7th Heaven

Journal of the Aus7 Modellers Group Inc.
No 68

$7.70 inc GST
Summer 2020/2021

Nymboida +

Oils Ain't Oils

The Iowa Scale Engineering Proto Throttle

A CHG Guards Van Kitbash

Breathing New Life Into an Old Scene

44 Tons of Conversion

Aus7
Modellers Group

CONTENTS

Straight Down the Line - Opinion

by Trevor Hodges

At the time of writing (Feb, 2021) organization for the April 2021 Aus7 Modellers Group O-scale Forum is well advanced. We are going ahead with the change of venue as discussed in 2019. So for this upcoming Forum we will be gathering at the Carnarvon Golf Club, 65-95 Nottinghill Rd, Lidcombe on the 10th of April, 2021. When they finally get to see the new venue, I think members will agree that the move from the old venue is a positive one.

Because of the unique circumstances under which we are holding this upcoming Forum the executive have decided to make some significant changes to the usual format. I understand that these may not suit everyone however it is the intention of the executive and the club's management that we keep everyone safe and satisfy our legal obligations to visitors to the club.

The main changes are as follows:

- Because we were unable to hold an AGM last year we are legally required to hold one as soon as is practical. For this reason the AGM will be the first item in the program and I've devoted a full hour to it to give members an opportunity to participate in this important process.
- The Forum will be a short program, running from 9am to 2pm.
- Unfortunately, no trade stands are permitted at the time of writing. We have our fingers crossed that this restriction may change prior to the event.
- Patrons at group events like ours are permitted to sit up to 8 at a table but there can be no general mingling. Instead of members wandering over to the bistro to order lunch or a coffee we will be called by table to a serving area during breaks and when each table is seated the next group will be called. This will be very similar to the arrangements at events like wedding receptions.
- Because of the short program and the lack of traders we have decided entry will be only $20 for this Forum.
- There will only be two talks held on the day due to the short program however, those being presented I'm sure will be of a high quality and will be well worth attending to hear.

I know some members will find these restrictions mildly frustrating and disappointing, especially the restriction preventing traders from attending. However, I would remind members that the choice is between holding the Forum under these restrictions or not holding a Forum at all.

Because of the restrictions on traders at the Forum Glenn Scott of ModelOKits has offered to open his shop from 7.15am till 8.45am and from 2pm till 5pm on the 10th of April and Bergs Hobbies are also open Saturday afternoons. Both of these outlets are within reasonably easy driving distance for those looking to pick up some modelling supplies.

Aus7 Modellers Group Inc
PO Box 179.
BUDGEWOI NSW 2262

Web Site
https://aus7.org/

Facebook
https://www.facebook.com/groups/2201320806795440/

Io group
Aus7ModellersGroup@groups.io.home

President
Trevor Hodges
trevorchodges@gmail.com

Secretary
Chris Lord
chrislord4401@yahoo.com.au

Treasurer
Anthony Furniss
anthonyfurniss@rocketmail.com

Vice President
Lionel Pascoe
lpas5190@bigpond.net.au

7th Heaven Editor
Paul Chisholm
paulchisholm1948@gmail.com

Advertisements
Full Page: $125 Half Page: $65
Quarter Page: $32 Eighth: $15

Please contact the Secretary for for any membership, advertising or back issue enquiries. For matters related to the twice yearly Forum contact the President.

All advertisements must comply with the Trades Practices Act.

Bank Accoun
BSB 062 233
Acc # 1017 2076

Back Issues
Issues 34 onward only available at $7.70 each plus $2.00 p&h for one or two copies, $4.00 p&h for three or more copies.

On The Cover
Take a look at the bottom of page 15 for an explanation of this issue's cover.

Nymboida +

John O'Neill

Like many my introduction to railways started at an early age and a very long time ago ~~now~~.

Many are to be thanked – Mum and Dad for buying the Triang HO set, AMRA for the Sydney Town Hall Exhibitions and having their shed just up the road at Rockdale, the gentlemen I've met by attending the O Gauge Modelling days at Thornleigh and Newcastle, many of whom are good friends and provide continual assistance and inspiration. Together, we have built and operated Stringybark Creek and Arakoola layouts, bringing much joy and entertainment to many.

But most importantly, my ever-supportive wife Annette who has suffered quietly the visits to country railways stations, railway museums, steam train rides and my continuous spending and collecting over many years.

