

MAIDSTONE MODEL ENGINEERING SOCIETY

Winter 2018

www.maidstonemes.co.uk

Maidstone Model Engineering Society

Winter 2018 Newsletter

Contents

Luke's Spot.....	3
Chairman's Corner	4
At the park.....	6
Ray Milliken.....	10
Featured Model : Lochwood.....	14
Lochwood's new boiler (Spring 2003).....	20
Northumbrian pt 2.....	22
Mike Lister	26
Every Steam Fair Has One pt 1	30
Building a Radio Control Volvo Truck pt 1	36



Luke's Spot



Another winter is upon us and Christmas (yes CHRISTMAS!!!) is fast approaching. Winter is a busy period too, if not so much at the park, although there is always someone there most Sundays, then in our workshops on our projects. For me this is on Northumbrian as you'll read later and on our Polly 6 having a rebuild after 6 of not so gentle years running. Trojan has been performing well this year, outperforming the 6 and showing what a benchmark will be for the 6.

As an engineering club we all have a shared interest, and like I was, you might be surprised at the general level of interest shown in even the smallest projects of questionable build quality (talking about Northumbrian here). What is seen as only okay by me has pricked the interest of a few members who have had some very though provoking discussions about her. So like me you may think other members, even those who have produced amazing engines, wouldn't be interested in seeing the small things we build for ourselves or the projects we have that we don't think will interest others, I can assure you other members of our club and the hobby in general will be interested.

It is what keeps the club going aside from the railway itself. I know many of you have projects tucked away out of sight, perhaps forgotten about of non-runners, stationary engines, clocks, IC engines, trucks, wagons, coaches, boats, trucks, aircraft. Model engineering is a wide ranging varied hobby, and we at MMES have some very capable modellers and engineers who work goes unsung and those that are willing and wanting to learn from those have done it before, so please bring them along on a Sunday, a Wednesday or for show at Detling or Ally Pally, you will find many supportive and interested members, you may surprise a few as well as yourself.

All that is left to say is I hope you all have a very **Merry Christmas** and a **Happy New Year!**



Join our members page at facebook.com/groups/Maidstonemes
And like our public page at facebook.com/maidstonemes

Chairman's Corner

Well, where to start? It's been a busy time recently, with plenty going on as the season came to an end and the winter beginning. Since my last report, the season carried on as strongly as it has been progressing, losing only a couple of days in the season through bad weather. A big thank you to all those who have offered their time and services to helping this progress smoothly, either collecting fares, loading, traffic controlling and most importantly making teas, not to mention the consistent supply of home-made cakes that we have had the pleasure of receiving this year, (all most appreciated!) every one of these jobs being vital to our continued running, without it all we couldn't pull passengers.

The Wednesday gang has been going as strongly as ever, being the unsung heroes of the club that put us in a situation that Sundays are not as panicked and stressful trying to get maintenance done at the same time as preparing for public running. Again you are all appreciated, even if not given the thanks you deserve often enough, partly because they do their jobs quietly, before we even know they need doing. Just to mention a couple of the jobs that go on, and I'm sorry that I cannot remember all involved; gradual painting of the guard rail around the track, painting white markings around the steaming bays to make hazards easier to see in the dark, replacing light fittings, cleaning drains, boiler testing... the list goes on.

So what else has been going on that I should be talking about?

We had our trips that I mentioned in the last newsletter, with a great visit to the K&ESR at the beginning of August, with a guided tour behind the scenes by Andy Hardy, sandwiched between visits to Sutton and North London where we were welcomed as well as ever. All three of these, I felt, were enjoyed by all who took part. Unfortunately, August also brought the sad news of the passing of our long standing member Ray Miliken, who lost his battle with cancer that he had managed to beat so many times before. Although not a regular in recent years, he and his wife Margaret did an awful lot for the club in the past.

On to September, and this brought an end to Bernie's reign as the holder of the Australian award, as the southern federation rally took place. This year in Cambridge, Bernie was unable to attend, so I returned the trophy

on his behalf, and Andrew took his place on the judging panel for this year's winner which I am honoured to say is me!!! It was an incredible feeling to have won, and as much as I'd hoped for it, I never anticipated how it would feel to hear my name called out. It has left me with the arduous job of travelling to the rally next year to judge and pass on the trophy once more. Fortunately the journey could be a lot worse as it is to be hosted by us to celebrate our 90th anniversary... more of that to follow...

A group of us made our annual trek to Llanelli at the end of the month for what continues to grow into one of the biggest rallies of the year, with well over a hundred engines booked in between the two tracks and the road vehicles, this is well worth a visit and it's in a beautiful area of the country too.

As the season came to a finish we did encounter a couple of rainy days that stopped play, however it is still pleasing to know that we get a much better turn out, with (in my opinion) a finer selection of models than any other clubs that I know of, long may it continue. Unfortunately, the end of the season also saw the passing of Mick Lister, not exactly a regular in recent times, however a fine model engineer who will be missed by those of us who knew him.

On to the winter months... still more jobs getting done around the site, which we don't necessarily get time for on a running Sunday, hopefully building to a stronger club that we can be even more proud of.

We have sent out the menus for the club annual lunch at the Grangemoor hotel, and I hope to see as many of you there as possible, it's great to get together and enjoy each other's company (and a drink or two) along with partners without the thoughts of keeping the club going; I'm sure it's not too late to sign up if you haven't already.

My final plea, is for you all to be proud of your work, I see so much modesty and yet I look around our club and see so much talent that I am so proud to say I come from the Maidstone MES, so with this being our 90th anniversary in 2019, let's carry on showing why we are such a successful club. With the London Model Engineering Exhibition coming up in January, I have to submit our list of exhibits by the 15th of December, so if you have something you're working on, or something that's finished and you'd like to show, let me know soon.

At the park

General Works - Jack Ruler & Maurice Knott

The Hose Reel cunning plan mentioned in the last newsletter has worked. Jack realised that the hose was expanding inside the reel due to the exceptionally high mains water pressure that we have at the park. This made the reel stick when feeding hose in and out; however, the hose that we had bought was much longer than we needed, so Jack shortened it by about 20ft, which still leaves enough hose to reach from the workshop right to the fence in the carriage sidings and the extra space inside the reel cured the sticking problems.

Chris Williams has continued to keep the station area neat with his gardening activities and Paul Clark has continued to patrol the track early on Sundays to collect any rubbish 'donated' by the public.

We had the Ticket Office window bashed in and Gerald has refurbished the shutters on all three windows by bolting a steel frame inside to replace the decaying wood structures. He was given a hand in this, amongst others, by Tom, Jim and Jack. Inside the building he has also removed the redundant small shelf, which had a small drawer beneath it, so we have a nice storage space for our station signs.

In the past Edgar has brought his own blower to do the pre-Boxing Day clearance of leaves and this was so successful that, after discussion in committee, we decided to get a similar blower for the club. Maurice has obtained a petrol driven leaf blower, Jack has commissioned it and put up some brackets in the workshop for storage. Another equipment update has been the purchase of a modern electronic welding unit to replace the two original transformer units that. Tom has been the main instigator of this and the new unit also has the necessary electrode and gas supply to do TIG welding.

