

The Prospectus

May 2016



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Free to members

50p when sold



RSME member Fred Few in front of a Junkers JU 88 at the RAF Museum, Hendon, on 23 April. On 9 May 1943 British Intelligence persuaded the aircrew to defect with all their radar secrets. It was escorted to RAF Dyce near Aberdeen and landed. Fred was on the station and witnessed it. "It was extremely frightening to see the enemy at such close quarters," he said., During the visit, organised for members by the club, Fred was interviewed by museum staff to record Fred's first hand account of this unique happening.. Photo J Billard

DAWSON'S DIARY

kept by the President

March Young Engineer running day was rather wet this time. Marcus Bailey has a lesson on lathe work. This time he made a new bolt for the valve gear that got damaged on his engine last time it was run. It has now been fitted Marcus doing well getting in to this hobby of ours. Harrison in the club house was giving the club's 3 ½" Maisie a good clean up for an exhibition at Reading Town Hall on the town's railways which opens in April 2016. Karl Trussler has passed out to drive steam locos was also busy giving the club Baldwin a good polish on Wednesday 30 March 2016 ready to drive in Sunday public running. There must have been 25 members all doing jobs round the RSME site a really good turnout.

Congratulations to Fred Few on his 91st birthday. Well done Fred from us all. Thanks from us all for the cakes! Fred is still able to get on with his latest project with the help of Rob Denton who is being guided by him on the turning etc. for Fred. In fact, being Fred's eyes. His knowledge is second to none. Rob is learning too!

Mike Sinclair has fitted steel mesh around the bottom of the club house bridge steps to save heads damaged on birthdays. The parks and gardens water tank is up and working, the small container is well laid out with hooks for tools etc. and shelves for storage. The Wednesday boys have done a great job again. Peter Harrison gave the RSME members a most interesting talk on the channel tunnel last Thursday club night. We all learned what a large undertaking it was to get this up and running. A major piece of engineering. It took four years to complete. I hope there is going to be a part 2 Pete!

Public running for this month had a new driver, Karl took his first train of paying passengers. A big boost for him. Mike and Chris Jones had their A4 Wild Swan running this time. This engine always gets a lot of interest from visitors. Steve Harland came down from up North giving his Britannia a run this time with the springing sorted out also Mike Sinclair had his Royal Scot running well. Many thanks to the members who put their time and effort into making it a successful day with the help of the tea bar ladies maker it worthwhile.

The PROSPECTUS has of late made a very interesting read. Long may it last with more contributions coming from the membership. Also good photos as well.

Club running day was a good one this time with plenty of locos steaming, we also had some visitors from Bournemouth and Southampton clubs. They came with two 2 ½ "locos a 4-8-4 "Helen Long" tank engine one of LBSC's designs also a 4-4-2 Atlantic also a LBSC design. One member brought along his S15 4-6-0 in 3 ½" gauge Martin Evans design. I happened to have the late Geoff Down's King Arthur having a steam test and also running. Mike Manners had his Class 66 running as well on the ground level. John Snook brought out his 7 ¼" A1X 0-6-0 tank in Southern Green!

PONDERINGS

by 61249

Privatising Network South East

The government White Paper on railway privatisation was published in 1992, paving the way for the 1993 Railways Act. Its publication was an important step for all involved, and a briefing programme was instituted in Network South East to make sure that everyone got the same message. Thus it was that I stood up in front of all the Train Technical support staff in NSE, roughly 220 souls as I remember it, in a specially hired room in the British Library.

Everyone was keen to understand the answer to three key questions. What will happen to my job? What will happen to my pension? What will happen to my travel concession?

The main problem we faced was that none of these three questions could in any way be answered from the White Paper. In fact, in the whole document, there was, I believe, one paragraph that referred to the trains specifically. What this said was – roughly translated – “we are thinking of forming some companies to lease trains to the operators”. So basically I had to convey the message that Network South East, a construct of the railway’s own management and a body that we all believed in, red lamp posts the lot, would cease to exist in 18 months’ time, to be replaced by who knows what. The management line on privatisation was that “The decision has been made by the government, the ultimate form is to be determined, but our job is to make whatever it is work so we continue to deliver a safe and reliable railway for our passengers through all the changes”

There were common sense answers to at least two of the three key questions. To jobs, the answer was that there was no alternative staffing for the railway in waiting. Furthermore, the process did not include any line closures, and service levels were to be protected. So in train engineering, we needed the same number or more trains in traffic, and they still needed looking after. Your job may have a different title, but your skills would still be needed.

On pensions, the answer was that the very successful BR pension scheme, which by modern day standards was ridiculously beneficial, had its success founded on its independence, separate accounting and highly expert management. It was effectively “ring fenced” and there was no reason that would change. For the security in this regard we had to mostly thank Robert Maxwell’s raids on the “Mirror” scheme, and the subsequent legislation.