It was Annette who found, purchased and helped dismantle our 2nd hand train shed, in searing 38C heat. I had been researching new sheds since moving out of Sydney and dreaming of a permanent layout, but never expected to have so much space available. With the help of a few neighbours, we re-assembled the shed once I cleared the trees and had a slab poured.

Photo 1: View of the shed frame erected 15th May, 2019. The ute was used as an anchor for straightening purposes.

The shed may be on its third incarnation, based on the number of screw holes and variations discovered. An investment was made in good insulation, new roofing sheets, electrical wiring and lighting, as well as a large wood fire. The double glazed windows reinstalled in position to take advantage of the view down the valley when sitting at the workbench. Internal dimensions are 20m x 9.5m – just enough for an O gauge layout .

My ideas for the layout are based on several concepts / observations gathered during our Stringybark Creek and Arakoola experiences, including the UK visit to the wonderful Bucks Hill layout. (Thanks again John B).

Layout Concepts

The general design concepts (in no particular order) for the layout and shed space are:

- To replicate (if possible) the simplicity and sparseness of Binnabri, that so accurately catches the look of country NSW (take a look at 7th Heaven #28 Showcase photos – fantastic)
- Views across scenes and also scenic sections partially isolated from others

- No duck-unders if at all possible
- Utilise the generous space available in the trainshed for a good sized workbench, coffee table, lounge, storage etc. and layout, and at a push, a vehicle
- the old Nymboida modules would have a home finally and form a branch terminus
- Stringybark had that left hand end where the trains swept around the curve, with superelevation, that looked great, so I wanted to replicate that look
- trains need to run for a distance before being seen again or arriving somewhere
- grades to be included, so some interaction with the train is required, i.e. drive it up the hill, with banking – one of the most desirable features of DCC
- some shunting and transfer of loads will take place (here come the Kadees); and,
- just be able to sit back and enjoy continuous running.

Photo 2: interior view taken 30th Jan, 2020. The workbench area is taking shape, the entrance and roller doors installed. The floor is yet to be sealed.

General Arrangement

Having stored the Nymboida modules for many years, I really wanted to give them a permanent home as a major feature - and recognise those whom helped with their creation during the later days of Stringybark Creek. So, Nymboida has landed along the northern wall – it had at one stage been placed centrally in the shed. Once this decision was made, the other aspects fell into place.

The schematic on page 18 outlines the first layout plan in general.

The initial idea was a single track (blue) out of and into the main station allowing continuous running. From the main yard, a line (green) branches to Nymboida Junction, with an option to continue on or head up to Nymboida. All lines would be bi-directional.

This arrangement would allow for continuous running as well as some shunting. It probably isn't that prototypical, but the objective is to operate trains in a NSW country landscape, rather than modelling a particular location. So, maybe operation is higher in the concepts list.

General Landscape

I have been keen to consider not just a track plan, but what the 'built landscape and topography' might look like. Consequently, the location of station / yard sections has been considered to create several scenes, some of which are not visible to others.

It might be hard to describe the vision for the overall landscape, hopefully the end diagram will help. If I were a better artist some sketches would be included, but alas that skill evades me totally.

The idea is to have a series of scenes around the layout. Only time will tell if the vision in my head ends up looking anything like what is built. I'm sure it will change along the way.

The scenes are:

1. The intention when entering the shed is to be greeted with a panoramic view across the expanse (~4m) of the reverse curve to the far wall, where the main station and yard will be positioned. The area within the reverse curve may contain a small industry / series of buildings. Hopefully the topography here can be established to enhance the grade on the curve.
2. With one or two steps into the shed and a turn to the right, the scene of Nymboida will be seen on the hard right, the Junction on the left. The Junction background landscape will climb to form a scenic break running the length, thus separating 2 from 3 and 4. Hopefully the 11m length of this corridor like area will assist with achieving some distance perspective. The trestle bridge out of Nymboida will be visible in the distance at the far end, with the line curving across a hill side and disappearing into a cutting. Whilst the junction is directly opposite, trains from Nymboida will arrive via scene 3. This is an attempt at disconnecting both these scenes via train operation, i.e. a train having departed Nymboida doesn't immediately arrive at the Junction. This also helps with an extended run between yards.
3. This view will be isolated and contains tracks running along an embankment. I'm hoping to have some sandstone type rock face and lots of trees breaking up the scene. The Nymboida backscene may be visible in the distance, but this depends how realistic I can get the hill and crests to look. Both tracks are climbing, but at different grades.
4. The main station and yard are planned to be rather spacious – consuming most of the shed length of 20m. This area is basically a blank canvas at this stage.

