



THE FLIMSY

NMRA Division 2 Newsletter

September 2021

In this issue.

From the editor

At home ~ Show-n-tell

The last say

COVID-19 ~ Adhere to medical advice & instructions.

The ACT Government lock down was revised to 15 October 2021

The easing to some venues was announced effective from 01 November so check ACT GOV site for any updates to any 'hot spots' to our areas.

The lock down hasn't curtailed the Members of Div 2 at home S&T where the diversity of projects provides great reading, information, pictures to view. Enjoy

At home ~ Show-n-tell.

John SANDS:

General overview:

• Aim is operations for four to six operators to reflect my interest in that aspect of the hobby.

• Theme is NSWGR main south circa 1960. Double track mainline with three refuge per track, three stations, 10 track fiddle yard, four track main shunting yard, loco depot. See interim track plan.

- Overall layout statistics.
- o Dimensions
- o Main line run 50 metres. Can accommodate two trains at proper intervals.
- Space restriction dictated that some track runs through scene twice.
- Insert photos

Progress:

• Boards/backscene complete.

• Main line track and sidings completed. Some point motors and track underlay (cork) installed. The layout of the main line is fixed, but I want to operate some more to confirm the locations, length etc of the sidings.

• Uses an NCE DCC radio system with EB1 circuit breakers. All power districts are installed. Bus for tethered cabs is not complete. Photo of circuit breakers.

- Immediate priorities are:
- o Prove the track plan.
- o Finish point motors and track underlay for main line
- o Finish electrics
- o Paint the back scene
- o Rudimentary main line signalling
- o Install the turntable and make the loco depot fully operational.
- Longer term priorities are:
- o Improve the buildings and platforms
- o Scenery.
- o Full signalling

The layout depicts the NSWGR main south circa 1960. It is a double track mainline with three refuge sidings on each mainline. In addition, there are three stations, a 10-track fiddle yard, a four track main shunting yard and a locomotive depot. The layout is designed primarily for operations and will need four to six operators when complete. The Main line run is approximately 50 metres and there are enough blocks to accommodate two trains on each mainline at proper intervals. Space restriction dictated that some of the mainline track runs through the scene twice.



The layout boards and back-scene are complete as are the main line track and sidings. Some point motors and track underlay (cork) are installed. The layout of the main line is fixed, but I want to operate some more to confirm the locations, length and so forth of the sidings and yards.

An NCE DCC radio system with EB1 circuit breakers has been used. All power districts are installed but the bus for tethered cabs is not complete. In the longer term I want to expand the system to include full signalling and a dispatcher's desk.



Locomotives are a mixture of steam and diesel. Some are built from DJH/Footplate kits and some are more recent RTR models from various manufacturers. There is sufficient rolling stock to allow for realistic operations



Summary: Can't host other than small groups of up to four. Interested to hear from potential operators.

Wal PYWELL:

As we are all locked down now, I dug out several kits which have not been touched for many years. These included a Fuel Storage Depot, Diesel Refuelling Station, a Freight House and loading bay and a range of street houses.

The street houses are a Grant Line kit which allows three houses to be built with a lean-to and an outhouse for each



One kit I did start is a Steel water/oil tank from Tichy Train Group. Obviously, a Craftsman kit with lots of parts and I could not work out where they should go...so I gave up on that. If anyone is interested in having a crack...it's yours.

The freight terminal is a HELJAN kit complete with boxes and barrels. The diesel refuelling facility and the oil and fuel depot are both Walthers Cornerstone kits.



Next problem I had was what colours to paint the models. My colour co-ordination is rather poor so I decided to paint them roughly the colour of the models on the box. Next problem was more of a problem than I thought it would be. I have (had) a range of Vallejo paints just right for the air brush, but alas, these were so old (probably 8-9 years) that most had solidified in the jar. What came out when I squeezed the jar was coloured water with the pigment in a big lump still in the bottom of the jar. These could possibly be recovered with vigorous stirring, and I did try but the result was less than ideal. Anyway, my air brushing skills are somewhat limited, and I do have a good range of tubes of artists acrylic paints and a selection of artists brushes (don't get the idea that I have any artistic talent), so the models got hand painted. Most of the paints are left over from my son's Warhammer days and his range of Humbrol and Games Workshop paint jars all dried up.