Household and Catering - Chris Williams

It was agreed to repaint the floor outside the toilets which has now been done

Public Running - Dave Deller

The two MENCAP runs had both been a success and the next public running day will be Boxing Day

Safety - Tom Parham & John Hawkins

Hazard areas in the steaming bays were being marked with white paint.

Permanent Way - Dave Deller and Peter Kingsford

The beam repair trials have continued; Pat Callahan has refined his shuttering system and Jack has sourced some special Fast Setting Concrete Repair Mortar. These have been used with a pre-coating of SBR on the beam to enhance keying of the repair. Several beams were repaired before the frost season halted progress and the results are very encouraging. If these repairs still look OK after the winter we can make quick progress with the repairs in 2019.

Fuel - Tom Parham

Nothing to report

Club Locos - Tom Parham

Enterprise - Has passed its boiler test but there are still a few outstanding issues

Doris - The Doris has now been stripped down to be repainted

Gertie - The starting cord on Gertie had broken but been repaired.

SNCF - progress has been good, led by Jack with great help and advice from Martin, Tom and Greg. The engine is fitted in the chassis and the two plastic hydraulic pipes in that area have been moved from the RHS to the LHS of the chassis to keep them away from the engine exhaust. After advice from Dave Deller, Jack has made an exhaust pipe from



plumbing parts to attach to the engine and exit through an existing hole in the side of the chassis. The engine has been connected to the hydraulic pump by a lay shaft connected by toothed belts each end. Martin had the parts for this from the equipment left by Ron Atfield and, after a chat with Tom and Jack, it was decided to gear the engine down by about 2.5:1 to avoid over revving the pump. Jack made a computer model of the lay shaft after carefully measuring all the parts and this predicted the position of the lay shaft within the chassis. He made a mock up with a wooden block that seemed to confirm the model as correct and Martin went ahead and made the lay shaft and block complete with bearing each end. This worked out very well indeed. The SNCF has been test run on the track with trolleys full of club members and seems to have an adequate amount of power. Work is continuing to tidy things up and improve the cooling air system.

Rolling Stock - Andy & Luke Bridges

A few trollies have been reported to have riding troubles, and a couple of bogies need their wheels turning, these will be given attention over the winter, all trollies are serviceable however





Ray (Raymond Howard) Milliken

17th July 1935 – 25th August 2018

Sue Parham



Ray was not just a member of the club for almost fifty years, but for some years a Life Member (an honour given to few); also, he was a former club secretary. He built many items in his lifetime.



Ray was born in Clapham Common. As a child, he grew up in the war years and would go looking through shrapnel with his brother. He always said the best day of his childhood was when his school got bombed! Ray was busy building and creating things from an early age. He served his National Service in the RAF and met Margaret at a dance. In 1967 they married, and their first home was a first floor flat in Dulwich. There his passion for building and mending things really began to flourish. He built a speedboat in the spare bedroom on the first floor, and when finished, then had to work out how to get it out. Undaunted, he worked out a pulley system and removed the window, and the boat was slowly winched out and down to the ground. They then enjoyed using the boat and water skiing. Ray and Margaret moved to Chatham after their only child, a daughter, Linda was born. He worked as an electrical contractor and radio/TV engineer, subcontracted to the Imperial Hotel in London, where he had a work room to repair TVs and other items needing attention. He built radio control boats (became a member of the Cygnets Model Boat Club in the Park), skis, motor bikes, and numerous things before he turned to steam. He joined MMES in 1969, when he started building a loco. When Martin was a teenager living nearby, Ray taught him a lot of model engineering



skills, and Martin learnt through watching him as much as he did listening to him. For some years as Martin grew up, Ray and Margaret were like family to him.

Ray built three 5" gauge locomotives.

The first was an

Ajax, called Linda after his beloved daughter, finished in the early seventies. The second was called Consolidation a Nigel Gresley loco to a Martin Evans design, which was painted blue. The third was another Gresley, a 4-8-2 which was proposed in full size but never built; it was based on an A3. This was called Duke of York, and Ray gave it to Tom shortly before he died. Ray was club secretary between 1973 and 1978, but during 1978 Martin took over the role as Ray was unable to attend most of the time. Ray represented MMES in Japan in the 1978 EXPO. He was chairman of the Southern Federation when the invitation was received and took the Gresley 4-8-2 locomotive he had built with him to Japan.

He was there for about a month, where he met and became friends with Barry Glover, President of the Australian Association of Live Steamers. Out of this this friendship was born the AALS Trophy, awarded at the Southern Federation Autumn Rally annually, for the best prototypical Commonwealth design locomotive running at the rally. (This has been won by several of our members.) In return, there is a Southern Federation Trophy awarded in Australia each year. Ray attended a reunion ten years later in 1988.

The last loco Ray constructed was in 7 1/4" gauge, a Romulus, a joint project with Martin. They built this together in sixteen weeks, starting after one Christmas. It was so they could run it at Hemsby, Norfolk, where they would go for a one week holiday every year at Whitsun. They only had this loco for a year, putting it on the Southern Federation stand at the ME

exhibition with a For Sale sign on. It was spotted by American songwriter David Rose (famous for being the composer of the music "The Stripper" amongst other melodies). David bought the loco and had it shipped to the USA and re-gauged. Ray also built a 4½" gauge Burrell traction engine, named Neddy, which was the pet name he and Margaret called each other. There followed construction of his steam lorries, a Fowler and a Beyer Peacock, a steam car, and a Simplicity roller. A steam tricycle was his last completed project. He attended many steam rallies all over the country with Margaret, and with Linda too as she was growing up, and won many awards, also at the Model Engineering Exhibition.

One ¾ size steam lorry raised funds for the British Heart Foundation, as in middle age he had a heart attack and surgery, from which he fully recovered. For the steam car he made every component, and this took part in the Bexhill 100 race. He also built clocks; not just a grandfather clock but a grandmother clock and a granddaughter clock as well, and he built an electric organ and furniture including a writing bureau. He could make or repair anything and if he didn't know how, he'd find out and then do it. He never took money off anyone for helping them out this way, he was kind as well as clever. He avidly read technical books. Margaret worked for the KCC at Springfield as a secretary and Linda worked in the library there, and so they could bring books home for him.

His latest project was going to be a hovercraft, but other more pressing matters took his time. As Margaret's health worsened, he became her full-time carer. He resumed coming to the club with her, as once he was into building bigger size steam that didn't need a railway track, he'd been far less. His own health deteriorated, and he learnt that he was also terminally ill. Nevertheless, he never stopped caring for Margaret and would visit her daily after she suffered a stroke some months ago and ended up in a nearby care home, despite being so ill himself. Linda found him a MacMillan nurse, who secured a place in the hospice for a fortnight's assessment. Once there, Ray relaxed, as they were able to deal with pain management. But just the very next day, the doctor was unhappy with Ray's blood count, so they sent him to Medway Hospital for a blood transfusion, a procedure he had undergone several times before. Sadly, Ray passed away peacefully within a few hours of being there.

