremost Hall frame angles have been removed, the holes plugged and new frame angle 18s positioned.



02/05/2009 - cab step plate with steps 'fitted' bolted to under cab valance. (Terry McCarthy)



02/05/2009 - general view of the frames showing progress to date, plus an array of 'bits' previously cleaned and primed. (Terry McCarthy)

The components neatly arranged on the floor alongside the frames demonstrate the need for the Pooley van for storage!

Preparations for the van making good progress, with repairs made to the door guttering, security bolt and general woodwork. Windows being refitted and repaired as necessary. The first lot of shelving has arrived and will be erected soon, while an electrical supply is being planned.

Once complete, many of the parts shown, besides others, will be stored securely, also freeing-up space around the locomotive to enable work to progress safely.

Bearings have also been removed from the brake cross beam stub ends, revealing the need for new bearings and reconditioning of the threaded spigots.



11/04/2009 - The three locomotive brake cross beams showing the varying states of the stub ends,



11/04/2009 - One of the better stub end spigots - reconditioning needed - minimal.



11/04/2009 - Close-up of the 'worse-case scenario'! This stub end spigot will require a lot more work - building up with weld and rethreading.

Work on modifying the motion brackets to County (Lot 354) specification has started. Only four of the ten bolts recovered were considered serviceable. Replacements, plus nuts have been ordered.



25/04/2009 - machining the first of the two motion brackets to the dimensions required for a County.



11/04/2009 - Spring accessory plates (to fit on the end of the springs) cleaned and primed.

Work on the bogie components continues. One axle box has been machined and is complete. A second has been remetalled and ready for imminent machining. Yet more small, but essential components have been cleaned and primed, in readiness for reassembly of the bogie.

Boiler - meeting with Richard Watkin of L.& N. W. Crewe indicated that the proposed modifications to the 8F boiler, to bring it to Standard 15 OA specifications, were feasible and practical. An agreed repair/modification specification is now being drawn-up and priced. In the meantime, drawings relating to the work are being gathered - 27 out of the 38 needed have been located to date.

May

Again, slow, but steady progress - much preparatory and planning work, including another trip to N.R.M.
15/16 May - no major discoveries of additional drawings for Lot 354.

Gary Davies completed 1014's nameplates - production having been started by Peter Rich:



Completed nameplate, attached to previously manufactured backing-plate, posed for photography prior to being placed in secure storage.

Work has been concentrated on two main areas of the locomotive frames. Machining of the motion brackets has continued. All the old fitted bolts have been removed from the Left hand bracket. Replacement bolts have been delivered - nuts from RCF and both round head and counter-sunk bolts from Tadley Engineering.



24/05/2009 - machining of second motion bracket to Lot 354 specifications.



24/05/2009 - Frame angle 18 bolted to frames and supporting the running plate.

At the rear end of the main frames holes for footplating on left hand side drilled were drilled in early May. Plugs prepared for filling redundant holes in frames. Forward Hall frame angles removed for set-up of frame angle 18. Later in the month, frame angle 18 fitted to the right hand side.

Meanwhile, machining of replacement inner rocker shaft bearing almost complete.

Progress was also made in fitting out the Pooley van. Steel mesh for window grills has been delivered, along with timber for door repairs. Roof still to be recovered, new steps fitted and installation of more shelving.

Finally, all driving wheel and bogie springs delivered by Owens.

June

Two significant off-site developments:

1) David Bradshaw and Keith Gilbert had a successful meeting with the group building an L.B.& S.C.R. Atlantic on the Bluebell Railway, relating to the manufacture of motion using water jet cutting from a billet of suitably specified steel. Interest also shown by the Patriot Group. Procedure being considered by a Vehicle Acceptance Board (VAB) engineer - if approved could have interesting ramifications for a number of locomotive projects.

Good to see the high level of co-operation between groups recreating long scrapped types of locomotive.

2) Machining of wheels and axles complete. Rileys waiting for pins to lock these items together before proceeding to assembly in a matter of weeks.