One advantage with hand painting is that the result has that "already weathered" look.

The other thing I have been doing is playing around with the 3D printer my son gave me for Father's Day. More about that another day.

Ian BARNES:

Taking advantage of Covid lockdown the Timbertown section of Ian Barnes's large East Coast Railway is being landscaped & scenic.

Ian uses shade cloth stapled to woodwork to form the topography, then applies cornice cement plaster, either buttered into homemade latex rock moulds to form cliffs, or, for the slopes, applied as sheets of newspaper dipped in a plaster slurry. The plaster binds well with the shade cloth to produce a hard rigid shell. The base coat of highly watered-down paint will be followed by vegetation and further detailing.

Shade cloth is stapled to woodwork the track will be protected by masking tape.



The plaster shell is complete, with the assistance of George SAISANAS, it has been painted a base coast of grey on the rock areas and green on the slopes and plains.

The plastered topography looks more like a northern hemisphere snow scene



The same area now painted, and the detail begins to show.



lan applying very watered-down grey paint on the rockwork



George paints himself into a corner, applying green to the slopes



Don EDGAR:



Another load of concrete heads off to the Batemans Bay bridge.

Meanwhile the second shift guys know that the railmotor does no leave for another ten minutes so why wait in the carriage? Social distancing and face masks do not seem to be an issue.



Rob NESBITT:

Progress continued with the small Borambola station diorama. The real station was demolished in the early 1980s and I had only taken one distant slide picture of it. The search for additional photos has taken me over 5 years and only found two, so a lot of the construction is a best guess.

Full notes on my Building Wagga blog http://buildingwagga.blogspot.com

The diorama was taken outside on a sunny day & blends in well against the scenery, only giveaway is the plywood base.

Yep, the horse in the background is Tracy's rescue horse, Sammy.







John MARTIN:

The major impact has been on my bank account.

In recent years I have not been a big fan of sound in diesel locomotives, but in early 2019 I bought an Intermountain ES44DC in the BNSF H2 paint scheme and the only version available was the sound one with Loksound V4. I was very pleased with it. Subsequent to that my wife bought me 2 Scale Trains C44-9W's that came with Loksound V5 for Christmas, and I loved them.

This started me on a dangerous slippery slope.

I then sourced a Loksound V5 decoder to install in a Kato AC4400 and while it was easy to install it does have a quirky issue with consisting with other locomotives, this can be fixed once I can get out to visit a fellow modeller with a ESU Lok Programmer.

But I then had another loco that sounded like the real thing.

I should mention that I normally run the sound loco in the lead with a non-sound unit/s behind it.

Six months later I started to investigate putting a decoder into one of my Kato SD70Mac and ended up getting a TCS WOW kit for it.

I absolutely love the sound. It's just how I remember these locos climbing through and south of Castle Rock, Colorado (south of Denver) on the massive, loaded coal trains from the Powder River basin in Wyoming in 2004 and 2006.

I'm guessing you know where this is going.

I have now ordered two more TCS kits from my favourite dealer; David NORTH, one for a Kato SD45 and the other a Kato GP35.

I have convinced myself that these will be the last! or two reasons, the aforementioned bank account and I have too many locos to convert; some of which would be quite complex to do.

That's me for today. Best get back to the workbench to continue building two British O gauge vans kits for my son. He very generously has them sent to me direct from the UK to keep me occupied.

Further thoughts on sound decoders.

Experience with the TCS decoder I installed has made me reconsider purchasing any more. The instructions they provide as so convoluted to be near unusable. Research on the internet has found many modellers have the same opinion. Again, it has some weird issues, and I find it difficult to run a non-sound loco as second unit in a consist. I have decided to purchase the same TCS decoder to install in the other Kato SD70Mac in the consist to resolve the issue.

I now intend to buy a Soundtraxx decoder to install in my Kato SD45 instead of a TCS one.

Why not Loksound? Love them factory installed but a pain to sort out any issues without access to a LokProgrammer which I find I occasionally need to do for non-factory installs. Have access to one but not during these Covid restrictions.