Featured Model

Next up we have a loco which until recently had a very distinctive sound, and behind which I have the oldest photo of me and my brother behind a miniature loco

Lochwood - A little bit Mysterious

Andrew Hulse

Model Fact File

Builder - ?

Year Built - 1949-1950?

Wheel Arrangement - 2-6-0

Length - Engine:41" - Tender:23.5" - Overall 64.5"

Driving Wheel - 5 3/4"

Weight - Err don't know, too heavy to lift onto the scales, but a little more wouldn't hurt for those slippery days...

Well there is a little bit of mystery about Lochwood. It was thought by Ken Linkins that she was built in 1949/1950 by builder unknown, and featured in a model engineering magazine at the time, but I have unfortunately been unable to trace any articles (if anyone out there has come across them, it would be great to see). Built to the design of LBSC's 3.5" "Princess Marina", but upscaled up to 5" gauge. There can't be too many of those around.

All that's known for definite is that she turned up at the club in ownership of John Winser, and ran for many seasons as a clattering clanking workhorse. Despite a few rebuilds that clattering and clanking didn't go away for long—you certainly knew when she was on the track.

Lochwood was amongst the first engines that I learnt to drive when I first joined the club in the early 90's and found great pleasure in being instructed by John in how to prepare her for the afternoon runs. I couldn't wait until I was old enough to drive with passengers and be a relief driver to get my hand on Lochwood's regulator.

John Burrows was next to take ownership of the clattery workhorse, and another rebuild was required at the end of 2000. A bit more major this time as Lochwood's boiler had finally expired, with several corroded tubes. Without any drawings, John had to measure up each part of the boiler, even opening up the top of the firebox like a tin can to examine the internal bits. I won't go into too much detail, but John did write an article for the MMES 2003 Spring Newsletter, worth a read for a bit of nostalgia. Needless to say John's boiler is still going strong creating plenty of steam when needed.

John was kind enough to pass Lochwood to myself when he could no longer operate her due to ill health, and I couldn't be happier. She was now my clattering, clanking workhorse. I ran her for a few years, with a break for a spruce up, the old LMS livery was getting quite worn, so time for a change to BR livery—thanks Tom for the repaint and Martin for the smokebox numberplate (there's more thanks to come...).

Another couple of seasons running and it was becoming obvious that all the clanking was getting worse, and with a lot of play in motion, and the off spring dropping off here and there, it was decided to take her apart before she fell apart completely. In taking her apart it was obvious what all the noise had been about; every bush and axle box was oval and every axle worn. It was going to be quite a task for someone with no real engineering experience such as I, so I put off the task of rebuilding for a while.

After sitting in many pieces for several months, with parts in various boxes in various parts of the garage I finally enlisted the very kind help of Richard Linkins to help me rebuild her. It's handy having an engineer living

round the corner sometimes. Many an evening was spent in his workshop, with Richard showing me how to get to grips with the lathe, although inevitably he ended up doing the majority of the work required, so many thanks there.

Before the axleboxes could be made, work was required to the frames, as the horn guides were not square having worn over time, so a job for the milling machine.

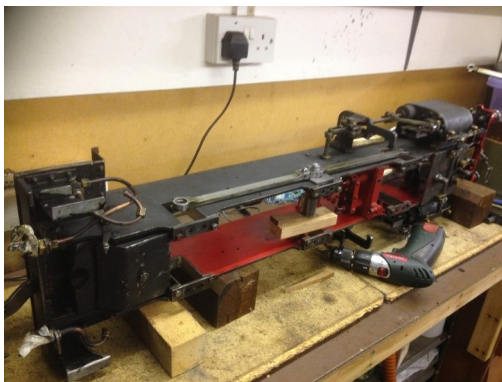
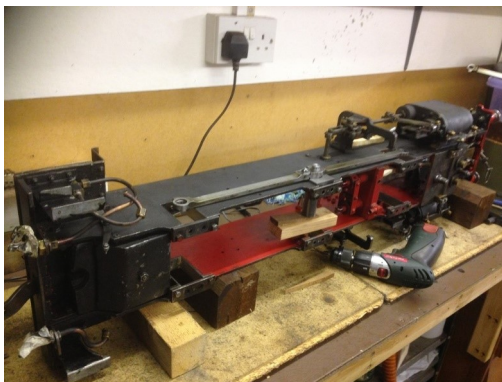
Whilst measuring for the new axleboxes it was found that the frames were not in line, and that there was a kink in the frames on the right hand side near the cylinder. It's thought that this kink could have been caused when the engine derailed in John Winsor's time, coming completely off the track on the first bend out of the station taking John with it. This could also have been the cause of the quick wearing motion parts between rebuilds and the incessant clanking...

To make the new axleboxes the holes for the axles were drilled slightly off centre to ensure the axles would be correctly aligned once back in the frames.

Once the boxes were complete Richard kindly donated redundant axles from Ken's Black 5, with little work required to ensure a fit to Lochwood's driving wheels.

Talking of driving wheels, these also required attention as they had become dished, so another job for the lathe and some reprofiling. There was talk of new tyres, but although slightly decreasing the wheel diameter, the easier option was taken.

The next task was new bushes for all the motion parts. Richard very kindly



Chassis coming together and running on air

did the majority of the work on the evenings I couldn't attend, surprising me one evening with the news that the chassis was back in one piece

And ready to run on air.



Nearly there

ly be put back together, with fingers crossed that all the bits could be located and hopefully put back in the right places.

With the smokebox door turning up with a new number and worksplate—courtesy of Martin once again—on the day of her boiler test, she fortunately passed and could once more resume her duty as the workhorse she had always been, although hopefully this time a bit more quietly. And indeed the first run on the track and you wouldn't have known she was the same engine.

Although she wasn't quite finished.

She needed some paint. However, I was enjoying having a working engine again so much it was about a year before that would be tackled.

With Tom nearing the build of his Jinty, apart came Lochwood once again

With Richard probably quite grateful to get her out of his workshop, I took her home to begin the task of putting her back together, by firstly taking her apart again.....

To pain the frames and wheels.

After a bit of work to a leaky regulator and with the boiler having been descaled and washed out and painted in grey primer, Lochwood could final-



The big test



for the cab sides, boiler, cylinder casings and tender to receive some glossy black paint. Finally... thanks again Tom.

With the paint dry, time for some lining. I was tempted to try painting the lining but as the LMS livery I had chosen had quite simple lining, I decided to try vinyl tape, and I think

Jinty and Lochwood receiving Toms attention
the result quite pleasing. It was certainly the easier option. I just had to wait for Bachmann to release their 00 gauge version so I could use it to match.

With paint and lining finally complete, Lochwood was looking smarter than she had been for quite some time. In fact I've been accused of keeping her too shiny by some.



Little and large

With a couple of running seasons and a wedding train now behind her, she still continues to run almost as quietly as a sewing machine. With thanks to the work put in by Richard hopefully she will continue to remain quiet for some time to come, despite comments that she's not the same engine without the clanking and clattering.





