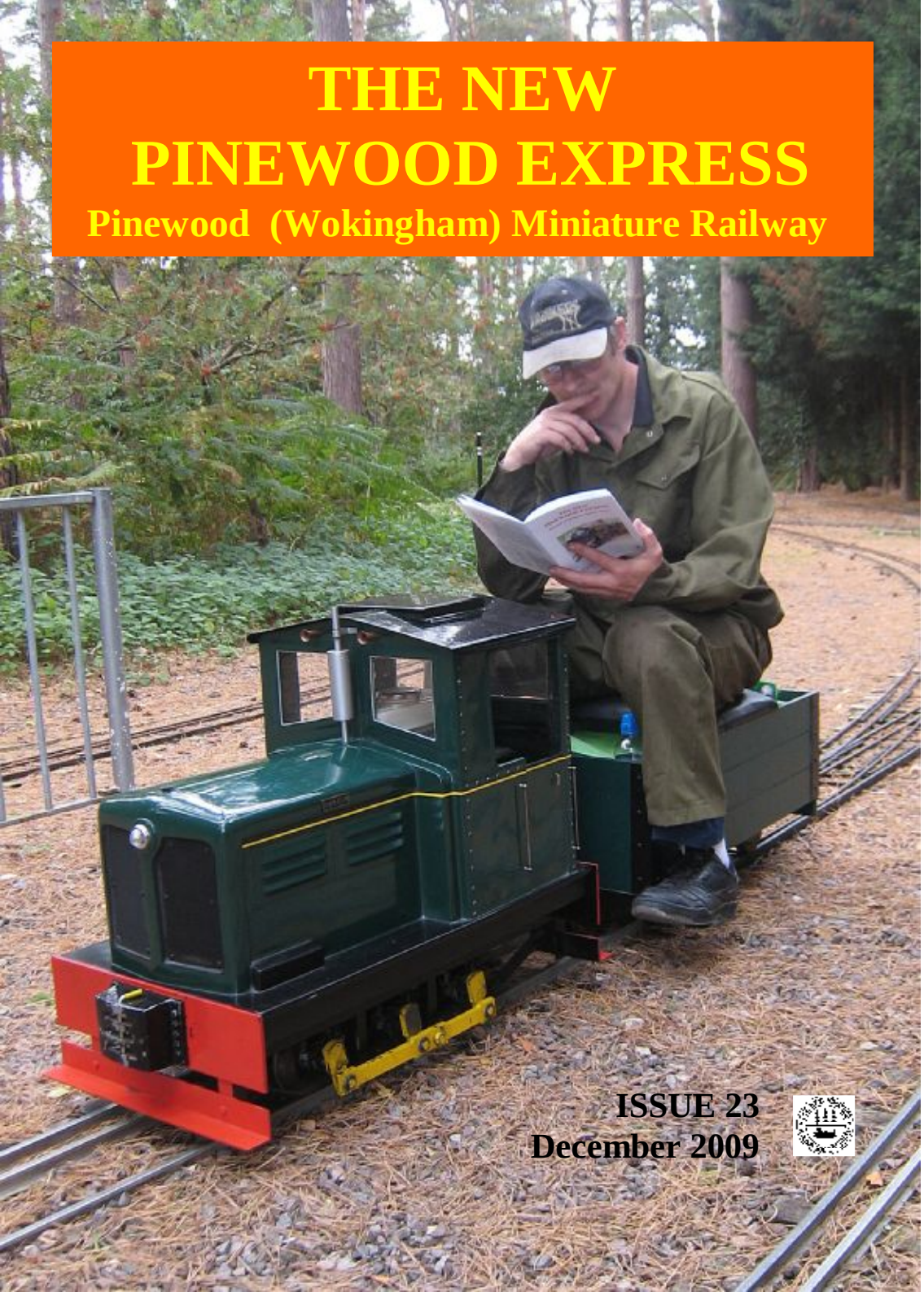

THE NEW PINEWOOD EXPRESS

Pinewood (Wokingham) Miniature Railway

ISSUE 23
December 2009

CONTACT DETAILS

Name	Post	Telephone and e-mail
Keith Briault	Chairman	_____
Paul Konig	Treasurer*	_____
Paul Archer	Secretary** & Publicity	_____
Mike Cole	Chief Engineer	_____
John Keane	Signals Officer	_____
David Simmonite	Safety Officer	_____