AFAIK Soundtraxx setup/adjustments are done using CV's. I'm comfortable with this style programming having used only NCE decoders for many years.

Hope this makes sense.

There are two more to come next month!

Ben FEATHERSTON:

Titchy oil columns for the fuel depot.

Fast tracks #8 curved point 36" / 910mm, outer 30" / 760mm inner



Stephe JITTS:

A FLIMSY TOUR OF KVHR

Welcome again to Kangaroo Valley Historical Railway!

By now most members of Div 2 will have met KVHR at some stage or other.

Some will remember it as an exhibition railway, others may have actually operated it, some only once or twice, some many times over many years.

The original concept has been retained throughout the layouts 20-year history i.e., it has been 'imagineered' to represent what might have been on sections of the south coast of New South Wales, Australia in 1955 if the Illawarra Line had been extended to Melbourne via a coastal route. It has always been intended to be an operational layout involving maximum involvement by a large number of like-minded people. Everything on the layout has a purpose. It is normally run to a timetable that has had progressive development over the last twelve years.

As the reader might imagine it is a fairly complex arrangement with a mainline and three branch lines, three large yards, a storage/fiddle yard. There are numerous industries that need servicing and ten stations that service the needs of the local population. KVHR now operates to a timetable that requires a large crew of seventeen persons to function fully. There is still lots to do if we were ever to complete the railway, but it is this Increasingly Fat Controller's fervent wish that it will take more years than he has left in him.

Perhaps the best way to examine the layout is to take a footplate tour aboard a 50 Class locomotive as it takes the South Coast Pick Up Goods from Sydney to Eden. Some of what we will "see" is still to be completed, but it everything exists at least in some form.

Before we depart, we will take a quick look around Sydney Yard. In reality it is just a large fiddle yard consisting of two passenger platforms, a three-track coach storage yard, and a goods yard capable of holding 100 wagons. At various times, just about every sort of vehicle that might have been found on the NSWGR in 1955 can been seen here.

As we climb aboard the locomotive and greet our Driver, he advises us that the Sydney Yardmaster and his Shunter have already prepared our train. The Yardmaster has examined the wagon cards for each of the wagons in his yard. The cards contain a Waybill that advises the yardmaster the load for the wagon and where it needs to be delivered. Having examined the cards, the yardmaster selected the wagons most appropriate for the Pickup Goods, ensured they were loaded and requested his Shunter to assemble the train. Most of the good's wagons are still of the 4 wheel type with the ubiquitous S wagon still predominant. However, we note a PV hiding in the mix, waiting for its next load of explosives to be taken to Mt Hope Mine. There are also a couple of insulated vans that will bring much needed meat from Valley Meatworks to the city. With almost 100 possible destinations and many loads to be carted, there is a full range of wagons to be seen.

With a full head of steam, we note the Yardmaster has cleared our ground signal indicating we can proceed as far as the Down Start signal and also note that it too has been cleared.

As we rumble at a maximum of 15mph through the yard, we pass Newtown Coal Services on our left. Its function is to distribute coal throughout the system for locomotive, furnace and home use. Coal is by far the largest commodity transported on KVHR.

On the right we pass Enmore Loco Depot with its five-stall roundhouse and steam locomotive servicing facilities that includes a heavy erecting shed under construction. Our Driver also points out the new facilities to service the new-fangled diesel locomotives. We note the 90ft turntable can handle most locomotives and wonder at the special challenges associated with positioning a garret in its special service bay.

After transiting the tunnel that passes under some of the inner-city suburbs, we note the Enmore Coal Stage. We see 2609 struggling to propel a couple of wagons to the top of the stage and note that the wagons are old S wagons that have been reallocated to the locomotive servicing L series.

Our attention is now drawn to the fully automatic signalling system that is in place throughout the city and suburban districts. It is an approach system whereby signals remain at RED until a train enters the block immediately preceding the signal. If the two blocks in advance are clear to receive the train the signal will turn GREEN. If only the next block is clear the signal will change to FLASHING RED which signifies caution and means we must be ready to stop quickly if there is an obstruction ahead.