On free travel, there was no clue, other than it was difficult to see how it could be radically changed for existing staff, many of whom relied on it to get to work, living (as I did) at a place chosen with lack of commuting costs in mind. Like many staff who work in London for the railway, housing costs are managed by working down the line from the capital, until one can afford a house within walking distance of the station, assuming that the train service

on offer could get you to work and back at the required duty hours.

To be left to common sense answers to such fundamental questions at such a meeting was at best an exercise in damage limitation, at worst it could have been a complete disaster. I do not remember it being that bad, but I made a mental note to never stand up again without good answers to the three questions. I am sure the same message got through to all concerned in the design of the scheme very quickly, and to their credit, all three questions were answered to general satisfaction within months. They had to be, but through the announcements made and costs allocated, any significant staff opposition was effectively bought off. It remains a significant management achievement that despite continued trade union opposition to the concept, let alone the franchising methodology, there was no loss of train service at all over railway privatisation through industrial action.

Keeping the railway safe and reliable through the changes became the main focus of our activity. The technical expertise on braking systems, railway traction, running gear, power supplies, overhead line, maintenance schedules and all the day to day stuff you need to operate a fleet of 6000 vehicles would still be necessary, and needed to be put into a form that would be saleable, and attractive to buyers in the corporate market place. Our answer was to set up NSE Train Technical Services as a standalone unit selling its products to the depots and operators. Separate accounting with visible contracts to its customers based on what they needed. We were quick off the mark with this one in NSE, and had it working within 3 months, the model being followed by InterCity and Provincial. The organisations that evolved from this change have developed into serious train engineering consultancies with a significant international presence. This was another good management achievement, made possible by the fact that the skills of our staff were worth a lot in a global market place. BR Engineering had a good name and efficiency in delivery that has held its own with the best in the world. We did not know this at the time, but has proved to be true. If you today walk into a major railway project in Europe, Australia, Dubai, Taiwan, Hong Kong, Singapore, and others you will find a significant part of the room occupied by Brits. This helps to make railway engineering careers based on the UK training wonderful and interesting opportunities with international possibilities.

Two notable things have not turned out as many predicted and commented. There was a political expectation that the senior management of the railway would be substantially replaced by forward looking and entrepreneurial individuals with a private sector outlook that would be a breath of fresh air. This has turned out not to be true. The names of the individuals who came from outside the industry and have made a significant positive influence on the railway in the last 20 years and is so small as to be remarkable, and the real movers and shakers have proved to be BR managers liberated by the opportunities of normal businesses. The list of these is long, and distinguished.

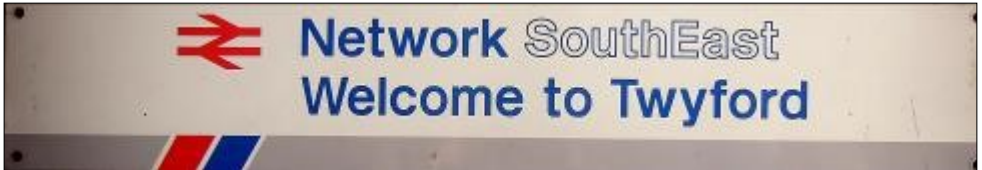
The second untruth was that peddled endlessly by the trade unions. "Profit

before Safety” was the scaremongering cry. In practice for several good business reasons, the reverse has been the case. I have no doubt that renationalisation would cost lives, and the experience of the last two decades I offer as proof.

Given the editor’s indulgence, the reasons why we have the safest railway in Europe may be the subject of a future article. Meanwhile, one more article on organisation change next month, then hopefully back to train engineering.

To be continued

Photo John Billard



Clubroom PC: Two Applications

by Alec Bray

Two programs (or applications) have been put on the PC in the RSME clubroom: these are

Valve Gear Simulations

GWR Locomotive Sketchpad Valve Gear Simulations



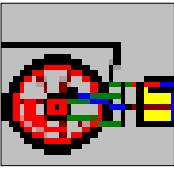
These valve gear simulations are by Charlie Dockstader.

These simulations as written by Charlie cover more than 60 different valve gear variants and include a large number of British valve gears, such as the GWR Stephenson’s and Walschaerts, Bullied’s miniaturised valve gear for the “Spam Cans” and Gresley’s conjugated valve gear.