Photo 3: The Nymboida modules positioned along the northern wall – no door yet! Taken 5th Sept 19.

To form the oval for continuous running, small movable module segments, such as those used for the end curves on Arakoola, will be built to connect the passing tracks to the main yard via the snaking curve on the bottom left of the diagram.

The space to the left of the entrance is the 'workshop' – desks, lounge, bookcases and wood heater with great view down the valley. Sometimes it is hard to move and run trains!

Build Sequence

Naturally, the desire to get some train operation as soon as possible has dictated the sequence.

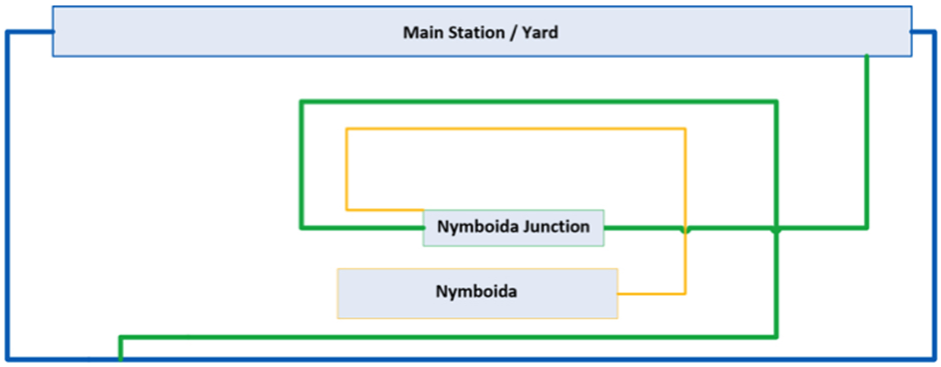
If Nymboida could be connected with some new track then trains could arrive, be shunted and depart, finally allowing it to evolve from a 7.2m long island to a 20m run into and out of the terminus. So, building the new benchwork commenced with the curve.

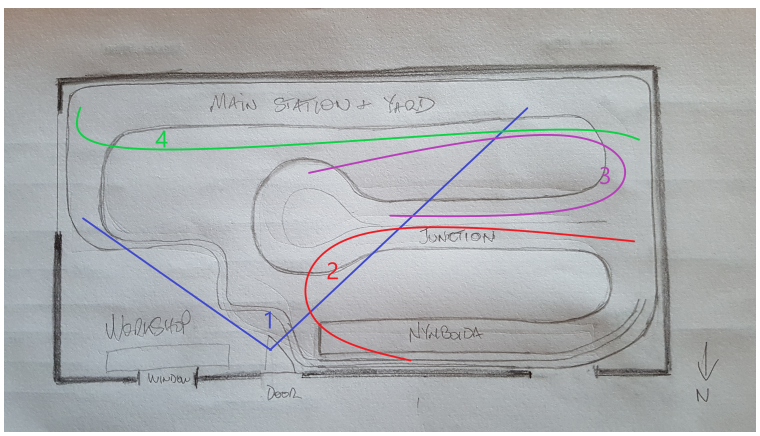
With the Editor's permission, the next article in a possible series will cover the benchwork from Nymboida to the Junction, some track plan details and experiences with running trains to test my track laying skills.

In the interim, some progress photos and videos will be uploaded to my Flickr album and YouTube, which all should be able to access.

On publication I will post a note on the Aus7ModellersGroup@groups.io group with the links.

Photo 4: Benchwork under construction, yet to be linked back to Nymboida





OILS AIN'T OILS AND GREASES AIN'T GREASES

With apologies to the Castrol Oil Company.

Bruce Lovett

As some of you know I model an American railroad in ¼" scale. Alright it isn't an Australian railway but you dyed in the wool New South Wales modellers should continue reading as you may learn something to your advantage.