A speed sign allows us to increase to 40mph as we enter a downhill grade. We gently open the regulator; not a lot as we are not in a hurry. In any case our loco is only capable of 35mph.

Now we approach Adamstown, an inner-city station that has no goods facilities. The iconic Red Rattlers are busy attempting to keep to schedule and provide a regular commuter service for the local population.

Next, we pass the Coca Cola factory followed by the City Gas Works. We, of course, know well the liquid refreshments that come from the factory, but learn that the gas works supplies coal gas for the entire city. The Coca Cola factory needs regular supplies of raw materials, the famous feminine shaped bottles. The gasworks is always hungry for coal to feed its hungry furnaces. Both these facilities can only be accessed from the up line and so we can ignore them on this trip.

Another speed sign requires that we slow to 25mph.

After another long tunnel we emerge with the ocean on our left. There is a beach that attracts local swimmers who take the risk of crossing the unprotected tracks. On the right is the Illawarra Power Company's coal fired generating plant. We note its dedicated coal siding and also the tunnel that leads to the dedicated coal unloading facility on the other side of the peninsular.

We pull to a halt at the down platform of Osport station.

Osport is the port district for Sydney. It is still somewhat antiquated in its safe working facilities. Goods trains must stop at the station to obtain keys that will allow them to work the various points. This disrupts main line operations if trains are not prompt in their movements. Management is looking to install a yardmaster but, as with all things in the railway world, this will take time.

Having obtained the key, we pull forward to clear the Down Port Entry, throw the point, and reverse into the Down Loop. The guard is careful to reset the point and return the key to allow the passage of other trains.

Osport exports include coal, petrol, iron ore, livestock, wool and wheat. The main import is crude oil, but occasionally there are other products that require a Pickup Goods services. A little to the south of Osport station is the all-important Toohey's Brewery and a wool store. While at Osport we examine the wagon

cards to determine what must be set out and shunted and to find what needs to be picked up. On this occasion we need to carefully cross the main line to set out a wagon at the wool store and pick up a muchawaited wagon loaded with amber fluid for the thirsty workers further south. As we shunt the yard, our Driver gives careful consideration to the order in which the wagons are placed in the train. Particular consideration needs to be given to what must be set out at the next station which has only very limited storage. Any wagons to be set out at there must be placed immediately behind the locomotive.

We consult the timetable and wait to re-join the main line when there is a suitable gap in traffic. It is important that we ensure all points have been set to normal and that any keys we have used are returned to the station. A sign advises that we may now accelerate to 40mph again, but it is unlikely that our locomotive will be able to reach that speed on the 2% upgrade we are facing.

After passing the wool store and brewery we enter another tunnel that passes under the hamlet of Jacksville. This began life as an open cut quarry for limestone. The limestone is used in the manufacture of cement. There is no road to Jacksville so all traffic must be by rail. An old 13 Class locomotive is based at the mine but does double duty as the local shunter that brings goods wagons to and from Jacksville and Violet. There is also a CCA carriage based there that provides a regular passenger service to Violet.

On arriving at Violet, we are first required to be put away in the down refuge to allow the South Coast Daylight to overtake us. We are pleased to see that management has seen its way to preserve the lovely green and cream colour scheme that was introduced in the 30s. While waiting we also observe the 1307 bringing down a couple of wagons that are bound for Kangaroo Valley. They are left on the back platform for us to pick up.

While we were waiting for the Daylight, our Driver takes a moment to do the paperwork and exchange wagon cards as appropriate. Finally, we uncouple the wagons to be set out and pull forward past the main platform, reverse into the back platform, couple to the wagons to be picked up and place them on the head of our train. We then pull forward again and spot the wagons to be set out on the back platform for 1307 to shunt when it has the time.

Violet is the end of the city system. The automatic signalling gives way to lower quadrant semaphore signals. From here on we need to have authority to enter a block, so we need to request the staff to enter. Looking at the staff equipment we note the Staff Meter is at CENTRE, so we press the adjacent red button. The meter then starts to FLASH GREEN which indicates the Stationmaster at Kangaroo Valley has been advised of the request. Soon the meter becomes solid GREEN which indicates the request has been approved. We press the red button again to take the staff, the meter turns RED, and we are ready to proceed. The Second Home signal at the platform and the Down Start signal both drop.