LOCHWOOD'S NEW BOILER by JB

Throughout many running seasons lots of members have had the pleasure of driving the 2-6-0 LMS Mogul 'Lochwood'. Most Sundays it could be seen hauling a double trolley load at a brisk speed, with a good reserve of steam. But all good things come to an end, and so it was during the 2000 running season that Lochwood's driver (me) was finding it increasingly difficult to maintain any sensible steam pressure. Firstly, the coal was blamed (sorry Pete), but then increasing use of the blower still could not keep the pressure up. Hindsight is an exacting science so they say, so it should have been (expletive) obvious that something was seriously wrong when the water consumption soared. During one particularly difficult day in October it was decided to retire early in the afternoon to investigate while a little pressure remained on the gauge. On opening the smokebox door the interior was found to be rather wet, at least two tubes were leaking quite badly. One from the archives – John Winsor driving Lochwood



All is revealed



During the next week, Lochwood's boiler was removed from the frames and a more detailed examination done. Not a pretty sight, the tubes were well eroded, but considering the many years of hard work done, no complaints. The boiler was definitely past reclamation, so a new one had to be built – problem No. 1, no drawings. Well, it's fairly easy to measure up the outside of something, but what about the inside? Details of

the internal stays and other bits were needed to copy the original design, which had served so well. Although the boiler was old, the outer case proved to be extremely strong, calling for hard work with hacksaw, drill, hammer and chisel. Eventually sufficient cutting allowed a large flap to be levered open revealing the internals. Fortunately the crown stays, of the girder type, were riveted to the outer case, but had the join been silver soldered, cutting would have been much more difficult. It was now possible to measure the crown and cross stays, permitting the details to be finalised.

I had intended to reuse the boiler fittings wherever possible, but then problem no. 2, identifying the various threads used. The safety valves were threaded $\frac{1}{4}$ " gas which you all know is 0.518" O.D. x 19 TPI, so much delving through the miscellaneous tap and die box until EUREKA – the right tap was found to make the new bushes.

The gauge glass blow-down valve had been seized for years and it was thought prudent not to force the handwheel with pliers while in service in case the whole fitting turned thus breaking the glass.

Now it was dismantled, force could be applied after the application of Plus Gas, but to no avail – the valve stem snapped neatly off rendering the whole fitting US.

Lochwood's boiler is of the Belpaire type with a small taper on the barrel, and this was the first piece to be cut from the standard 4' by 2' sheet of 1/8" copper. To use this material economically needs some careful planning if excessive wastage is to be avoided. The next largest piece was the Belpaire outer wrapper, 24" by 11" leaving about 4 square feet for the remaining plates. A variable speed jigsaw is the tool for cutting 1/8" thick copper sheet, and it's worth buying dome good quality HSS blades especially for this task. Progress is slow when cutting out the various shapes; so numerous tea breaks can be taken to allow the jigsaw to cool down.



Belpaire throatplate and formers

4 MDF formers for the firebox and outside wrappers

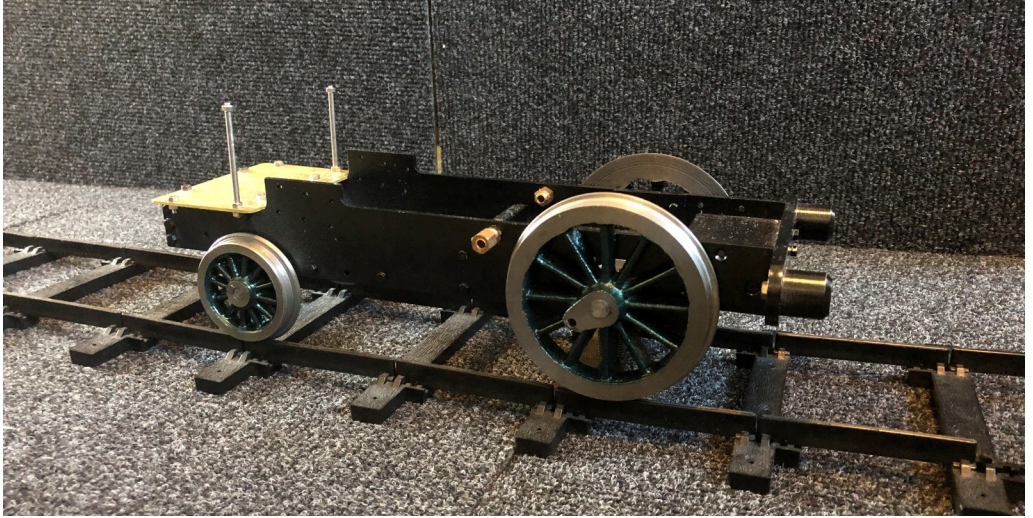
To save time, a start was made on the plate formers. Slices of MDF were cut to build up the two wrapper formers with small irregularities being smoothed out with car body filler. End plate formers were made in the usual way – 1/8" thick mild steel attached to plywood backing with wood screws. The Belpaire throatplate proved to be a challenge as it is double flanged, as shown in the photo. About 5/8" was allowed for forming each flange, and a hide mallet used



as it will be found that copper contracts neater when hit with something softer. Repeated annealing is called for of course, the Belpaire plate needing about ten reheats. The circular flange was made first, this then being clamped firmly to a disc bolted to the main Belpaire former to make the second flange.

For years Lochwood had performed well with the superheater elements removed, so it was decided to omit them from the replacement boiler. This enabled the tube layout to be revised with the absence of S/H flues. Popular thinking on fire tubes is that 16 SWG will ensure a longer boiler life and as Lochwood is intended to be a workhorse, that gauge was chosen for the new tube bundle. When the tube layout had been finalized, the firebox tubeplate was marked out and then clamped down on the milling machine for precise drilling. Silverflo 24 was used to join the tubes to the firebox tubeplate and there is a special holding jig kept in the Club Workshop for this purpose (not a lot of people know that). Once the tubes had been silver soldered, there was a great danger of bending them, so a thin pre-drilled supporting plate was pushed onto the free ends. Before the other tubeplate could be made, it was necessary to roll up the boiler barrel to establish the exact internal diameter. A single butt joint was used with a 1 1/2" wide strap attached externally to the barrel by a few 4 BA csk. Bronze screws. Once again Silverflo 24 was used for this joint, as the melting point is about 150 degrees C above Easyflo No. 2, which will be for the later joints.