In Charlie’s words: “...1986 I wrote the first versions of

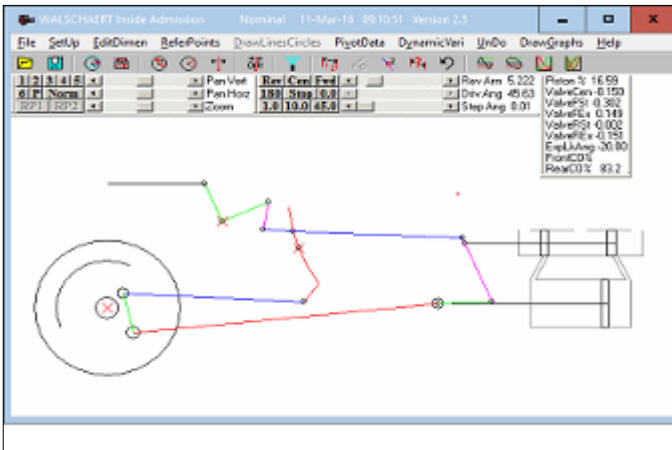
the software to simulate Baker valve gear. ...I have made the software available by placing it in the public domain as freeware. There are no restrictions on the use of the software.... The programs can be used with the default settings to view operation and characteristics of any of the types of valve gear supported. They may also be used to check or change designs as all the dimensions in the gear can be modified. Performance for all types can be viewed using several different types of diagrams.... The default dimensions used in the programs are in inches and most are 1.5-inch scale. They can be user modified to suite the scale desired or for use with the metric system..”

There is a shortcut on the PC for these simulations: click on the valve gear icon: below.



The start form is rather cluttered: there is a button for each of 32 possible valve gear variants (including that for a Mississippi-type stern-wheeler!) for the simulations updated to version 2.8. Click the button for the type of valve gear required. The simulation screen is shown: in this case it is for Walschaerts Inside Admission:

You can change the cut off, and change the speed, amongst other options. There are a number of graphs that you can see – these are equivalent to the



indicator diagrams and other measures of cylinder and valve gear performance:

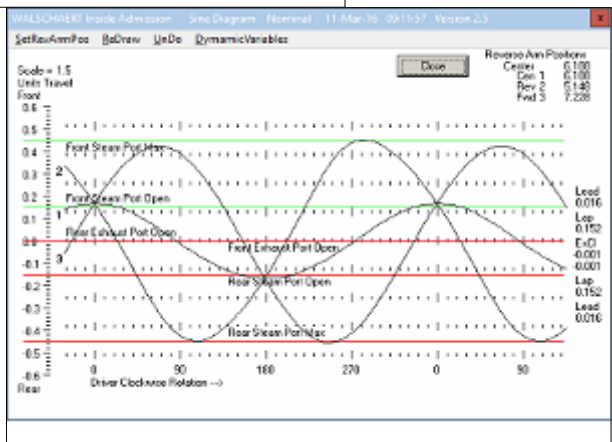
If you want your own copy of the simulations, the complete suite of programs can be downloaded from this site:

<http://www.bcwrr.org/>

[Dockstader-Valve-Gear.html](http://www.colinusher.info/software/valve%20gear.html)

This site is the “Bitter Creek Western Railroad” and is the official host for the Charlie Dockstader simulations.

Note: There are other valve gear simulations available, for example from this site: <http://www.colinusher.info/software/valve%20gear.html>)



GWR Locomotive Sketchpad

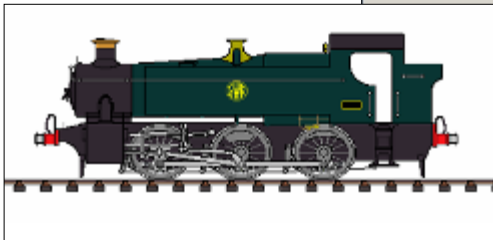
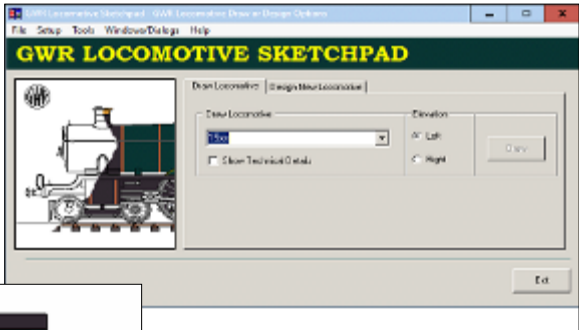
The tag line says that this program is "...A very simple introduction to the engineering required in Great Western Steam Locomotive Design...". What it actually allows you to do is to produce a left or right elevation of a locomotive which is based on the Great Western Railway (GWR) principles of locomotive design in use from about 1900 to Nationalisation (1948). Given a number of "leading dimensions" and some option choices, the GWR Locomotive Sketchpad sketches out the possible appearance of a Great Western "designed" locomotive. Basically, you can put yourself in the position of one of the draughtsmen in the



in the
GWR

Swindon Drawing Office during the first half of the twentieth century, doodling away at some possible locomotive outlines.