Ten years ago I bought an Atlas O Alco RS.1 diesel, factory painted and lettered for the railroad I model, the Spokane Portland and Seattle. This loco appeared to have been test run only and became an excellent performer on my layout. That was until three years ago when it started running like a hairy goat. I did the usual maintenance of cleaning the wheels, checking the lubrication, all to no avail. So, being an inquisitive bloke I removed the body from the chassis and looked inside. A look of horror spread across my face as I observed a mass of wires, circuit boards and all sorts of strange looking gadgets. The body was replaced before everything fell out on the floor. I should have mentioned earlier that this loco was fitted with directional lighting but not DCC as my layout is good old fashioned 12 V. DC.

Now I know enough about electricity to wire up a simple layout like mine but the mysteries of directional lighting, circuit boards etc. is beyond my limited knowledge. This was a job for an expert , so, it was off to my friend Graham who knows all about these strange things. After stripping down the loco, all the electrics were tested and found to be working perfectly. The fault lay in the plunger pickups on the backs of each of the eight wheels. These pickups had springs which had lost their "spring" and were not making contact with the wheels. New springs were made from phosphor bronze wire and after reassembly the loco was back in business earning it's keep.

That was until a month ago when it appeared to be running slower and drawing more amps. Then it stopped all together with the truck (bogie) under the cab end hardly moving and the long hood end truck stopped completely. Wheels were examined and found to be clean, all the plunger pickups were making contact, so, it looked like a job for Superman, err, Graham. Once again the electrics were checked and found to be working well, the problem finally being traced to an unlikely area, the trucks. The grease in both trucks gear trains had SOLIDIFIED preventing the wheels from turning in the bearings. After a thorough cleaning with isopropyl alcohol the gears and worms were greased with Labelle 106 grease and Labelle 107 oil for the bearings. After assembly the loco is now running like a Swiss clock.

Graham has done quite a lot of research on oils and greases and found that synthetic oils and greases are perfect for our models as they are suitable for both plastic and metal gears and bearings. Both of the Labelle products mentioned previously are synthetics and available at your favourite hobby shop. Incidentally, I tried the LaBelle website for more technical information about their products but drew a blank !

Another grease that is suitable for gears, which I have used for many years, is Tamiya's Molybdenum Grease which was specially developed for the nylon, plastic and metal gears in radio control cars, also available from your favourite hobby shop. The front of the tube states "For gears plastic and metal bearings". I don't know what the back of the tube states as it is written in Japanese.

Another grease Graham found in his research was one from Exxon Mobil called Mobilgrease 28. This is a synthetic grease developed for the aviation industry and the military. It does not break down under heat or cold conditions and is used on high speed bearings in aircraft and military vehicles. There is one problem however, as the smallest size is a 380 gm. cartridge costing $43.95. That would be enough for 5000 locos !

For many years I have used a product called Shellite for cleaning wheels, gears etc. , also for brass or white metal loco bodies prior to painting as it dries quickly and does not leave any residue. It is a petroleum product and therefore highly flammable so it should be used in an open area and discarded sensibly. After using the Shellite the item or items should then be cleaned with Isopropyl Alcohol. A word of warning. Test what solvent you are using on an unseen part of the model as both the solvents mentioned above can attack some plastics and paintwork.

Also on the cleaning list is WD.40. The solvent in it helps to remove oils and greases but not the hardened variety as they have to be dug out ! But for degreasing a gearbox it is good but being a lubricant it does leave a deposit which should be removed as per the method above.

In relation to lubricating locos and rolling stock, most of us tend to over oil bearings or grease gearboxes. Over oiling axle bearings in locos and rolling stock is not a good practice as it tends to run down the face of wheels onto the track causing a build up of “gunk” on the wheel treads and the rails. There is also a problem with excess oil around the bearings as the up draft caused as the vehicle moves along the track collects dust from the track bed that adheres to the excess oil causing drag or a “hot box”.

Before re-greasing gearboxes or lubricating axles, the old grease or oil SHOULD BE REMOVED as outlined above with a non shredding material such as a tightly woven cloth. Do not use a cotton bud or paper towel as they tend to breakup and stick to the gears, bearings, drive shafts and support structure.

The Isopropyl Alcohol available at chemists is often called Rubbing Alcohol but is only 64% pure so it would pay you to look around for a supplier of 100% strength.