Left hand rock shaft bearing still causing difficulties, despite new inner bearing.

Preparatory work for fixing footplating continues. Both new frame angles 18 supporting the footplating. Most of the old holes in frames now plugged and frame dressed off. Final Hall bracket on right hand side removed. Task in hand - fit right hand footplating to drop valences and countersink all holes on inner face of frames ready for riveting (work week).



Motion bracket modifications - to clear County 6' 3" driving wheels almost complete. New countersunk bolts necessary to fix modified brackets to frames also to provide necessary clearance for larger (than Modified Hall) driving wheels.

20/06/2009 - modifications to motion bracket to Lot 354 specifications.

Discussions in hand with Pipaway of Milton regarding the casting of a replacement, double-chimney exhaust cruciform.-

Meanwhile cleaning, derusting and priming of numerous small(ish!), but vital parts continues.



20/06/2009 - Derusted and primed front cylinder cover.

During the month work on bogie coil springs completed - awaiting delivery to Didcot.

Machining of bogie axle boxes set-up. Horn glide bearings on one front axle complete, with machining of bore and thrust face on a second.



20/06/2009 - machining horn glide bearings.

Progress is also being made on the Pooley van - our essential secure store facility at Didcot. During June, new steps were manufactured and fitted, plus a new door panel. All repairs being undertaken with the intention of

restoring the van when the G.W. County Project have finished with it.



12/06/2009 - newly manufactured steps for Pooley van.



20/06/2009 - new steps completed and fitted to van.

July

Three work days saw a fair amount of positive progress. Some work undertaken in preparation for Work Week - team of 7 - 9 recruited to complete a number of major tasks:

- Riveting frame;
- Fitting running plate;
- Machining and cleaning cleaning axleboxes.

Design work for conversion of exhaust cruciform to double chimney configuration complete - will be submitted to Pipaway Engineering, Milton, for pricing.



Rockshafts now complete and operating smoothly.

Motion bracket modifications completed.

04/07/2009 - modifications to motion brackets completed and bolted to frames using appropriate countersunk bolts - to provide clearances for larger driving wheels.

Frame angle 18 fitted on both sides holding-up footplating. Old holes filled and dressed. Final Hall bracket on left hand side removed and holes plugged. Frame angle 40, drilled and fitted to both sides. In the process discovered that frame angle 49, part of the cab structure must be fitted soon.

Many small tasks completed including:



18/07/2009 - Oil keep bolts - cleaned in readiness for fixing oil keeps to main axles boxes.



18/07/2009 - newly manufactured ties - long bolts, threaded at both ends, with a split- pinned bolt at one end, used to secure top and bottom covers of the brake vacuum cylinders.

Progress on the bogie continues. The coil springs have been completed and delivered by GB Springs. We now have eight for immediate use, plus one spare.

Two of the axleboxes are being machined and another needs some additional white metalling.

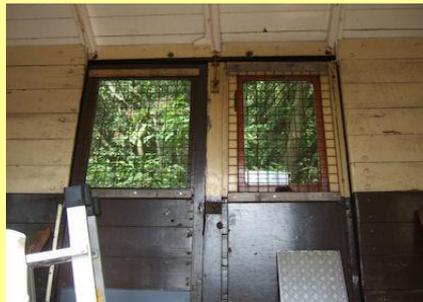
Pooley van - good progress made. Roof felting completed and is watertight. Security grills being added.



04/07/2009 - roofing in progress.



18/07/2009 - Pooley van watertight (needed this 'summer'!!)



18/07/2009 - interior of Pooley van. Some security grill fitted to windows. First set of shelving to be installed.

August

Dominating the month was 'Work Week', a time which proved the adage the 'plans of mice and men ...' Circumstances beyond the control of the working team prevented the accomplishment of the work on riveting the running plate etc. because:

- 1) H.M. Factory Inspectorate decided to make an unexpected call - thus time when we might have had access to the compressor was lost as the team had to spend time clearing areas in readiness for inspection.
- 2) The compressor was unavailable when required.