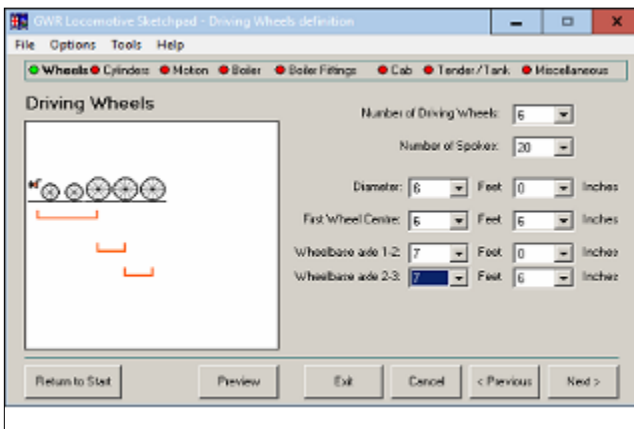
There is a shortcut on the PC for the application: click



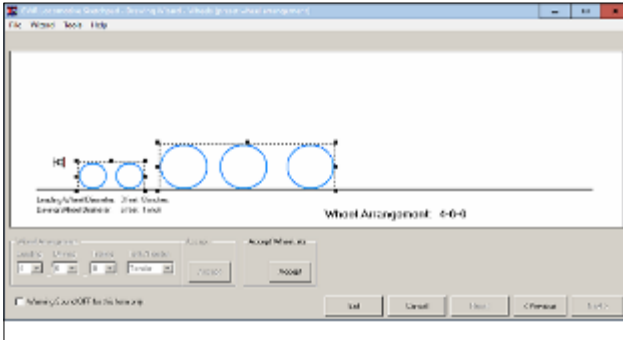
on the chimney icon:

You have a choice – draw out a locomotive design, or create a new one from scratch.

Here, a “Speedy” look-a-like is drawn:



For the design side of things, you can choose one of two routes: you can enter the leading dimensions (in feet and inches) or you can use a graphical interface to resize and position the currently selected part of the locomotive. Examples of the two routes are shown here:



Dimension-based design

This approach is useful if you have lots of information about your locomotive to hand.

Graphical Interface

This approach is used when you want to manipulate the positions and sizes of the various parts in relation to one another.

With either approach, you can complete a “first pass” of your locomotive in about twenty minutes. You can then refine your design, and change the livery, background and other features of the locomotive. The resulting pictures are side elevations of the locomotive – rather like the coloured frontispieces of “The Railway Magazine” in the early



years of the last century.

Here is an example of what you can do. When William Stanier moved to the LMS from the GWR, he took GWR practice with him – so you can draw some early Stanier locomotives. This shows a Princess Royal class locomotive in the fells of Cumbria:

You can even reproduce some “classic” GWR photos – here are two loco-



motives numbered 111 face to face.

(Ok, the 2-4-0 isn't *quite* right (and has been slightly tidied up)).

Unfortunately, the drawings are (at best) only correct to the nearest inch, and since the designs use as little user input as possible and are constructed using rules and algorithms based on the GWR standardisation of parts, and the very strong in-house GWR design style, the drawings should not be used for modelling purposes: they are just illustrative of a locomotive type.

If you would like your own copy of this – it is available through the Great Western Society's Didcot Retail Shop. All profit from each sale goes to support the GWS activities.

Wednesday 23rd March was a good day at the club by Mike Manners

Fairly recently we had an incident of vandalism where the local idiots dropped a length of concrete pipe from the footbridge on to the raised track. At first we did not think it had done any damage but during recent runs on the track it became apparent that not only had the track been bent but the concrete support beam had been damaged.

This Wednesday it was decided to sort out the problem. A spare support beam had been located and Peter Culham and John Evans were soon well into unbolting and removing the damaged track panel. By lunch time the damaged support beam had been removed. It literally fell in half when it was placed on the ground. The support pillars were soon cleaned up ready for the new beam. After lunch there was the fiddly job of arranging support for the new beam and adjusting it to give a level top surface. Quick drying cement was then mixed and support blocks cut and cemented in place. Mike Sinclair cut the damaged length of rail out of the track panel and replaced it with new material. It was then just the fiddly job of replacing all the sleepers and bolting down the track panel. A good day's work. Well done to everyone involved.

While all this was going on Nigel Penford was busy getting the water butt set up on its base and plumbing it in to the gutter at the back of the clubhouse. A really fiddly job and just in time to make use of all the rain over the Easter weekend.

Mike Sinclair installed the final bit of security fencing so we now have a fully enclosed secure area. Stuart Kidd is ordering a new small steel bunker so that we can store inflammable materials in the secure area rather than the containers.