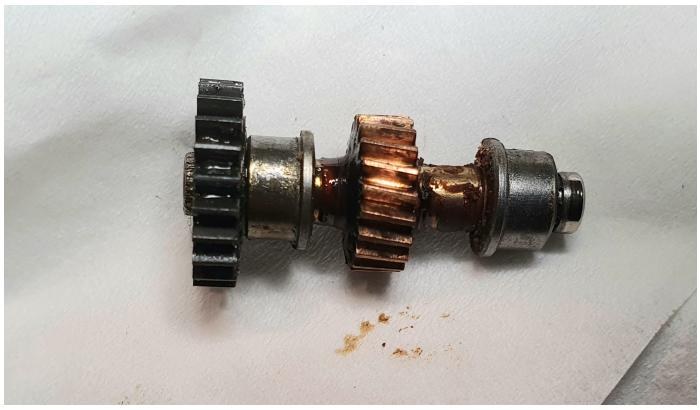
On the subject of oils and greases and their suitability, I think a lot of it lies with the manufacturer and the cost of their product as everything is made to a price. You can’t expect a Rolls Royce for a Holden price. In 1950 I bought my first 240 Volt electric drill, a Wolf Cub Made In Australia which still works. Today, just for curiosity I removed the end of it to expose the gearbox. The original grease around the gear train of years ago was still soft but a little discoloured from the tiny bits of sawdust which somehow had worked their way into the gearbox. What I am trying to say is that it depends on the grease and the manufacturer.

Also, the type of plastic used in gears and gear trains and whether it was a warm day or freezing cold when the gears were “spat” out the side of the moulding machine. Many years ago Tenshodo Models in Japan used laminated plastic gears in their steam and diesel loco gearboxes. These were made up of layers of plastic and plastic mesh heat welded together and with all my experience I have never seen one that was worn out. But maybe that is a subject for somebody to write another article.

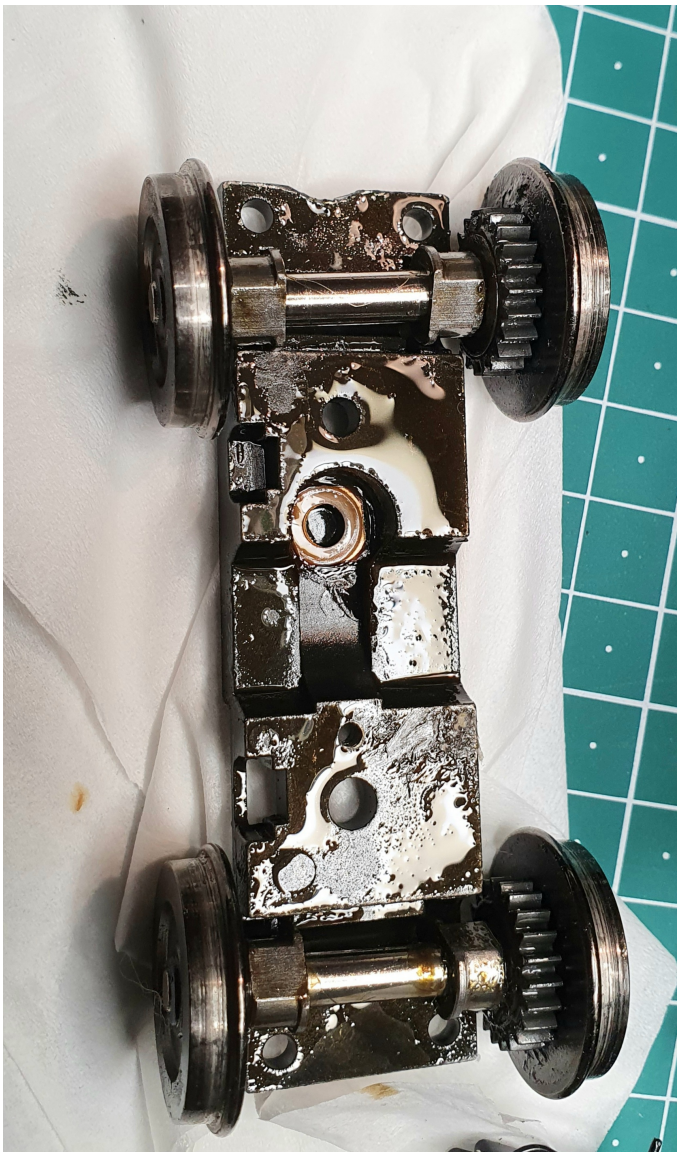
Although my loco was made in China this problem of grease hardening in gearboxes etc. could apply to a loco made anywhere in the world.