Northumbrian - part 2

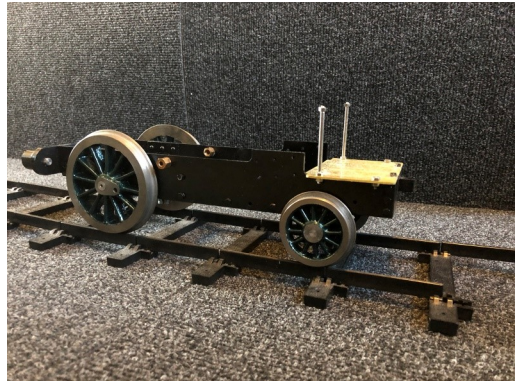
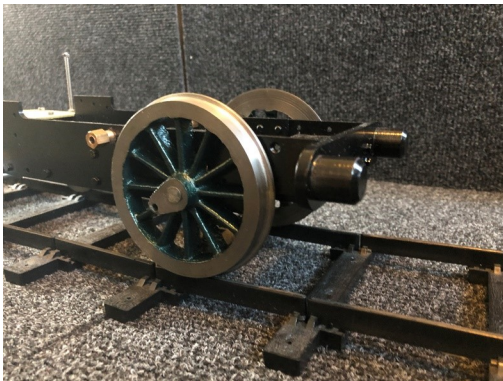


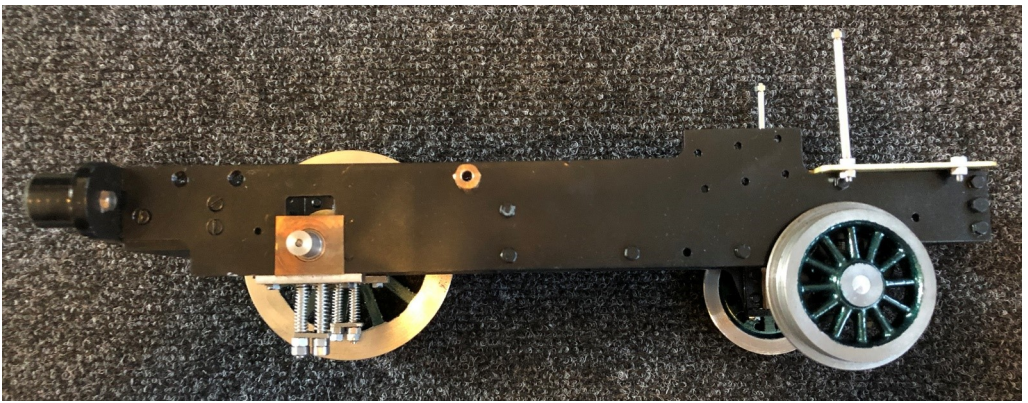
In case you missed part 1 in last issue, here's a quick recap -

I am attempting to build a 3 1/2" gauge Northumbrian as featured in ME from 2009 when I first joined the club. It is an updated version of LBSC's Rainhill and represents Liverpool and Manchester Northumbrian which was Rocket Mk2 basically. An 0-2-2 tender and mostly as Rocket was rebuilt in its current guise.

Here's the story so far -

Progress since part 1 consists of painted frames, replaced aluminium stretcher with steel, buffer beam and buffers, footplate, finished axle boxes and wheels, painted





wheels, slip eccentrics axle pump eccentric, rocker bearings and made a start on the tender to loco couplings, crankpins completed.

As recalled from part 1, the frames I bought for £2 from Nottingham club at IMLEC 2015. As received they had been erected true but with the front main stretcher which the buffer beam bolts to was made of aluminium, as were all the axle boxes.

Aluminium is not a good bearing material and doesn't add adhesive weight over the front drivers where the front stretcher is located.

These have now been replaced with a steel stretcher, slightly deeper than drawn but all weight is needed for such a small 0-2-2. The axle boxes too have been remade in bronze, suspension studs installed, springs found and generous oil ways drilled. The front axle is under-sprung and the rear is sprung from above with the spring located over a stud in the frames. As this goes to print the rear axle is being final assembled with the wheels locked to the axle.

All axle boxes were milled from solid to fit the existing frames instead of sticking rigidly to the drawings as the horns slightly differed in size and alignment. 3/8 silver steel became the driving axle and 1/4 for the rear axle.

All these were firsts, milling from solid, tapping for spring studs, reaming to size and fitting to frames. Also neither of two locos we have previously built have under-sprung axle boxes so that was new to me too.

Both axles being plain proved easy enough, both ends stepped for the wheels and as drawn the driving axle has no way of locating the eccentric stop collars or axle pump eccentric, this will be remedied so that the grub screws locate in a dimple in drilled into the axle.

Turning the wheels was straightforward enough after drilling and the axle hole, turning and threading a stud to hold in the lathe and fit the wheel to for turning. The root radius proved most difficult after



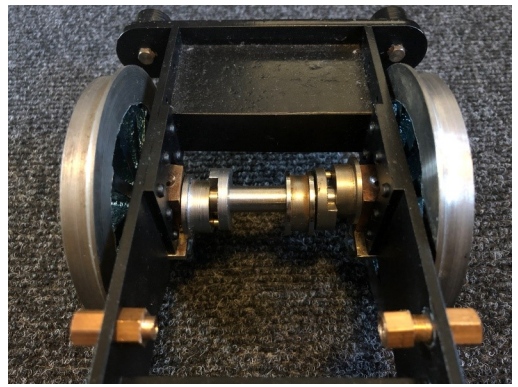
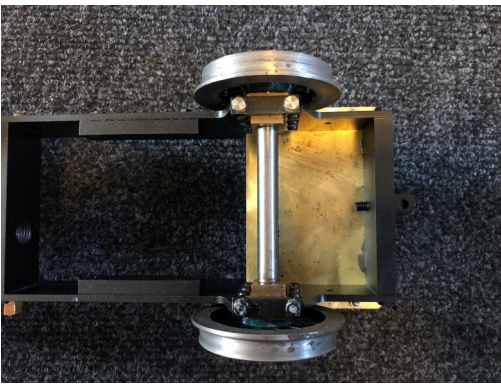
that although luckily on 3 1/2" diameter driving wheels this radius is tiny. The castings weren't the greatest, the centre boss on one wheel has a blowout near the driving pin and all four wheels were turned to thickness, the spokes still weren't broken through so had to be undercut to break the backs out as all were solid behind the spokes.

One driving pin had been turned and will be fitted to the wheel after painting, then followed by the second pin. These are both an inch long overall, the first 3/8 turned to 5/32, then the next 3/8 to 3/16 then the final 3/16 threaded 5ba.

Both rocker shaft bearings are from 3/8 brass hex drilled through 5/32, threaded and nutted into the frames behind the drivers.

The footplate I've had laser cut from 1/16 brass by Model Engineers Laser, all that needed doing was drilling spotted holes to size for bolting and for handrails to be attached. I am all in favour of laser cut plate work, both in terms of accuracy and time saving as I have only limited hours a week to work on Northumbrian.

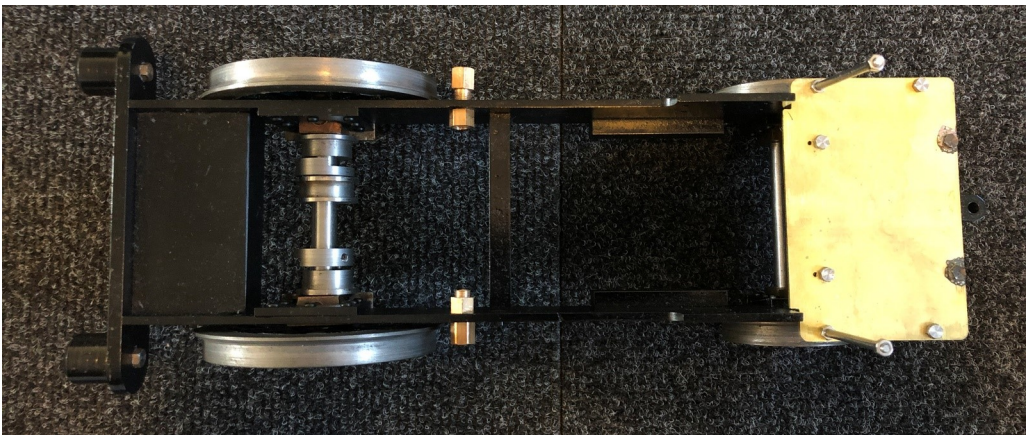
The buffer beam was also laser cut by Model Engineers Laser again for speed and a smooth rounded end, again four fixing holes drilled and two for fixing the buffers which are simple solid dumb buffers,



representing the leather filled sprung buffers of the original. They are simply turned from solid bar, chamfered, and centre drilled 4ba at the back.