We gradually pull away, past the end of the catenary, past the Mother's Choice Flour Mill on our left and soon approach the gauntleted Whitton bridge that spans Backhouse Creek. We note the signal protecting the bridge is at DANGER, so we slow to a crawl, knowing that if the bridge is not occupied, the signal will clear automatically when we are very near to it. We also note that the 10mph speed limit for the bridge. This is required because the bridge is well past its use-by date and needs replacement.

After passing the bridge we begin the climb to Kangaroo Valley and another speed sign optimistically advises us that we can return to 40mph. We pass through a heavily wooded district, cross over a small back road and note the cement works on the right.

The cement works is a busy factory; so much so that is has privately leased an old government M Class locomotive to do its shunting. There is limestone, coal, sand and machinery to move about and, of course, cement wagons to prepare for departure. However, all access to the cement works is on the up line so we only have time to briefly watch the M at work before we plunge into the tunnel through Mt Hope.

Above us now is Mt Hope coal mine that is the reason for Kangaroo Valley's existence. Coal was discovered many years ago. The inhospitable terrain required a steep switchback to gain access to the mine. Only 4wh goods vehicles and small 18 class locomotives are permitted on the rails. An ubiquitous CPH railmotor provides the service that takes miners to and from their shifts.

After emerging from the tunnel, we pass a landmark. Accordingly, we reduce our speed to 25mph which is the maximum speed allowed in the KV district.

The landmark is a hangover from the days that the track to Kangaroo Valley was only a single line. Management has never seen the need to replace it with a more expensive and difficult to maintain distant signal as the landmark still serves it original purpose of warning that a controlled district lies ahead.

The Down Home allows us into Platform One where we briefly halt until we are given the Shunt Ahead. We pull ahead to clear the Down Main Crossover. After the Stationmaster has reversed the points we back into Platform Three. Here we uncouple the wagons destined for KV Yard after a brief run-around, place them in one of the yard sidings. Then we reverse the process to place the wagons to be picked up at the head of our train and are grateful that the Stationmaster had had his Shunters arrange them in a block before we had arrived. Now our Driver exchanges wagons cards with the Stationmaster, thanks him for his hospitality and after he has set the route, we pull into the Up Loop to wait for clearance onto the single-track main line southwards.

While waiting for clearance, we take the opportunity to climb aboard the footplate of the Mixed which is departing Kangaroo Valley to travel the branch line to Alabmob. After leaving the platform we travel slowly passed the yard and Tan's Tannery before branching west to pass the Valley Meatworks on our left. Passing under the road we emerge on a steep climb to Halfway. There is nothing at Halfway other than a short passing loop. We are advised that trains on the branch must be limited to twelve axles due to the grade, the sharp curves and the length of the loops. Despite this the branch is heavily trafficked with several trains a day used to transport livestock, dairy products and wheat in addition to a regular passenger service. And they must pass each other at Halfway.

We climb further into the hills and arrive at the small village of Ethel. Its main function is the export of wheat, but a loading ramp and stockyards allow it to perform all the usual functions of a small country station. There is even an old Out-Of hut. In a similar way to Osport we are required to stop at the unmanned signal box and use keys to unlock the ground frames for the points.

After completing our business at Ethel, we once again request the staff that allows us to proceed to the terminus at Alabmob.

The rails to Alabmob climb steadily and pass over Harvey Bridge, a fine, well-maintained example of a wooden truss bridge, before we make a sharp turn into Alabmob Yard.

The yard has all the normal facilities of a rural yard including a small single-track engine shed and turntable for the locally based 30T class locomotives that are most commonly found on the branch. The dominant feature of the yard is the famous Oak Dairy Factory. Every day it processes lots of the local bovine product to produce its renowned creamy milk and ice cream.

After arriving at Alabmob we spy the unique Creamy Kate railmotor waiting patiently at the platform. We thank our driver and rush over just in time to hitch a ride back down the mountain to Kangaroo Valley.