Ian Shanks	Auditor #1	
Tony Weeden	Auditor #2	

James Jarvis	Web site Manager	

*Also a Director of Pinewood Miniature Railway Society Limited.
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UK Registration Number 4999442
Website: www.pinewoodrailway.co.uk

Cover picture

Not the driving manual, but Trevor Hill engrossed in issue 22 of the New Pinewood Express

Photo: John Keane

EDITORIAL

In this, my last edition as editor, I indulge myself in a Travellers' Tale of one of the latest additions to the Isle of Man railway restorations – the only part of the island I got to see before Diana broke her leg. We also have a report of the visit to the Spinney Light Railway and Paul Konig's description of vacuum brakes and their application to Pinewood rolling stock.

I have enjoyed three years of editing the New Pinewood Express (by coincidence the same length of time as the previous editor) and hope that my successor will find it equally rewarding. I thank those members who have supported the newsletter with reports and other input – I have never been short of material - and I promise my similar support for the new editor.

SUBMISSION OF MATERIAL

Contributions for the future issues of the Newsletter are warmly invited. Contributions can be in any man- or machine-readable form. Original material should be marked for return, if required. All material, including text and photographs, must be the submitter's own work or the copyright holder must have given written permission for publication. Submission of material implies conformance to this. Submission also implies agreement that materials may be reproduced in relevant other Model Engineering and Railway publications.

CHAIRMAN'S NOTES

Well, we are nearly at the end of another year, but as we all know, there are the Santa Specials on the horizon. The bookings are looking good, so can I ask that you keep Sunday 6th and 12th of December free to assist in making it a memorable time for the children - and to put a smile on our treasurers face.

Unfortunately Mike Cole has decided to stand down from the post of Chief Engineer at the 2010 AGM, so we will looking for nominations when the time comes; if you think you would like to leave your mark on the Railway now will be your chance. John Keane has also decided that he is standing down as editor of the New Pinewood Express as of this December issue. So once again

is there any budding Editor in the club who would like to have a go? If so, please make your presence known. Having decided to use a commercial printing service, the next editor will be relieved of much of the chore of producing future newsletters.

Finally, I would like to wish you and your families a very happy Christmas and New Year.

SECRETARY'S REPORT

The end of a very busy running season which has seen an increase in takings on refreshment but, of course, an increase in the purchase price of the items. We should see a slight increase in profit from this source which has proved successful and has improved the atmosphere on running days.

An unexpected report in a local newspaper led to our last running day of this season being the busiest yet.

Some of you will have become aware of the confused parking on running days resulting from us being unable to utilise the square. This is a direct result of the Parish Council closing the square to parking for all site users due to a perceived deterioration in its condition. The committee has formally raised the issue with the council and are to meet with representatives in November in an effort to resolve the issue.

ON THE RIGHT TRACK: Pinewood Minature Railway will be running its monthly services for the last time this year on Sunday

Come on and do the locomotion

THE Pinewood Minature Railway trains will be soon coming out of the depot for the last time this season.

The tiny locomotives will be chugging round the tracks in Pinewood Leisure Centre, Nine Mile Ride, on Sunday afternoon.

Starting at 1pm and running through to 4pm, the service will feature pint-sized rides through the Pinewood forest for children of all ages.

Each ride costs 80p or you can buy a special saver ticket, giving you eight rides for £5.

As well as offering rides on its to scale steam and diesel trains there is also a snack bar and a play area nearby.

For more details, call (0118) 983 4516 or log on to its website, www.pinewoodrailway.co.uk.

Wokingham *Standard*, October 15 2009

Membership levels have remained relatively static throughout the year but the success of the final running day in October attracted attention and two forms have been sent out to prospective members.