Mike Manners was replacing the floodlight over the raised track steaming bays with a new LED type. It comes on instantly at full brightness and even though it uses less than a quarter of the power of the old light, it is considerably brighter. It was tested on Thursday evening and looks to be very effective.

The gardening team were busy dealing with all the new spring growth and Stuart Kidd was out on the mower giving the grass its first cut of the season.

Anyone who visited the club site on Monday or Tuesday will have found surveying instruments set up in the carpark and the surveyors working around the site. This work will provide the club with accurate plans of the whole site and will be invaluable in planning future work especially if we decide to start a clubhouse replacement project or expand our rolling stock storage arrangements.

...and on 6 April, Mike adds

Nigel Penford and John Evans continued the work of clearing out the big container and organising storage in the rear blue container. At last the big container is looking quite clear and available as a work space.

Mike Sinclair and Peter Culham were finishing off the installation of metal mesh around the base of the footbridge.

With help from Nigel and John, I bricked up the vandal damaged clubhouse window opening.

Les was investigating the lack of brakes on the club Baldwin. This is proving a difficult problem to solve. The investigation continues.

Dave and Lilly Scott were digging out around the containers ready for laying a skim of concrete to stop weed growth. Stuart has obtained the flammable materials bunker. It can be assembled and located in the secure area once the concrete skim has been completed.

Dean Mildenhall from Gsurv has completed the entire site survey and will be sending paper copies ASAP. They look very impressive even as a small PDF.

At lunchtime I managed to persuade most of the Wednesday warriors to pose for a team photo. The result is attached. There are a few of the regular crowd missing so I will have another go at some point and see if I can catch up with them. *(see photo on page 11, Ed)*

...and then on 13 April, Mike continues

* The patch of vandal damage masonry next to the clubhouse door that was bricked up last week was given a skim of render and can be painted next week.

* The metal mesh under the footbridge that was completed last week was being given a coat of undercoat.

* A skim of concrete was being laid alongside the big container to prevent weed growth.

* Around the raised track turntable centre pivot there was an old and loose aluminium cover plate. This has now been removed and replaced with a skim of cement.

* The final light in the 30' container is now working so all work on the container is now complete. Job done!

- * A length of 2.5” gauge track has now been permanently fitted in the raised track steaming bay area.
- * The vegetation on the Bath Road side of the site has now been cut back and most of the outstanding ivy cutting has been done and the grass trimmed back to the new tree line.
- * All of the ground level point lever frames were inspected. There is one that requires some further welding but it is not urgent and of no H&S risk.
- * All of the damaged panels of security fencing were cut up and taken for recycling. This leaves us with a good stack of undamaged panels for future use.
- * The final two replacement bogies for the ground level riding trucks are now on order.
- * Red LED warning lights have now been obtained. These will be fitted in a prominent place in the clubhouse to remind people to turn off the water pump, etc.



From left to right:- Peter Culham at the front with Marcus Bailey hiding behind, Mike Sinclair at the front with John Evans behind and Andy Day at the back, Nigel Penford at the front with Alf Cusworth behind and Karl Trussler at the back, George Saffrey at the front with John Spokes behind, Mike Furness at the front with Chris Simons behind on the left and Jim Brown behind on the right, Stuart Kidd in front and then Lily and David Scott on the far right. Other people around at the time but not in the picture were myself, Les Dawson, Fred Few, Charles Benham and Dave Cole. Photo MM

REVIVING AN OLD FRIEND

Or, how my home made lathe got relocated

by David Scott

Yes Home Made, well in the school workshops for one of my practical A Levels back in 1977 when schools had such things and technical colleges ran H.N.Ds packed out with suitable machinery. Good old yellow pages found an iron foundry just outside Exeter, and the inspiration for all of this was out in Winkleigh in the shape of the creation of locomotive models to dream about.

1976 saw me become a School librarian and a life long friend of Alan Wilson who soon had me cycling out and becoming acquainted in everything 1366 in 7 ¼ inch gauge round the family house. Inside the workshop 5 Kings and 2 Castles slowly took shape. On the drawing board the Bulldog series started and eventually got replaced by Ariel all in 5 inch. A slight diversion was the odd development of the C5 for a Mr Clive Sinclair and having had goes up and down the lane preferred the locomotive! The computer that also arrived left such a lot to be desired, no drawing package, boring games, no internet... Sorry I forgot C B radio Uncle Dennis wud nor over Cher ton Fitz!

I got my A Level grade A and others and headed to Coventry to study industrial design, two tone music, how to avoid a UB 40, the madness of the student bars, selector ing specials nights out, and seeing Morning has Broken via the Islam Society. (Cat Stevens A lovely guy to meet).

The more of the lathe that got machined the more British Industry seemed to fail around us. We went to a party by Alfred Herbert's Machine Tool Works only to emerge to a sad scene of its break up?? Back in Devon I worked on boat and ship models for a year at Exeter Maritime Museum... Manpower Services? Cycling up to build a boiler with John Short and other bits and pieces.