Despite being thwarted thus, a number of tasks were undertaken and progress was made.

Frame angles 28 and 40 were drilled, reamed and the frame holes countersunk in readiness for riveting. Frame angle 49 was fitted. The rivets were also cut to length.



08/08/2009 - Frame angle 49 fitted to frames.



08/08/2009 - cleaned oil-keeps.

Brake crossbeams - heat-shrunk fitting of replacement threaded stub ends to two of the three brake cross beams complete.



08/08/2009 - close-up of repaired and rethreaded brake cross beam stub.

Exhaust system prepared for removal from site to Pipaway for reconstruction to double blastpipe specification - move due to take place 25/08/2009 - job to take 7 - 10 days.

Bogie - work on bearings resumed later in month. Two axlebox bearings have been machined, one is being white metallised, while the fourth awaits attention.



08/08/2009 - Rock shaft castellated cap nut.

Off-the-shelf fasteners are cheap (10-20p each) but have a low material specification (MATSPEC) so are unsatisfactory for most of our purposes. Correct MATSPEC nuts/locknuts can cost up to £4 each when purchased in the relatively small quantities we need. Mike Cooper is on the case! However, orders have been made for appropriate nuts, locknuts and castellated nuts.

Time was spent locating various items from stocks at Didcot - e.g. 5 piston valve covers, a complete set of locomotive brake rodding, a rear right-hand cylinder cover pattern.

Pooley Van - August weather proved the efficacy of the re-roofing work! Rack installed and populated. The filing cabinet has been placed inside, along with various tools.



08/08/2009 - What the Pooley Van was intended for - storing our 'kit'.

Although there were frustrations during August, the positives out-weighed the negatives. Much significant background work was undertaken, including discussions in Llangollen about the process of water-jet cutting steel for valve gear, acquisition of copies of drawings from N.R.M. and planning for the tender.

September

A month of consolidation and steady progress.

Work continues on the fitting of the running plate to the frames. On the right hand side, frame angles 18 and 19 have been fitted together and completed. The reverser pedestal has been recovered, cleaned and fitted to running plate.



19/09/2009 - under view of fitted frame angles.



19/09/2009 - reverser pedestal fitted on to right hand running plate.

Main axleboxes confirmed serviceable. Underkeeps cleaned. We now have springs, links, link pins, spring hangers, accessories, nuts and bolts to fit wheels.

Negotiations with a local supplier has resulted in a more attractive price (lower!) price for the nuts needed. In the quest for a rolling chassis, the Project team; Keith Gilbert and Mike Cooper, with Colin Evans (metallurgist) are working on a technical paper on water jetting valve gear/motion. The case in favour of this method of production seems strong.



Further progress with rockshafts - fitted correctly and pinned.

19/09/2009 - Rockshaft caps fitted and pinned.

Exhaust conversion not yet started - move to Milton postponed to overcome some health and safety issues. In the meantime, the exhaust box and mudplates have been repainted in readiness for refitting modified exhaust system. Fasteners to complete this task are available.

Boiler - Ted Lacey has produced another tranche of drawings. The N.R.M. is ready to begin production of the drawings we require from the Swindon Collection.

Bogie - machining of axleboxes resumed. Tee bolts for bogie oil keeps complete. Work on oil keeps almost done - wiping seals on order from Severn Valley Railway M.P.D. Once these jobs are finished, the bogie will be substantially complete.

Pooley Van - electrical loom complete and operational.

October

The big news of the month - progress on the wheels.

In a statement the Chairman outlined progress to date and indicated the next stage in their production: Up at Ian Riley's workshop in Bury the six driving wheels and three axles have all been machined during the last couple of months and at the beginning of October the wheels were pressed on to the axles. At the time this was done using temporary keyways and at the time of writing the final keyways are about to be pressed on - you can see the temporary keyway protruding slightly between the main axle and the hole for the crank pin. The centre driving axle has also been machined to take the eccentric sheave which is also ready for fitting. This is a major step forward but there is still plenty to do. The tyres for the County driving wheels have now arrived from South Africa and been delivered to Buckfastleigh where they will be fitted to the wheels which will be the next step. After that we still have to final machine the bore holes for the crank pins which also have to be manufactured and fitted. Finally we need to fit the balance weights.