Photo JRK, courtesy of PA's camera

The queue for tickets on our busy last running day of the season.

MECHANICAL ENGINEERING REPORT

As a result of recent track work, the track was in particularly good condition for the final running day of the season – probably the best it has been so far. The ride is comfortable and an exceptionally busy day at the end of the season saw no derailments.

Photo John Keane

Keith Briault and Derek Tulley dismantling the Planet engine.

Photo John Keane

Keith Briault using one of the two new guard's trucks. The seat has since been painted in PMR green and JB has applied the usual livery .

The 'Planet' works loco is undergoing a full rebuild for the first time since the overhaul at Ascot. Dave Elen is also taking the opportunity, while the loco is

dismantled, to repaint the bodywork.

CIVIL ENGINEERING REPORT

A start has been made on the changes to the station layout (*see issue 22*). With the willing cooperation of the motorcycle school, the ticket office has been moved back to align with the railings, so as to remove the pinch-point on platform 1. Phil (of the motorcycle training school) has also helpfully repositioned one of the tyre walls so that our visitors can once again view the trains from the grass behind the railings.

The pen fence has been re-arranged as proposed, to provide a way through to the benches area for buggies without them being wheeled across the track. Though successful in this respect, the jury is out on whether allowing people with tickets to re-enter the pen without re-joining a long ticket queue is as successful. Either passengers will queue for a long time while those ahead take repeat rides or those with multiple tickets will queue multiple times (up to forty minutes per time on our exceptional last running day). There seems to be no right answer - other than stop advertising!

SAFETY OFFICER'S REPORT

Following two incidents with 'run-away' trains in the yard, one leading to damage to a locomotive and one to a few bruises for the driver, we are updating the procedures (*see issue 22*) with two new measures:

Drivers should not walk alongside locomotives in steam wherever that can be avoided (It is recognised that it may be necessary to move a steam locomotive before its driving trolley has been attached – in this case the locomotive reverser should always be in neutral and the locomotive pushed.}

A requirement is being introduced that all electric locomotives that are run at Pinewood should be equipped with a dead man device – as most already are.

Members are reminded that the procedures covering Officer in Charge, Guards etc. are on the chalet shelf and should be read by all members.

I am pleased to record that there were no reportable incidents associated with the running of the railway even though our popularity has put a strain on motive power and manpower resources.

Unfortunately, at one of the parties, whilst eating her party food with the other children, a 22-month-old girl fell backwards off her seat, cutting her head. Her father attended to her.

Of course we still have the two "Santa" runs to come on the first two Sundays of December and members are reminded that their full support is needed to ensure our excellent safety record is maintained.

SIGNALLING REPORT

The new automatic signal, S15, on the top loop is now installed and the long country loop is now divided into two.

Now that the signal posts are all permanent and only the heads are removed after running, it has been possible to place the signal relay board in a weatherproof box on the post rather than in the damper conditions inside the old connecting posts.

At some future date(s) the same treatment should be applied to the other four signals that could benefit.

Photo John Keane

Paul Archer and David Simmonite laying the conduit for the yard telephone.

The telephone circuits in the signal box have been updated in preparation for installing a telephone line to the yard. Signalmen have requested this, so that drivers about to leave the yard can contact the signal box before moving off. This is mainly to avoid conflict with locos returning to the yard.

At the last running day of the season, the track gang, in an uncharacteristic moment of collective brain malfunction, decided the best way to adjust the height of the insulated track in block 4 was to place a metal sheet under all three rails!! This was initially puzzling but the signalling department rose to the challenge of why track volts had fallen to zero. The track gang were able to correct the situation before the trains ran.

VACUUM BRAKING AT PINEWOOD

Paul Konig has provided the following article on vacuum braking.

Traditionally, mechanical braking systems have been used successfully to bring a train to a stand, as and when required. With the requirement to run longer trains, for example our Santa Specials, the effectiveness of these systems can be reduced. Vacuum brakes are therefore being developed for the Pinewood passenger carrying stock to mitigate this.