So what colour have I gone for?

There is some debate over LMR liveries, there are no contemporary photos only sketches and paintings showing various colours, including greens, ochre, yellow and red. However company accounts only list the buying of green, black and limited white paint. For this reason I have chosen green. But what green? Using the excuse that there is limited info available I turned to Halfords car paints once again as have done for both Polly locos and chose - Rover British Racing Green. Why not.



Michael Allison Lister

25th April 1939 – 30th October 2018

Sue Parham



Mike (or Mick) was born on the 25th of April 1939, in Brixton, to Madge and George Lister. He has a younger sister Ann, who currently lives near Maidstone. Mike grew up in Crystal Palace where he attended Ingram High School and was also a keen member of the Boys Brigade. Mike was also from the time when National Service was still a requirement, and he was one of the last people to serve out his duty.

Always destined to be in retail, Mike worked

at Grants of Croydon for a time, before joining the family business, where he picked up the reins of Furley and Baker, a sports and toy shop on the High Street in Beckenham. He later purchased the business and ran it for the rest of his working life.

At the tender age of 19, Mike met she who was to become the love of his life, Mavis Nelmes (Mave), who was aged 16. Following the traditional courtship, they married in 1963, and began building a family, having two children, Michelle and Mark. Both are now married, and Mark's wife, finding her father-in-law quite grumpy at times, nicknamed him Victor Meldrew (after the character in the TV



*Mick & Mavis at the 2009
Grange Moor Club Lunch*



Mick driving Graham's Wren on an evening run at the Park in 2004

programme One Foot in The Grave), which Mike quite liked. Mike and Mave have three grandchildren, Luke and Bradley to Michelle, and Charlie to Mark. The family resided in Beckenham until their children were old enough to start their own lives, at which time Mike took early retirement, selling the business and following Michelle, who had moved away nearer to Maidstone.

Mike and Mave settled into a small community in Ditton and gradually gained many new fantastic friends. Michael did a lot of woodwork, but after meeting neighbour and MMES member Graham Kimber, he turned to metalwork and model engineering as a new hobby. He took to it like a duck to water, joining the M.M.E.S. in 1995. He often came with Graham to Mote Park. Mike and Mave became firm friends of Graham and his wife Joy, and they went to many steam rallies together. Whenever Mike wasn't calling out for a cup of tea, Mave always knew where to find him - in his workshop, or in Graham's.



Mike's award-winning Atkinson Lorry, which gave him many hours of pleasure

Mike was always known for sniffing out a bacon sandwich at these rallies whenever he could, and Peter and Peta Evans often obliged.

Mike first built a 1" scale traction



Receiving the trophy

engine, a Minnie. This was in the 1996-7 Model Engineer Exhibition and won a gold medal, no mean feat for his first attempt. The next project was a 3" scale Atkinson lorry. This won a gold medal and the Aveling-Barford Trophy at the 70th Model Engineering Exhibition. Latterly he was building a 3" McLaren Traction Engine, which, realising he wouldn't be able to finish it, he sold this traction engine recently to member Dave Deller, who will complete it.

Mike suffered from some challenging health issues, having had a heart attack early on in his retirement, and latterly he was struck by two strokes. Whilst these were fortunately quite mild in nature, over the years Mike found he became unable to concentrate on his hobby. He also found it impossible to completely give up smoking, and once nearly set the house on fire trying to hide the evidence. When his very good friend and neighbour Graham Kimber died a couple of years ago, he took this hard and missed him a great deal.

Always wanting to be busy, he took to 'pottering', which often entailed anything that didn't move being either painted or varnished. But nothing was more important to him than being with his

family, who all regarded him as their rock and dearly loved him. Mike sadly

passed away on Tuesday 30th of October 2018, after a short illness.





Every Steam Fair Has One - part I

Amy Dixon

At the beginning of September this year, I found myself a project, a miniature Traction Engine. At a bargain of £10, my chauffeur (Luke) took me to pick up my new found project. After picking up my engine in a shoe box we took her home. With the help of my lovely assistant (Luke), we completed our first inspection.



With thoughts and ideas flying everywhere, now was the serious discussion, what would I actually like to do to her? Keep her the same old green that I picked her up in, or take her apart and give her a new lease of life? Well I'm sure you can guess what option I picked and was time to shortlist

my ideas in what I would like to complete (obviously this list has grown significantly longer since then!):

- To be painted in a sparkly purple or bright pink
- Black and gold accents
- Being turned into a Showman's Engine.

So, to give you a bit of background information. Since Luke and I have been attending Steam Fairs, and most importantly "the Great Dorset Steam Fair", I have completely fallen in love with Showman's Engines and aspired to have one (that's right, I have been transformed into a train nerd!).

Since my family have met Luke and spoken a lot about steam and trains, memories have been riled to the surface again and I have learnt things I never knew, for example, my Grandad used to have a miniature loco which he kept in the garden shed, never used, I don't

think but it was a shiny black as my Grandmother can remember and was sold on to a new home after he died. Also, when I first told my Great Grandmother that I was going to be attending the Great Dorset Steam Fair for the first time in 2017, the weekend before we went, she told me to enjoy myself and take lots of pictures, so she can remember what they looked like. At the age of 84 she had no issues with her memory what so ever and could describe an engine to me very clearly from her childhood. Unfortunately, I never got to show her these pictures as she died the day before we went to the Steam Fair, which made me enjoy this weekend even more as I was enjoying this both for myself and for my Great Grandmother. Which led me to think of a name for my new engine:

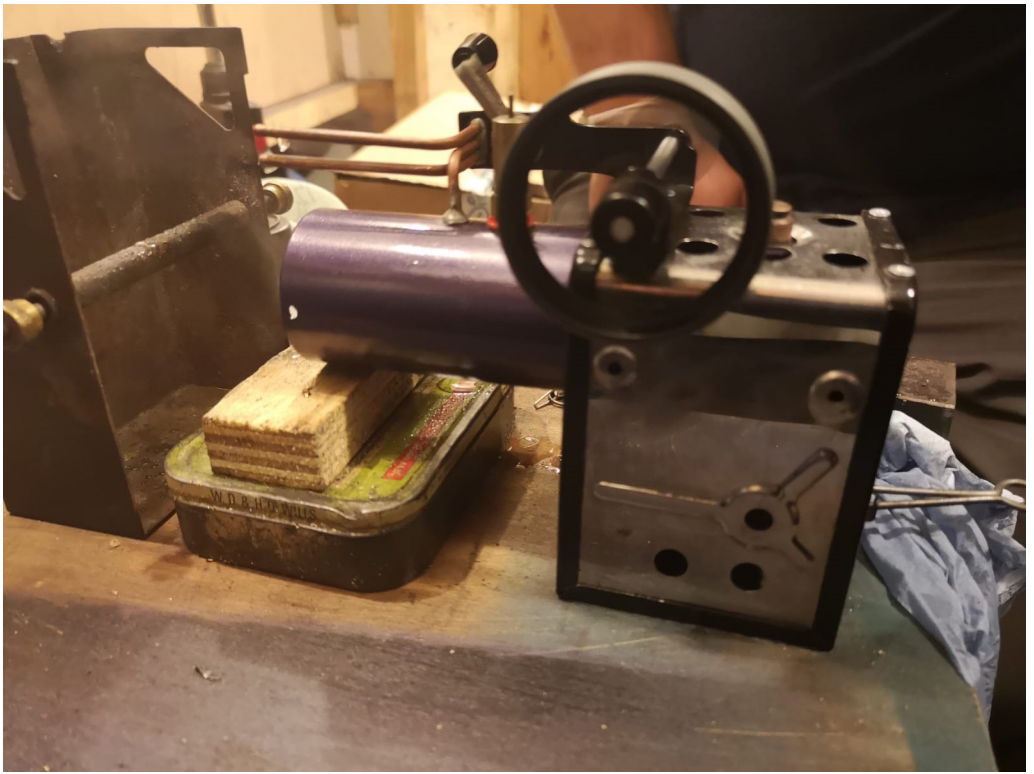
Jean Peggy Quean Ellen. Or **Jeanie** for short.

Any way, back to the topic at hand. The plan of action was, to steam her up, make sure she runs okay and to start assessing the damage. All was okay, a few stuck or stiff bits here and there but manageable and fixable. Next was to dismantle her, strip her down until she was just parts, which led to my first workshop injuries, cuts, bruises and a few (a lot) curse words and everything was fine again.

I removed all of the rivets, with a scary hand drill and was reminded to be very careful with the pressure as I could go into the boiler or make a nasty dent.

Next (while waiting for many eBay purchases to arrive) was to put parts into a citric acid and hot water mixture to rid of the lime

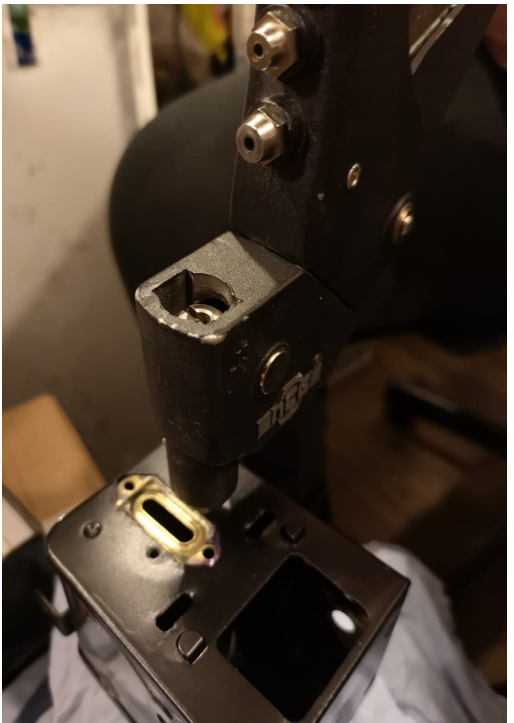




scaled areas and sand down painted areas to prep for spraying.

After about an hour, hour and a half of scrolling through Halfords car paint, I found the one, **Ford Purple Velvet**.

Off to Halfords I went to pick up my sparkly paint. The following weekend I spent most of the day down The Bridges' workshop priming and painting shiny purple on to my boiler. Next was the wheels and masking them to make sure no paint got into any screw holes.

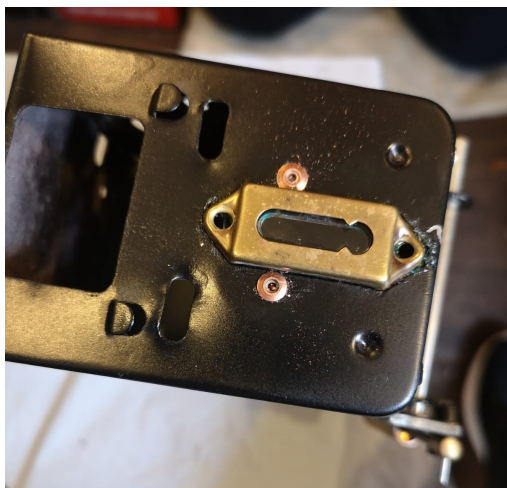


During all of this I was / am dreaming about what I can add to Jeanie to make her that little bit special.

Once the painting was done it was time to start reconstructing putting the smoke and firebox and piston back. However, we had a slight issue when it came to the riveting. As this is my first time doing something like this, Luke has been educating me. So off I went riveting the SIGHT GLASS BRASS COVER when Luke tells me that he should have told me to actually put the sight glass inside the cover beforehand. Out came the hand drill and back on eBay I went to order more rivets.

Sight glass is now correctly in place, it is now time to think of any modifications that I would like to make before putting the wheels back on. So far I am thinking of putting a steering wheel in. Many more ideas that need to be thought through before putting into place.

Currently I have just finished painting my boiler bands and now perfecting the gold stripe down the middle.



2018 MENCAP run - Rita Williams

Tuesday 21st August – 10am to 12 Noon.

The younger children arrived with their carers and university students promptly at 10am all excited for rides on the engines. Members were already steaming up their engines and electric engines ready to go.

Continuous rides for the children for a solid two hours. You could see the children thoroughly enjoying themselves. Some of them so much they didn't get off the engine until it was time to stop for lunch.

It was even better than last year, especially with all the members support so a great thank you to all, and to all you made the tea and washed up.

Thank you to all who gave encouragement to the children, talking and waving to them as they passed by on the engines, great fun had by all.

Tuesday 28th August – 10am to 12 Noon.

The older children arrived at 10am all eager for engine rides. Drivers ready with engines in the station. Once all the children boarded they stayed seated, so made it easy for the drivers continuously running around the track without stopping. All children excited, happy and waving to everyone.

Several youngsters were wheelchair bound and they were watching from the other side of the railway bridge, drivers tooted, passengers waved which the youngsters thoroughly enjoyed.

Last young girl to enlighten for lunch wasn't going to get off with any encouragement so drove the engine right outside the clubhouse where two carers had to lift her off.

The patience of the carers and students is so amazing, what a won-

derful job they do, such a break for parents. Couple of the parents came had rides, watched, then went off for a break.

Members that covered all or part of the two days.

Drivers: Andrew Hulse, Dave Deller, Paul Stephens, Chris Williams, Lewis Gravenell, Jack Ruler.

Supporting: Maurice Knott, Les Whitehead, Greg Anderson, Paul Rolleston, Mick Cranfield, Pat Callahan, Dave Arnold, Roger Vain, Charles Darley, John Hawkins, Rita Williams.