15/10/2009 -At Riley's, wheel being pressed onto axle after machining. Second wheel in readiness for pressing onto axle. (Stuart Grey)



15/10/2009 - Wheel being pressed on to machined leading/trailing axle. Middle axle required further machining for fitting of eccentric sheaves. Key-ways shown on axle. (Stuart Grey)



15/10/2009 -Wheel-set completed. (Stuart Grey)



15/10/2009 - View of wheel-set. Almost ready for despatch to Buckfastleigh for fitting of tyres etc. (Stuart Grey)

Once at Buckfastleigh measurements will be taken - axle journal size and back to back measurements to facilitate axlebox machining.

Work continues on the rear parts of the frames. A system has been designed to secure back of splashers to frame. To start the work, three parts of frame angle 19 welded.

Work to secure splashers and footplate to frames continues - right hand side secured to frame by 24/10/2009, while work continues on left hand side. Plans discussed for the next stage on rear undercab running plate and components - necessary to fit the cab side sheets.



10/10/2009 - Frame angle 19 welded-up and ready for fitting.



24/10/2009 - Vacuum brake pump cover fitted into place on right hand side running plate.

Other fittings added: hinged plate giving access to vacuum brake pump.

Following discussion, research, negotiations etc. the Project has been able to arrange the loan of a pattern for the rear cover of the right hand cylinder. An order has been raised with delivery to Didcot at a cost of £250. Machining will be undertaken 'in house'. This will provide the fourth of the cylinder covers required.



10/10/2009 - Pattern for R.H. rear cylinder cover, before despatch for casting to be produced.

Exhaust system arrived in Pipaway early in month. Rapid progress made to convert it to double blast-pipe configuration.



24/10/2009 - Exhaust almost complete at Pipaway. Four fillets to be added.



24/10/2009 - Exhaust mounted on exhaust cruciform. Awaiting sandblasting of rusted areas and priming.

By 31/10/2009 - Exhaust conversion complete. Sandblasting and priming in-hand. Arrangements being made for return of exhaust system to Didcot, where it will be refitted at the earliest opportunity.

Work to produce a technical paper on the use of water jetting to produce valve gear continues - version 5 to be published early November. Major issues - meeting toughness criteria and supply of suitable thickness of the appropriate steel plate.

Project to produce a reversing rod for 2999, in exchange for that from 4942 - not as stress critical as valve gear. Gary Davies to produce replacement bolts etc.



10/10/2009 - salvaged reversing rod bolts etc. - patterns for replacements.

On-going discussions about cross heads - one suitable for County found in security. Project will have to manufacture another.

Brake crossbeams being worked upon and brake hanger drilling complete, thus brake system in various stages of completion. The top and bottom pins are to be fitted with grease nipples.



10/10/2009 - completed bogie underkeep bolts in readiness for reassembly of bogie.

Work on bogie components continues. Axlebox and oil keep bolts complete.

By mid October another axlebox set-up for machining in vertical borer. Machining continues, slowly but surely.

November

Axlebox machining continues. Order for axlebox felt pad lubrication cages cancelled - nothing done for 4 months. Alternative supplier sought and possibly found.

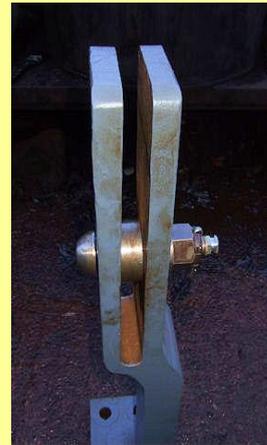
Inventory of stock of motion parts undertaken - Dave Bradshaw seeking 'spare' and suitable motion parts. One such item - crossheads. A left hand crosshead (Modified Hall-type) has been confirmed as being of the correct pattern and has been placed in security. A number of potential right hand crossheads are being examined to ascertain they are correct for the County.