PRINCIPLES OF OPERATION

A vacuum braking system comprises a method of evacuating the air from a pipe running the length of the train, the 'train pipe' (either using a steam locomotive's "ejector" or electrically driven vacuum pump) to create a vacuum and a method of destroying this vacuum. When the vacuum is created the brakes are pulled off; when it is destroyed the brakes are applied. This has the advantage of being fail-safe, i.e. in the unlikely event that a pipe were to break (for example, if the coach comes away from the loco) the air introduced to the system would apply the coach's brake automatically, bringing the coach to a controlled stop.

Brake Release

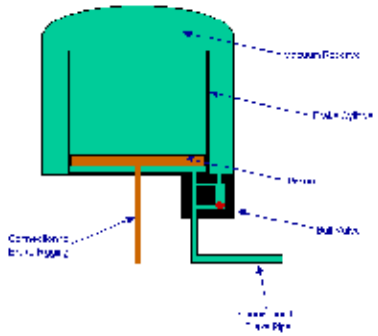
The removal of atmospheric pressure from the system has caused the ball valve to open the connection between the vacuum reservoir and the brake/train pipe. The brake cylinder is open at the top so that it is in direct connection with the vacuum reservoir.

The fall of the piston to the bottom of the brake cylinder causes the brake blocks to be released from the wheels.

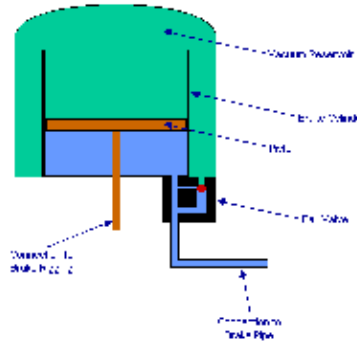
Brake Application

The vacuum has been reduced by the admission of atmospheric pressure into the brake/train pipe. This has forced the piston upwards in the brake cylinder. By way of the connection to the brake rigging, the upward movement of the piston has caused the brake blocks to be applied to the wheels. The movement of the piston in the brake cylinder relies on the fact that there is a pressure difference between the underside of the piston and the upper side. During the brake application, admitting air from the atmosphere reduces the vacuum in the brake pipe. As the air enters the ball valve, it forces the ball upwards to close the connection to the vacuum reservoir. This ensures that the vacuum in

the reservoir will not be reduced. At the same time, the air entering the underside of the brake cylinder creates an imbalance in the pressure compared with the pressure above the piston. This forces the piston upwards to apply the brakes.



Brake Off



Brake On

PINEWOOD'S SYSTEM

The braking system currently undergoing trials at Pinewood uses proprietary vacuum pumps, diaphragms and brake blocks, manufactured and supplied by 'PNP Railways'. The mechanical linkages were developed by Derek Tulley, with Tim Caswell machining several sets. A significant step forward from previous brake gear is the mounting of brake hangers on the bearing blocks not bogie frames, thereby removing the variation in distance between brake block and wheel set depending on passenger loading.

The general arrangement of the bogie mounted equipment can be seen in the photograph. Where the brakes are to be installed (currently three coaches have the appropriate bogies), there will be a set of brake gear on each bogie. It was found that only mounting on one bogie led to wheels locking up under braking.

Due to the relatively small size of the diaphragm (necessary due to space constraints), an additional 'vacuum reservoir' is located under the coach. This provides an element of damping in the system; reducing the impact of small leaks on the overall braking system. Actuation is via a simple pull valve at the Guard position or from the main vacuum valve on steam locomotives. Where

existing coach bogies preclude the fitting of brakes, the rolling stock are 'through piped' to maximise the flexibility of rake formation.

The prototype vacuum pump installed in one of the coaches for testing.