Keith set off for America and I set up to machine the saddle and tail-stock base first. Then the bed which is a rolled steel joist with two steel bars screwed each side. These were horizontally milled into a Vee and a flat to match the saddle and tail-stock base. Now clamped tightly these were now vertically milled with the vees done identical.* The headstock was bored and the two slabs of iron parted and bolted together. I cheated and bought a Myford spindle and one for the tail-stock saving me the huge price for a number 2 Morse taper reamer. The final machining being boring the tail-stock out by mounting it on the saddle*! I did the screw cutting for the lead screw and feed screws.

I fell in love with Myford's Trilever system of slipping belt clutch so set about doing one for mine. Most evenings you switch it on set at 700 revs and the parts just flow off nicely. Even better from the rear parting tool and quick change tool-post also home-made. By this time a Dore Westbury Mill had

come into existence and they both helped improve each other. And get their teeth into the various projects.

A first job and first wife plus a move to the North London Track... Sorry Enfield!... saw several more parts done in between locomotive and boiler making activities. Back in Devon we settled into number 6 Sea Lawn Terrace. Yes, it was the one that got its front garden bitten out by the sea having devoured the railway line and the road in front. I made small parts on the Unimat 3 and had the full kit and long lunch times at the Topsham Road Campus Exeter where I now worked. Polytechnic South West then University of Plymouth... Plymouth University. An MGB GT came into our lives and once rebuilt came in handy for everyday transport. Finding Orchid Vale where out of builder's offcuts built a superb summerhouse with workshop behind. This wonderful residence being equal distance from a superb pub and the 'eventual' third site for the Newton Abbot track. Technical term walking distance? Ten years after we left.

We moved into Exeter with a double bluff to Halifax about our wages who had moved into the old Barings Bank building?

Strange that the garage was built in '1966' but made a lovely workshop which became a refuge from the gathering storm not predicted by the Met Office who seemed to double the price of houses in the area when they arrived from Bracknell. I was now into building two Hunslets and the lathe and mill chewed their way through most of the parts. Friday nights saw visits to Tiverton and a circle of natters about our growing collection of projects. Their big project was the new track and my growing involvement in mould making and skills with concrete. Friday night also became film night down in Plymouth for her with a young, fit and sporty Steve.

Dreams of a Britannia, a Super 7, and a larger mill vanished in the direction of my solicitor... But a protected pension and a deposit came my way for a new house. Also a sitting room with a lovely brown carpet and a single life for well over a year. Robbie Coltrane and I sharing a passion for workshop in the house activities. Lovely advert, where do you wash your bike? I was commuting between Ivybridge and Exeter so via a slight diversion could help out at the Newton Abbot track build, or have a bash at Buckfastleigh on the way home... eventually?

Steaming into my life via South Manchester came Shirley... "Oh good!!" said mum. "A local girl at last and from Manchester!" "Sorry via Xian... Shi an! home to the Terracotta Army and in brackets home to Lily Chen at university!! Remember 1966 and the perfect workshop!

We had in interesting six months where many questions about my strange student's passion for moulding body parts and things may have put her off? "I have a new girlfriend!" I told all my remaining friends left over from the break up. "NEVER" they teased back. Thankfully in my spare time I had done a lovely job of the loft in which now Lily Scott helped me install the

lathe and mill. Also a monitor that at the time weighed about the same as its base. This was for the den away from the redecoration below.

The BASE was a suggestion from Keith which knowing ME involved concrete, a mould and an upturned lathe bed. Wow does it dampen all the vibrations aided, I am convinced by the huge white metal bearings of the ML7! I turned two Stirling Single wheels for my eldest cousin... one on a Colchester Bantam and one on The Lathe. They both got finished chatter free on you can guess? What you can do on a 9-inch faceplate and 15 M10 bolts going through very solid concrete!

We moved back to the Plymouth track... Sorry Mutley, and within walking distance to the new campus, a new boss who came up with many new ideas including putting a band-saw blade in to run upside-down, not noting down peoples holiday requests and having people off on stress for 7 months. So we moved to Tilehurst and you have to put up with us!

Part of my therapy in between encouraging our daughter to build boats, bake almost impossible to eat chocolate cakes. Upsetting the now ex headmistress at Calcot. Was building a summerhouse and the ultimate workshop. This is super insulated all round. Far warmer than the house in mid-December. And cool enough to cut 1 inch bar in mid-July without collapsing. It grew and grew but has one fault. Once all the metal and other projects arrived IT IS NOT BIG ENOUGH. Piles are good. That pile can go and live in the loft. That pile can go and live back in the garage!! And this lot can go and reside in the spray painting area eventually. Also known as the greenhouse which was moved to make way for the workshop. A nice clear bench full of Lathe parts, a freshly lapped in bed and saddle, cleaned spindle and original drive belt. A new tray from a garden centre. Clutch lever back in its original position resembling a single engined aircraft throttle... sorry, that was influenced by Les.