If your loco starts running slowly and using lots of amps, it may pay you to check the gearboxes/gear trains first.

Have fun !



Truck drive shaft with worm gear and gear train gear. Build up of hardened grease shown.



Truck chassis with keeper plate removed to show extent of grease hardening.

The Iowa Scale Engineering ProtoThrottle

Daryl Blake

The Iowa Scale Engineering wireless Proto Throttle that replicates an EMD diesel standard control stand, was released on the market several years ago and while I was initially tempted, I resisted the urge due to the cost and a weak Australian dollar.

Having been a freight train driver in Victoria and NSW before retirement in 2014, I was attracted to the idea of operating my models this way but spending the equivalent of a new locomotive on a throttle was a bit too much for my bank account.

Then COVID-19 stuck preventing me from visiting any local operating layouts. Consequently, via the internet, I was fortunate to be put in contact with another modeller Pete in Canada and his O scale (1:48) layout based on a fictitious Canadian short line which is set up for remote operation. This allowed me to play engineer from 16,500 kilometres away using my iPhone, the WiThrottle app and Zoom on my laptop. Pete is totally committed to ProtoThrottles and after watching him use them to operate over a period, I just couldn't help myself any longer, so I logged on to the ISE website, placed an order, closed my eyes and pushed the "purchase now" button.

The throttle itself is roughly the size of a 500ml tetra pack, weighing around 450g. It fits comfortably in the palm of my medium sized hand and has an index finger strap on the back and a lanyard for around your neck. It is highly recommended you use the lanyard as any fall to the floor can break the levers off, though they are sold as spares.

From an operational point of view the ProtoThrottle is a lot of fun and easy to use. It takes two hands like most throttles and just hangs around your neck when not in use. The controls are simple and responsive with just enough resistance to your touch. It's so much fun to open the throttle to notch 1, hear the engine rev up, release the brake and open it up. Then shut off, roll with momentum, gently apply the brake and come to a stop. Shunting is a ball and just so much more realistic than turning knobs and pushing buttons to do the same thing. In fact, having recently used a NCE T bar with dodgy buttons and wheels, I will probably now sell mine and buy another Protothrottle. These things are extremely addictive.

To get the ProtoThrottle to work with your DDC system of choice you need to purchase a receiver. Basically, a small board of electronics which allows the ProtoThrottle to communicate wirelessly with your command station.

It is also recommended that you purchase the AVR Programmer cable that allows you to set up your throttle and update the firmware as ISE occasionally adds new tricks like simulated brake tests and train weight loading features.

If you're now more curious about the ProtoThrottle, there are several great videos on YouTube.

Personally, I cannot recommend the ProtoThrottle highly enough. By the way I'm told a steam version is being worked on.

ProtoThrottle $482.00 USD

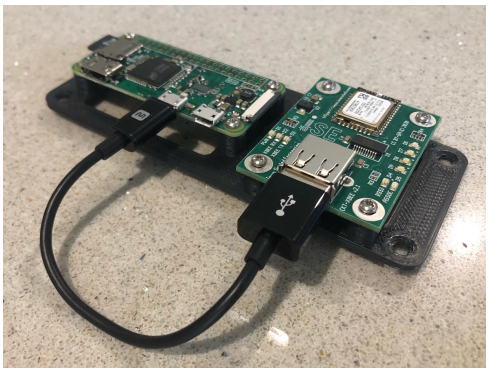
Receiver $99.00 USD

Pocket $10.00 USD

AVR Programmer &15.00 USD

Postage $65 USD

Approximately $892 AUD



A CHG Guards Van Kit Bash

Michael Parker

What follows is an article that I hope inspires people to think outside the square, as they say in the classics.

I have always been fascinated by the Hunter Valley Coal trains, partly because when I was stationed in the ACT serving in the RAAF, I used to drive through the Hexam area on my way back to Brisbane when ever I had leave. In the late 60s and early 70s, the area seemed to be covered in coal hoppers being shunted by small steam engines. The memory still lingers today.

Some years ago I came across a Parkside Dundas LMS 20 ton goods brake van (diagram 1659) for sale, and thought it had possibilities for a kit bash into a CHG guards van.

Checking the dimensions suggested that some modeling licence was required, because the wheel base on the PD van was 12 feet, where the CHG is 11 feet. So can I live with the 7mm difference? The answer is yes because my aim was to build a convincing model not necessarily an exact replica. Besides as all the other measurements are correct relating to length of vehicle and overall length, I decided that I could easily live with the difference. The other detail that some of you may notice is that most of these vans were timber framed, however there were some built in later years with steel frames, so I feel that I had that covered.