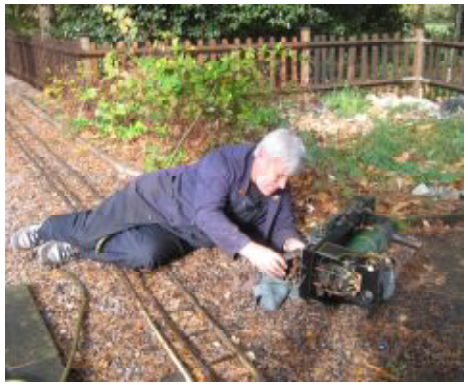
A battery powered vacuum ejector has been built and wired by John Brotherton. This has been designed to sit within the braked coaches, or the new guard trucks, and enables the vacuum braked stock to be operated by petrol or electric locos not fitted for vacuum.

For members wishing to fit locos with ejector equipment, the typical operating range is 0" to 21" Hg (typically operate at c15"Hg). Vacuum pipe connection should be 6mm bulkhead fitting, suitable suppliers include 'SMC' and 'Legris'.

Trials of the current system should be complete prior to next Running Season with the aim that braked bogies are available thereafter.

The training of guards and drivers on the system will be undertaken prior to the system being operated on Public Running.

TRAINING SERIES No.2: How to fit the ash pan



Best done on a dry day (and when no one with a camera is about).

An alternative method is available for C19s and Black 5s, which being nearer to round in cross section, will roll upside down making access even easier, though temporary removal of the whistle and chimney may be advisable on a C19.

TRAVELLER'S TALES – John Keane
THE GREAT LAXEY MINE RAILWAY

The Isle of Man is a popular holiday venue for those interested in narrow gauge railways. However, only those who have visited within the last five years or so will have come across the restored Laxey mine railway (*mentioned briefly in John Ephithite's Traveller's Tale in issue 13*).

Mining at Laxey started in about 1780 and by the mid 1870s the Great Laxey Mine was one of the richest metal mines in Britain, employing nearly 1000 men. Lead and zinc were exported from Laxey harbour.

Bee photographed in 1877.

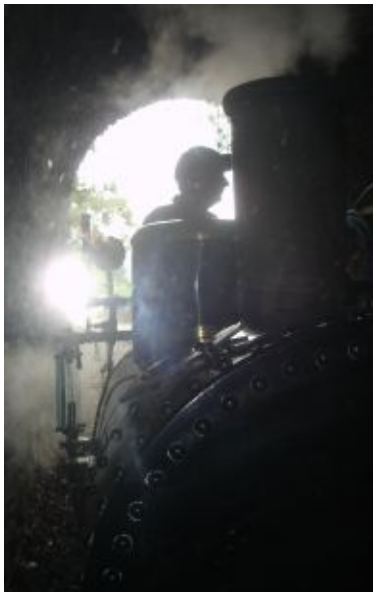
A tramway ran for over a mile into the main adit from where shafts were sunk to over 2000 feet. In 1877, two 19" gauge locomotives replaced ponies for hauling the ore to the washing floors. The two locomotives, Ant and Bee (built by Stephen Lewin of Poole, Dorset) worked until the mine closed in 1929 and were broken up in the early 1930s.

In 1999 restoration of the tramway was commenced and a private bequest funded the building of two fully working replicas of the original locomotives. The restored railway was opened in September 2004.

Working replica of ANT

The 0-4-0 locomotives are very basic with neither cab nor spectacle plate. Cylinders and curved-link valve gear are fitted inside the frames. The replicas appear to be a very faithful reproduction of the original locomotives.

Passengers are now able to travel on the railway in a specially constructed low-profile carriage (seen below, entering the tunnel under the road).