On our return to Kangaroo Valley, we find the Pickup is still held in the loop, so we again jump on the footplate. To our right we see the Valley Meatworks and remark on its slogan of "You stock 'em, We shock 'em". While we are waiting, we watch the restored F Class shunt a couple of freshly iced Tancred Meat MRCs from Union Ice works to the Valley Meatworks where they will be loaded with protein for the hungry consumers in Sydney. The F Class then shunts a single S wagon, loaded with raw hides, back to the tannery. Our Driver tells us the F class is the pride and joy of Kangaroo Valley's staff, as they had meticulously restored it recently after several years sitting forlornly in a back track.

At last, after 3306 arrives hauling its freshly painted Tuscan and Russet set of FO carriages, the Pick Up is given the staff to depart for southern destinations. We pull onto the main line and quickly pass the Kangaroo Valley turntable on the right. We shudder at the sight of Linton Prison on our right; it has a reputation of the strict security it maintains over its inmates. The large stockyards are then passed on our left. We have nothing for it today, but at times it handles large quantities of livestock of all kinds.

As we pass through a short tunnel, we emerge into Museum Station. There are no goods facilities here, but the museum is a fascinating place with rollingstock dating back to when the railway first opened in 1855. Visitors are often fascinated by the traverser table which still services the locomotive graveyard next to the museum. On occasion a heritage special is run from Museum.

Despite the fact that we are a goods train, we are held at the platform at Museum. And the reason is soon apparent. Coming towards we spy the mighty 6040 Garrett lifting its 1000-ton rake of BCH wagons up the mountain in a cacophony of noise. We marvel at its sheer size, the largest locomotive in the southern hemisphere, but our driver advises us that, unlike many smaller locomotives, it is able to carefully tread many of the pioneer lines in western NSW.

On leaving Museum we pass over a long bridge and enter Moruya Industrial Estate. This estate is serviced by trip trains from Eden so we have no business to conduct here, but there are still lots of things to see.

First on the right is the junction to the large coal storage facility from whence 6040 had emerged.

On the left is a small oil refinery. It receives its crude oil from the docks at Osport and after processing distributes its products all over the region. The refinery was built and operated by Shell Refining (Australia) P/L in 1947 just after WWII to supplement the petrol it was producing at its Clyde Refinery in Sydney. That facility was no longer able to keep up with demand for its products. Ours is a small plant and is planned to be phased out soon, once the newly constructed refinery at Geelong has reached full production.

Soon afterwards we find ourselves with a loop on each side of the main. The up loop on the right-hand side services a scrap yard, a steel merchant and a fertiliser plant. We note a couple of RU wagons at the fertiliser plant that will soon be taking their valuable product to the fields near Ethel and Alabmob. The down loop on the left-hand side services the refinery and a timber mill.

Then, rounding a tight bend, we spy our final destination. Across another bridge we enter the Eden Peninsula which is largely occupied by Eden Station and its yard.

Eden is an important border station. Goods and passengers bound for points between here and to Melbourne can remain in their carriages and wagons, but NSWGR crews, locomotives and guards vans must be exchanged for their Victorian cousins. We are fortunate to spy such an exchange occurring with a double ended B Class coupling to the Coastal Daylight Express at the platform in readiness for its departure to Melbourne.

So our journey ends as we finally wheeze to a halt in the goods arrival track. We thank our Driver and watch him as takes our locomotive to Eden Loco for a well-earned service and rest. The trip has been noisy and hot, and we marvel at the manner in which the Driver and Fireman endure the conditions. But somehow, we also manage to keep our desire to one day do it ourselves.

Sidebar One

Our tour will hopefully inspire others to consider joining our regular crew. With current Covid restrictions imposed upon us, large crews are a thing of the past, maybe never to return. So thought must turn to how to enable KVHR to continue with its good works in times of adversity, but that will be another chapter.

KVHR has a formal operating session on the afternoon of the second Saturday of each month. Visitors are always welcome but be warned! You may be given a job to do!

Sidebar Two

KVHR is modelled in HO and operated by a Lenz DCC system including 16 driver handsets.