Investigations into the issue of producing motion parts by water-jetting. Consideration has reached the quest for suitable steel to the required specification. Agreement has been reached with SPX of Newbury relating to the machining of the motion parts, notably the connecting rods.

Gary Davies has completed the new reverser pedestal bolts.



29/11/2009 - close-up of new reverser pedestal bolt.



29/11/2009 - view of reverser pedestal. Reversing rod passes through the slot, while the bolt will pass through the slot on the lower part of the reversing rod.

The bracket at the bottom of the photograph is the attachment by which means it is fixed to the running plate.

The exhaust cruciform conversion is 100% complete. Delivery to Didcot imminent.

Exhaust box painting with red oxide complete, with mud shields to follow. Preparations in hand for fitting of exhaust system and subsequent orders for the saddle box and smokebox saddle plate.

A replacement right hand rear cylinder cover has been ordered from Railway Forgings & Castings, Warminster. Cost, including delivery to Didcot, £285. On return, it will be machined in-house.

Meanwhile work continues to prepare for the permanent fitting of the cab side sheets to the rear undercab running plate. The plate, plus a range of components has been ordered.

The left hand rear running plate/splasher assembly is being worked on to clear-up some dimensioning issues, prior to fitting to cab sides plate.

The right hand running plate/splasher has been demounted. Sharp edges have been removed and phosphated.

The fishplate on the undercab valance is being converted from three to four bolt fixing so that it can be fitted correctly. Reassembly will follow.



29/11/2009 - Work proceeding on the demounted right hand splasher/running plate. Removing the sharp edges in readiness for priming and refitting.

At the beginning of the month four sandboxes were retrieved from storage and assembly. One was welded-up so that fitting of the internal working parts could be clarified. The latter will require careful attention as brackets and levers must be clearly identified for they are fitted with taper pins whose holes must line-up properly for reliable operation.



29/11/2009 - Top view of sandbox constructed and ready for trial fitting of internal workings.



29/11/2009 - Underside view of completed sandbox. The interiors will be galvanised to prevent rusting in operation.

Machining the bogie oil keeps and axle-boxes continues to make steady progress.

Mike Cooper, project leader, and responsible for co-ordinating the order of copies of drawings from the N.R.M. has been able to submit an order for all drawing requirements for the 1014, 2999, 6880 and Steam Rail Motor projects. Those for 1014 include plans for a G.W. County Standard 15 OA boiler - once received they will be used to work out the final details for the conversion of the 8F boiler to Lot 354 specification.

Donation - at the end of the month Peter Todd delivered personally, a G.W.R. Duplex Vacuum Gauge for 1014. It will require minimal restoration, but needs to be re-calibrated before installation on the cab as an essential part of the locomotive's braking system. Thanks, Peter.

Overall, a period of steady progress, with good news about the wheels and tender sub-project.

December

Exhaust box cruciform removed to Didcot Railway Centre just before Christmas. Team of young engineers delegated task of fitting it in place in January. Invoice received - £2646.15.



Right hand running plate/splasher remounted and drilled for four round headed bolts to fasten to forward splasher. reverser pedestal and frame angles refitted. Previously bare metal primed.

19/12/2009 - view (from cab of 4079 showing latest stage of work on R.H. running plate/splasher. Holes for rivets drilled. (Terry McCarthy)



19/12/2009 - under view of R.H. running plate/splasher area, showing new frame angle bracket in place. (Terry McCarthy)



19/12/2009 - view nearer cab area - view shows the 'fishplate' connecting running plate to cab side valance.(Terry McCarthy)

Left hand running plate/splasher causing a few difficulties. Cleaning continues nevertheless. Running plate/splasher found to be twisted following careful measurement. Concluded that the splasher and fire-iron tunnel required modification for it to be fitted correctly.