Now assemble the Terrier tank. Bliss. Build greenhouse, paint kitchen, new wall in landing.....

Opinions expressed in PROSPECTUS are the personal views of the contributor and cannot be taken as reflecting the views of the club committee or editor.

**The deadline for the June PROSPECTUS is
18 May. This is the final date.**

Contributions from all members are greatly welcomed

They may be submitted in hard or soft copy to the editor.

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All photos David Scott



READING SOCIETY OF MODEL ENGINEERS

ANNUAL GENERAL MEETING

THURSDAY 19 MAY 2016 at 1930

This is the first AGM of the newly formed Reading Society of Model Engineers Charitable Incorporated Organisation . There are four trustee appointments available for members to vote on.

Should you wish to be considered as a trustee please complete the nomination form available from the secretary and return it to him before Thursday 12 May 2016

Ex Southampton
Docks shunter at
ICI Wilton 4 February
1997

Photos WP



Abandoned diesel
depot at Ripple
Lane, Barking 9
June 1995.

Photos WP

WOLVERTON PUG - SORTING OUT PROPERTY ISSUES

There were two sites more than any other which gave me constant grief. Firstly, Barking. This site was surrounded by railway lines. The down and up Fenchurch Street to Tilbury and Southend lines ran either side. Between the down Tilbury and the Terminal site lay the derelict Ripple Lane diesel depot, made redundant by the cessation of the oil trains from Thameshaven. Road access was off Renwick Road bridge, a 1970s concrete structure, suffering from early signs of concrete cancer. Most of the site was leased off to P&O Containerbase, who handled the traffic arriving at the Terminal on the P&O contract trains. They had quite a large office complex, including a canteen on the site plus vehicle maintenance facilities.

The Freightliner facilities consisted of a small single story building, housing a traffic office, supervisor's office, mess facilities including a sink and a couple of WC's and a washbasin. Staff complement up to four- crane driver, carriage and wagon man, traffic clerk and supervisor. Not exactly a huge demand for volumes of water. The P&O part used much more water.

There had been several instances of burst watermain, which had been repaired. However, I got the engineer to report on the state of the watermain generally. It was a PVC pipe laid in about 1970. It had been supported on piles of bricks spaced at intervals. The pipe had sagged over the years, and as PVC pipes were expected to go brittle after about 25 years, it was now starting to fail. The only way to deal with it properly was to renew the whole pipe. We obtained quotes from contractors used to dealing with railway environments and bearing in mind the distance from the public road, the need to obtain a Railtrack lookout for the section under the Down Tilbury and the difficult access to the route of the pipe which passed underneath the road bridge the figure was something like £83,000. I knew I would never get the Freightliner Board to approve that sort of outlay to support four men and a dog, usually only two during quiet periods. The tenant (P&O) was not going to look favourably on chipping in their portion based on user, particularly as they were already paying us £460,000 per year in rent! So in the interim we carried on the spot repair regime.

Then along came the Channel Tunnel Rail Link, which was due to pass directly beneath the Barking Terminal just before emerging from the tunnel from Stratford International. Due to the land condition in that area (estuarine gravels) everything on the site, including the lighting standards was piled to some depth. This included the crane rails and the road bridge and ramp. It cost the CTRL project an absolute fortune, because they needed to replace the crane rails, the lighting tower piles and put huge supports under the road bridge and ramp during the tunnelling. Whilst the new crane rails were installed they paid for us to divert the P&O trains to the newly opened inter-modal terminal at Tilbury Riverside. P&O Containerbase needed a new building for their straddle carriers. These are huge four wheeled monsters

which carry containers slung underneath rather than lifted above as with a reach stacker. They are about 12 metres high, so you can imagine the height of their garage!

Well, we got our new water main out of the job.

I mentioned in a previous article that I had inherited a tenant beneath the road bridge who had no proper sanitation for himself or his two assistants. We found out that he had tapped into the old water supply for the closed and derelict Ripple Lane diesel depot and was handling polystyrene products. It seemed he made those things you see on the top of a hearse reading " In Memory of Dad" etc. Well I had to serve notice on him. We only got £5.5 k a year in rent anyway. He did go quietly, but sometime after he had gone I needed to go to Barking for some reason, not long after the funeral of Reggie Kray. John Williams said to me "I wouldn't go down there if I were you, that bloke you booted out made the display for Reggie's Hearse!" John always did have a devilish sense of humour.