Building a Radio Control Volvo Truck - part I

Simon Bridges

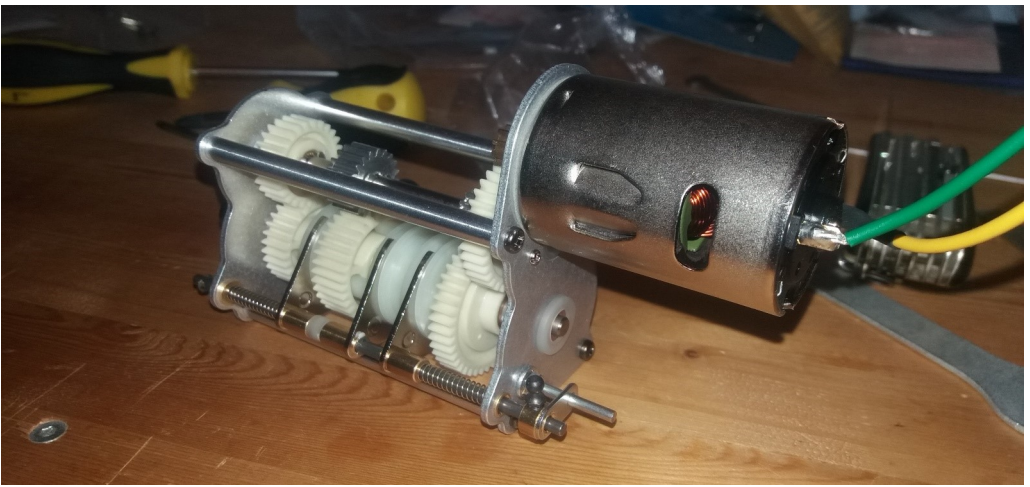
I have always had an interest in remote controlled vehicles and have amassed quite a few over the years. When I became an apprentice truck technician with Volvo four years ago I decided I would like a remote controlled truck. I built my first one, a King Hauler and would drive it about the house and took it to the Detling Transport show on our club stand. It was at this show that I watched R/C club members driving their trucks on a purpose built layout and also saw the Tamiya club at the Ally Pally show. Earlier this year dad and myself joined the R/C club which meets once a month at Delting village hall where I drive my truck and dad drives a Fedex truck. Also I take trailers to hook up, one of which we cut and turned into a low loader. I have now decided to build another one. Although not train related it is still model engineering.

The new truck is a Volvo FH12 built from a Tamiya kit which you can adapt in any way to suit your needs.

So the first thing I assembled was the chassis. It is essentially a ladder frame chassis, two aluminum channel section longitudinals joined together with cross members.

Next the front axle was built up. First the shock absorbers were put together and attached to their brackets on the chassis. Then the suspension drop links and stays were bolted into position on the chassis. Using four small 'U' bolts the two leaf springs were attached to the front axle cross member and bolted through two four hole plates. Next the stub axles were pressed into the steering control arms and the steering ball joints were bolted onto the steering control arms, two on the left and one on the right arm. Then the cross member with spring and shocks were bolted to the chassis. The steering arms were fitted and connected to the servo.

Then it came to the gearbox. This is a 3 speed gearbox which has to be completely built from bags of parts. There are lots of 'E' type circlips, 7 gears and pinions and 3 selector sets. The gears are built up



on two shafts which have various splines with selector in between. A third shaft, the selector shaft has 3 selector forks and two springs and on one end a ball joint to attach a servo when fully assembled. The drive motor and pinion are attached to the input and a coupling to the prop shaft added. All sliding parts were greased with silicone grease. Then the gearbox outer case was then attached and the whole assembly attached to the chassis with the prop shaft fitted between the gearbox out put and drive axle differential. The whole thing took dad and I about two and a half hours to do.



Top this for a speeding ticket...

Two British traffic patrol officers from North Berwick, east of Edinburgh, were involved in an unusual incident, while checking for speeding motorists on the A1 Great North Road.

One of the officers (who are not named) used a hand-held radar device to check the speed of a vehicle approaching over the crest of a hill, and was surprised when the speed was recorded at over 300mph. The machine then stopped working and the officers were not able to reset it.

The radar had in fact locked on to a NATO Tornado fighter jet over the North Sea, which was engaged in a low-flying exercise over the Borders district.

Back at police headquarters the chief constable fired off a stiff complaint to the RAF Liaison office.

Back came the reply in true laconic RAF style. "Thank you for your message, which allows us to complete the file on this incident. You may be interested to know that the tactical computer in the Tornado had automatically locked on to your 'hostile radar equipment' and sent a jamming signal back to it. Furthermore, the Sidewinder air-to-ground missiles aboard the fully-armed aircraft had also locked on to the target. Fortunately the Dutch pilot flying the Tornado responded to the missile status alert intelligently and was able to override the automatic protection system before the missile was launched."



What happens to elves when they behave naughty? Santa gives them the sack

What kind of music do elves listen to? Wrap

What is a snowmans favorite breakfast? Ice Crispies

Why didn't the skeleton go to the Christmas party? He had no-body to go with.

Who hides in the bakery at Christmas? A Mince Spy!

What says 'Oh Oh Oh'? Santa walking backwards!

What do you call a greedy elf? Elfish

What do zombies eat with their Christmas dinner? Grave-y

Customer: Do you have any two-watt, 4-volt bulbs?

Sales Rep: For what?

Customer: No, two.

Sales Rep: Two what?

Customer: Yes.

Sales Rep: No.



Kevin & Kell



Boys Steal License Plate From A Speed Trap Van. What They Did Next Is Genius.

Four youths from London, England pulled off a trick of breathtaking bravado in order to gain revenge on a mobile speed camera van operating in the area.

Three of the group approached the van and distracted the operator's attention by asking a series of questions about how the equipment worked and how many cars the operator could catch in a day. Meanwhile, the fourth musketeer sneaked to the front of the van and unscrewed its numberplate.



After bidding the van operator goodbye, the friends returned home, fixed the number plate to their car and drove through the camera's radar at high speed - 17 times. As a result, the automated billing system issued 17 speeding tickets to itself.

Go Brits!

MMES DIARY DATES 2019

December 26	Boxing Day Run
January 18 - 20	London Model Engineering Exhibition - Alexandra Palace
February 3	Club Lunch—Grange Moor Hotel
March 31	Start of public running
April 6	Heritage Transport Show - Detling Showground
April 13 - 14	Pembrey Spring Steam Rally - Llanelli
May 10 - 12	National Model Engineering and Modelling Show - Doncaster
September 27 - 29	Pembrey Autumn Steam Rally - Llanelli
October 17 - 20	Midlands Model Engineering Exhibition

Friday Nights start around 7-30pm at the Clubhouse, evening runs a bit earlier, with the track available from 5pm

Friday Evening Meetings are for members and associate members (their families), occasionally for members' friends, and for those who intend to join the society.

Donation minimum £1 per person for Friday evening meetings, unless otherwise stated for food if you are eating what is advertised for the Club Night.

Wednesday Playtime Runs generally start around 10-30am and finish early afternoons.

Events listed will only alter if an unforeseen situation means change is essential.