Further work undertaken on rear sandboxes. Rubber gaskets cut and welds on first box smoothed. Cab activator for sanding gear retrieved from scrap pile - restoration commenced.

Retrieved from the security store, were parts of reverser pedestals. Two pedestal boxes are available, from 4953 and 7927 and will be reconstructed and restored to provide one such for the completed locomotive. In addition, the screw portion of G.W. reverser has been released and will also be subject to reconstruction.



19/12/2009 - One of two reverser pedestal boxes available to the project - this is the better of the two! Nevertheless, they provide, at least, a pattern for steel cutting etc. (Terry McCarthy)



19/12/2009 - the screw portion of the reverser box. This will also need rebuilding before mounted on the completed pedestal box. (Terry McCarthy)

Bogie - machining of oil keeps complete by the beginning of the month. Machining of axle boxes at least 80% complete by Christmas.

Immediately pre-Christmas, dimensions of bogie pintle checked to ensure they fit the bogie. Found to be satisfactory. Need to make locking plate to complete.

Christmas Party - on the last Saturday before Christmas work for the day finished early and the Project team

were treated to a small party by our project leader. Despite the bitter cold (a dusting of snow was present outside) good inroads were made into both the food and drink and toasts were duly drunk for a Happy Christmas and for 2010 - with the assistance of members of the 4079 group who happened to be 'on hand' at the time!



19/12/2009 - The 'County Set' - part of the Project Team who braved the elements on this day, but whose efforts throughout the year are helping to make very good progress with the recreation of 'our' County. (Drew Former[4079] for Terry McCarthy)

PROJECT ANNUAL REPORT - CHRISTMAS 2009

The County Project has now been running for over two years and we have developed from an inexperienced team into one that knows what it has to do to deliver 1014 for the main line. Our skills and confidence have increased and we are all older, wiser and more experienced. 2009 was slow but steady. We completed our cataloguing of the Swindon Records at the NRM and ordered some 30 additional drawings for the project. Our boiler has been assessed by Richard Watkin from LNW Crewe, who will carry out the overhaul work, and he has been drip-fed with drawings so that he can complete his assessment and costing of the work needed to change it from LMS 8F specification to a GW No 15 OA type.

A powerful team was assembled for our paper on water jetting, which is convinced that the case is strong and will take an equally strong case to refute. However, it does appear unlikely that we will be able to buy the correct specification plate from stock, so the alternative will be to go the Brighton Atlantic route, forge the plate, then water jetting and machining it. We have identified suppliers for all these phases. We have carried out a stock take of the motion held in Security for the project and David Bradshaw, our project coordinator, has located a number of possible sources of motion and other GW parts, likely to be of use to the project.

In addition, the nameplates are complete; main oil keeps repaired and degreased; work is well ahead on the manufacture of the new rear sandboxes and the integration of the donor internals and rigging; all the necessary springs have been delivered; the donor tender stripped to a carcass with all recoverable parts cleaned and overhauled; motion brackets modified and refitted; bogie oilkeeps and fasteners are ready; rock shafts fitted and adjusted; brake hanger brackets fitted; RH rear running plate fitted and LH in process; exhaust cruciform converted, as well as a host of other minor tasks.

Our Pooley van is now secure, waterproof and fitted for electricity, and is proving to be a valuable base for the project.

Both Richard Croucher and David Bradshaw are working to identify backers for the project and the various appeals have yielded a good financial return. We now have an effective publicity machine, run by Peter Donaldson, which is giving us regular exposure in the preservation railway press and our website has proved very popular and is updated by Terry McCarthy every month. Finally, a few statistics. As at 11 December 2009; 7851 hits on the website, total project spend to date £220,000, 2009 spend £14,920.46 (excluding wheels and loco/tender mainsprings), total hours worked 2115, total support hours 520, team size 19, average workday turnout 12.

All of this is all very positive. We have done well during 2009 and I am very confident that we can build on this for 2010 with some significant achievements.