The other site that gave me more headaches than enough was Crewe Basford Hall Yard. This is another site similar to Barking but much larger. It was totally rail locked. It had the West Coast Main Line on the east side and the Crewe Independent Goods Lines on the west side. The yard handled a lot of interconnecting Intermodal trains, so was busy most of the time. There were various offices and messing facilities and latterly a locomotive fuelling point. There were several huge lighting towers. As with many railway locations the gas, water and electricity supplies and the drainage had simply been added to over the years. The station opened in 1837!

Freightliner were billed for these services by Virgin Trains who ran Crewe station, which had always been billed for usage by the power and water companies etc. Most of it was based on various meter readings, historical data and some sort of rough and ready guesstimates. These bills were sent to the manager of our yard, a chap called John Smith. John and I had been discussing this loose means of calculating the bills so we agreed he would carry out a full survey of exactly what buildings and lighting towers were ours and what they were using. Where no sub-meters existed John would get them installed and he would analyse the readings against the bills received. Once all this had been done we were able to go to Virgin trains with a robust assessment of what we should be paying. One thing that emerged was we were supplying water to Crewe Sorting Sidings North Signalbox, so a periodic invoice to Railtrack sorted that one.

John rather sheepishly phoned me one day to say that somewhere in the yard he had discovered an electricity sub-meter, but could not work out what it served. So in a controlled manner he switched off all the supplies he knew were his but the counter still kept spinning round. He then turned off the switch adjacent to the mystery meter and all hell broke loose as he had switched off some of the signals on the West Coast Main Line!

Another interesting site was the terminal at Wilton, Cleveland. This was inside the ICI works and at that time ICI were looking to divest itself of non-core activities which included responsibility for the rail network from the Railtrack boundary on the line to Redcar at Grangetown and the Freightliner terminal. A distance of two miles. As only we and EWS (English Welsh and Scottish Railway, who ran the coal trains to ICI's power station), used the line, we considered taking over the track maintenance work as ICI had not been maintaining it to a reasonable standard for some time. Although I had maps of the place I needed to get my head round what exactly was there and which bits we actually ran over. There was a large amount of rail infrastructure out of use by this time in the ICI complex. I therefore got myself a cab pass from the FL Operators and decided to climb aboard one of the early morning arrivals at Middlesbrough station and travel on the foot-plate round this track work and into the terminal. I got myself booked into a hotel not far from the station. I travelled north one evening, ordered a breakfast to be delivered to the room, set the alarm clock and duly retired. The train was due through Middlebrough Station at about 06.50. The alarm went off at just after 6 and the breakfast tray arrived about 6.15.

I phoned the Freightliner Control at Euston to enquire how the train was doing to be told it was thirty minutes early at Northallerton. Gulping what I could I shot out of the room and down to the station. Up into the signalbox to discover it was still at Tees Yard Thornaby and due to leave there at booked time. The Bobby held his signal at red so that I could join the train, which I duly did and saw for myself the full route into Wilton FLT.

(To be continued)



Above One of P&Os straddle carriers just visible outside its shed, known as the elephant house. Right, Checking the water main at Barking. WP



DIARY

May 2016

Sunday	1st	Public running	13.30-dusk
Tuesday	3rd	00 Gauge layout	19.30
Saturday	7th	Club running	11.00
Sunday	8th	Birthday party	11.00-13.30
Monday	9th	Trustees meeting	
Thursday	12th	Fish and Chip night	
Friday	13th	Grange pre school	
Saturday	14th	Birthday parties	11.00-13.30 14.30-17.00
Sunday	15th	Birthday parties	11.00-13.30 14.30-17.00
Tuesday	17th	00 Gauge DCC	19.30
Thursday	19th	CIO AGM	19.30
20th—21st– 22nd Doncaster MEX			
Saturday	21st	Birthday parties	11.00-13.30 14.30-17.00
Sunday	22nd	Birthday parties	11.00-13.30 14.30-17.00
Friday	27th	Young Engineers Club running	11.00-13.30 13.30
Sunday	29th	Autistic Pride Day	11.00-16.00
Monday	30th	Public Running	11.00

June 2016

Saturday	4th	Birthday parties	11.00-13.30 14.30-17.00
Sunday	5th	Public running	11.00
Tuesday	7th	00 Gauge layout	19.30
Thursday	9th	Church End School	
Saturday	11th	Club running	11.00
Sunday	12th	Birthday parties	11.00-13.30 14.30-17.00
Monday	13th	Trustees meeting	
Saturday	18th	Open	
Sunday	19th	Weekend	
Tuesday	21st	00 Gauge DCC	19.30
Friday	24th	Young Engineers	18.00-20.00
Saturday	25th	Young Engineers Club running	11.00-13.30 13.30-17.00
Sunday	26th	Birthday parties	11.00-13.30 14.30-17.00