Passing under the Laxey to Ramsey road

Entering the tunnel under the Laxey to Ramsey Road

Photos
Clare and Diana Keane

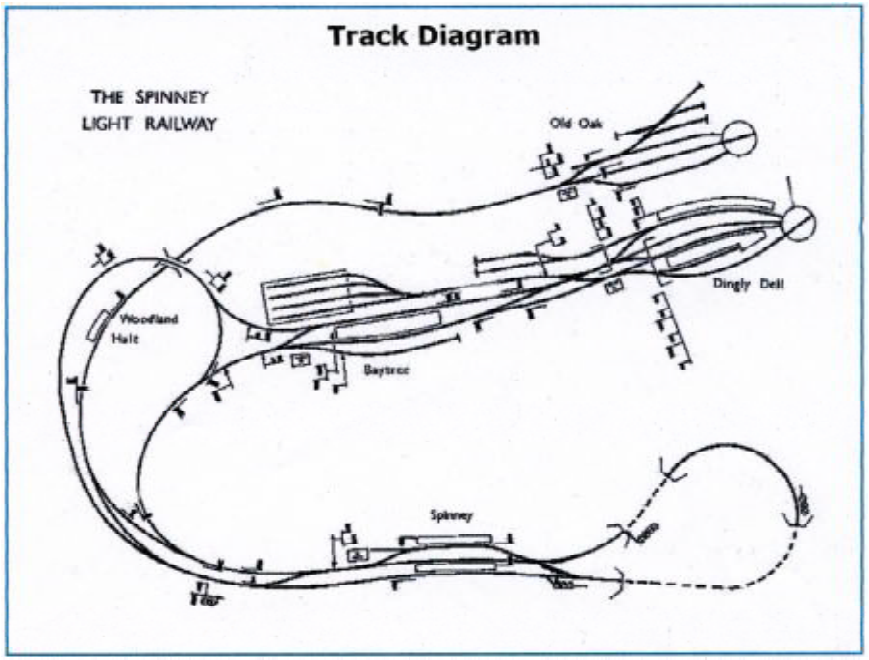
The old washing floor at Laxey Mine. The mine railway is at the top left where it turns sharply into the tunnel.

A VISIT TO THE SPINNEY LIGHT RAILWAY

Following his visit to Pinewood with his Clan Line in April (*see issue 21*), Cliff Perry arranged for us to receive a return visit to the Spinney Light Railway. The railway is owned by June and Alan Ainslie, who bought the railway (with a house attached), several years ago. The railway construction was started in the 1970s.

A number of Pinewood members and families accepted the invitation and enjoyed a pleasant afternoon at the railway (Keith and Esme Briault, Roger, Helen and Sophie Marney, Ian Shanks, John Keane, Peter Starr, Peter and Mary Downes and James, Claire and Sam Jarvis).

This private railway is a well-equipped 7.1/4" gauge railway supplying several end–to-end and continuous routes through a hilly garden with deep cuttings, two tunnels and steep inclines. Joining a train one rarely knows how long the journey will be or where it will end.



Photos John Keane

The railway is fully signalled, with train detection via the bonded aluminium track and three signal boxes.

The loco shed

Receiving the token for single line working at Old Oak signal box.

The signal box at Spinney; one of three boxes controlling the complicated train movements.

A feature of the railway is the small clearance on either side of the track. Passengers' shoulders brush the hedges and narrowly miss the semaphore signal arms.

Even more memorable is the experience of plunging into one of the tunnels from a deep cutting. Inside, all is totally black due to the curve of the tunnel and its length. For drivers, unable to see their controls, there is the prospect of emerging on a downgrade with the possibility of an immediate signal at danger in the station approach!

Because of the steep inclines, double heading is common. The train pictured here is triple headed and is crossing the removable access bridge on the approach to Spinney. Though triple headed, this train with only two passenger carriages had just failed to complete one of the inclines due to wheel slip – providing unforgiving amusement for other drivers.

This stretched Remus (a non-well tank Romulus) is an exception to the generally main-line outline of the locos and stock that run at Spinney. The stretching consists of an additional bogie, with ample lateral movement, surmounted by a driving seat, making the loco self-contained.

Before the teatime break, - a cavalcade of five locomotives passing through Spinney.

A pleasant close to the afternoon was tea and cake on the lawn.

A MAKEOVER FOR PAUL'S C19

After some steaming troubles, Paul Konig decided to take the plunge and send his C19 to the workshop of Andy Walton ('Denver Light Railway') in Wolverhampton for a compete overhaul. Andy's business specialises in restoring and servicing miniature steam locos for which it has built an excellent reputation. Andy has worked on several of the other C19s around and is currently building his own, so is well placed to undertake the work.