A recently installed Raspberry Pi allow the use of Engine Driver on personal phones. An auxiliary LCC coupled with CanBus and JMRI is in the process of being installed to operate all non-locomotive functions to ease the load on the DCC system.

An integrated lighting system is also being installed that will allow moonlit night-time operation..

A copy of the KVHR Operator's Manual is maintained on the NMRA website www.nmra.org.au

David VIRGO:

Elevated Timber Water Tank Stand by Harlow Graphics - Laser Rail Bits (HO Scale)

I recently spent an afternoon putting together a new stand for my 20,000 gallon water tank. The kit is produced by Harlow Graphics of Goulburn. It consists of a laser cut basswood frame on an acrylic base. Assembly is simple and PVA glue is recommended.

It is intended to be a generic example quite similar to the one seen at Hay, NSW.

It also comes with a spare acrylic base to replace the one that comes with the Casula Hobbies 40,000 gallon tank kit.



I had previously built a "Models N More" tank stand kit and both kits produce a very similar model. The differences being that Models N More kit has a laser cut ply base and quite poor instructions. The last point is of note as the Harlow Graphics model has excellent instructions and some tips on staining etc.

My only criticism of the Harlow Graphics kit is that the main post and bearer parts are quite brittle (but easily glued back together).



Showing the 2 models' side by side.

The tank stand with ILM 20,000-gallon tank.



Robin FOSTER:

LED's & Fibre optics.

There are instances where replacing those globe lights with LED's is the only answer especially in those older TRAX / POWERLINE 48 class (as other plastic manufactured items) where heat distortion disfigures the top those plastic shell. Also, when replacement does come around the fixture isn't designed for instillation for suitable LED's.

LED's also come in various colours as brightness i.e.: daylight, warm & white light

Top Left: LED as supplied with resistor & large wires heat shrink.

Middle: Removal [flatting] of the top of the LED by file / sandpaper then polishing with 1200 wet-n-dry emery to smooth the surface. Heat shrink for the 3mm LED & heat shrink for the Plastruct .060 Fibre Optic with 1mm heat shrink. The reason for the heat shrink on the Fibre Optic is to allow the cavity to the 3mm to be filled.

Note the different length of the Fibre optics, this is allowed for easy fitting into the drill hole inside the shell, first the long then the other is manipulated for easy fitting into place.

Lower: Assembled items. Make sure the fibre optics are positioned into place against the head of the LED a test before heat is applied is recommended.



Use the barrel of the soldering iron to shrink whilst rotating to allow even shrinkage.



One item one cannot do without in your tool kit is the LED-TESTER.

Testing of LED's is highly recommended prior to any instillation as there may be a dud that are frustrating to replace when your neat wiring needs to be removed for any replacement, DUH.

The ends of the Fibre Optics were snipped with sharp wire cutter. There are two sides for any cutter, flat or inside, when cutting optics try to make the cut 'square' as possible with the opposite cut end leaves a 'ragged' edge



Fitting in the number one end of the 48, note the brass insert for the flettner vent separating the optics.



Fitting in the number two end of the 48, the thick red & black wires will be cut to attach the blue & yellow wires from the decoder.



Testing the optics, these will be trimmed using the 'flat end' of the snipper on final assembly when the decoder and wiring are in place and there is no need to polish the ends.

The NSWGR 48165 shell was a NQR purchase at an exhibition, remember those? many years ago.



I have used the LED & Fibre Optics replacements in Plastic & Brass models with success where I am pleased with the results as the optics allow some degree in getting around some difficult obstacles as that flettner vent, which is noted, yet to be correctly positioned

Two publications from the AJRM site Stephen JOHNSTON <u>https://stephenjohnsonmodels.com.au/product-category/ajrm/</u> are a wealth of information & very informative to the Titled subjects



The last say.

Austerity Frugal & Recycle.

Remember and adhere to the ~COVID-19~ medical advises.

Watch emails for updates to Div 2 meetings & continue to 'bling' to my inbox to the activities of Div 2 members in modelling at home.

Keep on training

Robin.

To comply with current COVID-19 rules meetings will be advised.

2021: a year yet to be determined for scheduled events.

Keep an eye on your in box for hosted Meeting notifications.