I probably should add here that my career before the RAAF was in the Graphic Arts field, and during and after the Air Force I was totally involved in photography. So you can probably see that I am used to creating illusions, which I see as necessary to convince the public that what they are looking at did or could have existed.

The project used most of the original kit, so all of the chassis, wheels, bearings, couplers, brakes and one step, most of the body, and all of the roof, although with some modifications. However I did have to cut down the cab sides and modify the ends to fit into their new positions. In addition to this I had to scribe new plank detail into that part of the floor that was previously inside the cab.

I removed one door, and made a new one from Evergreen styrene, as I wanted to show a door open, in order to suggest an interior. I also had to cut away part of the inner roof to make it fit the new positions of the end walls. As I also wanted an interior, I had to be mindful that the roof would have to be a very neat fit, in order to clip in place when the vehicle was being used.

New windows were fabricated from Evergreen strip for both sides. The original roof vents were filled in, and new ones created to match the CHG, and line up with the stove. I made sand boxes from styrene sheet and strips, and fabricated an additional step, all of these features were quite different to the LMS van.

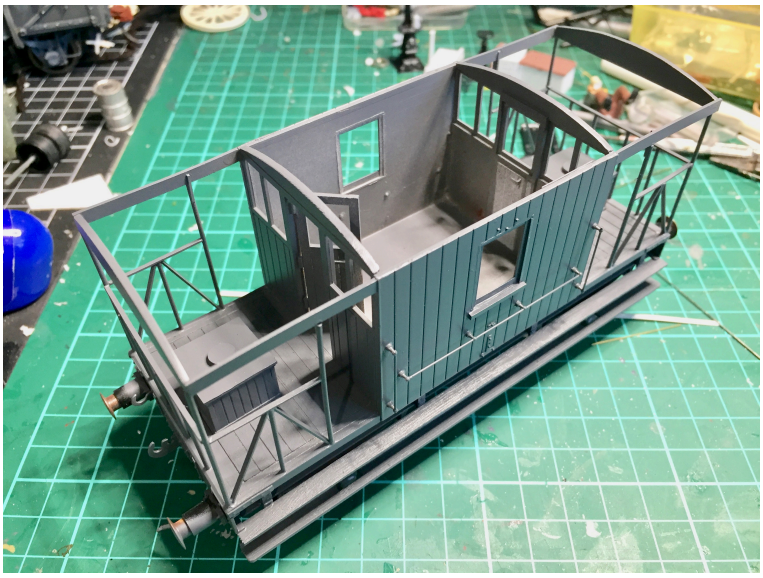
You will notice from the photographs that I use evergreen styrene rod, and flat strip to fabricate the railings on the verandahs. Like most of us at some stage I used brass wire for this application, but over the years I found that there was very little give in the brass, and the slightest bump resulted in a break of a joint. Believe it or not the styrene rod glues together very well, and is surprisingly sturdy, with the added benefit that if a slight bump is experienced it more often than not bounces back.

I did however use brass wire for the hand rails on the side, along with OO scale brass knobs from Alan Gibson, as I found the smaller scale was a closer fit. The lamp irons are made from brass strip bent to shape and superglued in place. The hooks holding the three link chain is made from brass wire shaped and hammered into shape.

Next I made all the internal components, all of which are made from Evergreen strips, sheet, rod, and tube. The exception was a brake wheel from Precision Scale, and the stove from an unknown kit, that I had in my parts box. I think I picked it up at a model railway show, some years ago. There is also a bag from my parts bin. The papers are small advertisements cut out of catalogues, while the flag is a cut down tooth pick with a piece of red tissue paper. The photo on the wall is of Marilyn Monroe I reduced probably 20 years ago, when I had access to a darkroom. Sadly those days are long gone.

Although I have kept the three link hook and links, I have added Kadee couplers, which are bolted on and so are removable when desired.

Next was spray painting the body, which was simply a Tamiya dark grey spray can. Although I spray painted the under body with a combination of flat black and red brown, I only had to touch up those parts that were oversprayed with the grey. I should note here that as the wheels and bearings are in place, I cut strips of 3mm masking tape to run around the tyres, and then also added Microsol masking fluid to the edges of the flanges, all of which was easily removed later.