Photo Paul Konig

Paul's C19 undergoing overhaul and resplendent in its new green paintwork.

Whilst in for the overhaul, the loco is being out shopped in green. Paul assures us this is a genuine Denver & Rio Grande colour, used c 1928 – 1940 and that any similarity to GWR green is pure coincidence.....

We look forward to seeing one of our most useful passenger haulers back on the track for the Santa runs.

NOSTALGIC RETURN VISIT

We were pleased to see Arthur at our last running day of the 2009 season. Arthur was one of two grounds men whose Stirling efforts, along with Councillor 'Dickie' Dove and Life Member Jimmy Dulieu made the Leisure Centre happen and who remains a friend of the railway.

Photo John Keane

Arthur, reminiscing with founder member Dave Curtis.

ANOTHER PINEWOOD LOCO CHANGES HANDS

After much soul searching, Dave Curtis has finally decided it is time to let go of his much-admired Dart (0-4-2T GWR 1466). This was the second locomotive that Dave completed, in the mid 90s, and the first completely from scratch. It was second in his affections only to his retained *Bridget* which was the first loco he completed after acquiring a running chassis.

Photo Peter Downes

Dave describing the finer points to the 1400's new owner at the handover.

New owner, member John Keane, now has a running engine for the first time after a decade of membership at Ascot and Pinewood. First runs demonstrated his inexperience (almost running out of puff on the top loop) but he is learning fast under the eagle eyes of Dave and Paul K and promises not to let 1466 languish on a shelf (actually on his lounge floor where a judiciously placed tray is keeping most of the oil drips off the carpet!) for too long between outings.

DIARY DATES 2009

External events are in **bold** text.
Please check dates of external events before travelling.

DECEMBER	Sunday 6th	Santa Specials
	Friday 11th - Sunday 13th	**Model Engineer Exhibition (Sandown Park Exhibition Centre)**
	Sunday 13th	Santa Specials

DIARY DATES 2010

External events are in **bold** text. Please check dates before travelling.

DATE		EVENT
JANUARY	**Friday 22nd - Sunday 24th**	**London Model Engineering Exhibition (Alexandra Palace)**
MARCH	Thursday 11th	AGM (provisional date)
APRIL	Sunday 4th	EASTER Public running, 13.30-16.00
	Saturday 17th - Sunday 18th	**SW Model Engineering, Model Making and Hobbies Show (Royal Bath and West Show Ground)**
	Sunday 18th	Birthday Party, 11.00-13.00 Public Running, 13.30-16.00
MAY	**Monday 3rd**	**Yately May Fayre** (provisional)
	Sunday 9th	Invited clubs & members' running (provisional)
	Sunday 16th	Birthday Party, 11.00-13.00 Public Running, 13.30-16.00
JUNE	Sunday 6th	Family Day (members' running), 10.00-16.00
	Sunday 20th	Birthday Party, 11.00-13.00 Public Running, 13.30-16.00
JULY	Sunday 4th	Members' Running, 10.00-16.00
	Saturday 10th - Sunday 11th	**Guildford Model Steam rally & Exhibition**
	Sunday 18th	Birthday Party, 11.00-13.00 Public Running, 13.30-16.00
AUGUST	Sunday 1st	Members' Running, 10.00-16.00
	Sunday 15th	Birthday Party, 11.00-13.00 Public Running, 13.30-16.00
SEPTEMBER	Saturday 4th	Polly Rally at Pinewood Railway
	Sunday 5th	Members' Running, 10.00-16.00
	Sunday 19th	Birthday Party, 11.00-13.00 Public Running, 13.30-16.00
OCTOBER	Sunday 3rd	Members' Running, 10.00-16.00
	Friday 15th - Tuesday 19th	**Midlands Model Engineering Exhibition (Warwickshire Exhibition Centre)**
	Sunday 17th	Birthday Party, 11.00-13.00 Public Running, 13.30-16.00
DECEMBER	Sunday 5th &12th	Santa Specials (provisional dates)