I hand painted the wheel faces with a dirty brown, and hand painted the interior and all the various furniture. Glazing is made individually using clear styrene, and marked out with a long pin. I use white glue to attach the glazing, as it dries clear. Decals were from a Microscale set, and were attached in the usual way, with an overspray of flat varnish.

I think that given the opportunity I would purchase shares in the Evergreen company, because I don't think I could achieve as much without it, in fact I have collected enough packets of various sizes and profiles that they cover the back of my hobby room door.

Overall I am happy with the result. I think I have achieved the flavour of the prototype, and doubt that any one will insist on measuring the wheelbase.

What's next is some weathering, something I always dread, as I am always worried that it is the stage where it is easy to ruin a model, but we will see.

Michael.

Breathing New Life Into An Old Scene

Trevor Hodges

Some of you may have seen Queens Wharf in the flesh when it attended several exhibitions in the early 2000s. Many more of you have also probably read about it either in 7th Heaven or perhaps on my blog Morpeth in O-Scale https://7mmaussie.wordpress.com/author/7mmaussie/. However, for those of you who haven't seen or read about Queens Wharf (QW) the photo of her at the 2010 Murwillumbah Exhibition (Photo 1) will give you some idea of the layout's size and arrangement well before any of the following took place starting in about 2017. That's yours truly behind the layout and noted Queensland modeller Anthony Veness taking a photo of the layout. No one could accuse QW of having ambitions to great size but I did enjoy building and exhibiting this layout and I felt it showed what could be achieved in standard gauge O in a tiny foot print.

Now if we shoot forward to about 2017 I make the decision to purchase a new home with a space that will be suitable to build a "permanent" layout. Of course nothing is permanent in terms of layout building so let's consider this new layout one that wasn't built to be exhibited rather than something that will last forever. At an early stage of planning I decided to abandon an attempt to build something around a prototype other than the Morpeth line and thus allowing me to incorporate my two small, portable layouts into the new endeavour. However the passing loop at QW was only about one metre long so I took this opportunity to expand on this through the simple expediency of drawing the two 1.5 meter halves of the original QW apart by about 1.2 meters and in-filling between these with new track (Photos 2). Things have moved on considerably since these photos were taken in 2018 however, this allowed for passing moves of trains of about twelve 4 wheel wagons plus a tender loco and PHG type van.

However, while this expansion allowed for much better operation, it created problems around the location and suitability of the station facilities. Firstly, the location of the station platform on the original QW was dictated by space being at a premium so it was crammed down one end of the layout with a turnout directly in front of the platform. I wanted to move it from its original location along the line, placing it more central to the newly extended passing loop (Photo 3). As the depth of the real estate available behind the main line on the new section of bench-work was the same as the old it was a relatively simple matter of prying up the station scene (it had been glued in place) and relocating this about 1 metre further along the line (Photo 4).

However, a far bigger problem was presented by the changing role of QW itself. The station and its newly acquired yard had gone from a wayside halt on a quiet (pre-1953), rural branch line, to a station with a three line yard, several industries and a main line junction just outside the yard limits. The new QW had outgrown the original, sleeper built platform and ground level waiting shed but I didn't really want to scrap the old station scene. As I saw it I had three options:

- Leave the platform scene in its original condition and simply move it further up the line making it more central to the extended passing loop.
- Scrap the original station and rebuild something new.
- Retain the original station and blend this with a new, extended platform and upgraded platform level building.

I was justifying the enlargement of Queens Wharf into a yarded station by imagining the line being extended with a new bridge crossing the Hunter River just off scene from my layout. There had been a plan for this to happen on the prototype but it never came to fruition and the line was eventually closed in 1953. Placing myself into the mindset of the NSWGR, I decided it would be much more cost effective to expand the station facilities at QW rather than bulldoze what was there and start completely from scratch. So the plan was to build a new, extended structure abutting the old, sleeper-built wooden platform with a "re-located" wooden (A4) station building from somewhere else on the system. ModelOKits sell a suitable card kit for the station at Wingham so I purchased one of these, along with some of their laser cut wooden platform facing, station fencing and seats. I'd purchased a small NSWGR wooden signal box kit from The Outback Model Co a few years ago at an Aus7 Forum which I'd only half completed building, so I decided to finish building this model and incorporate it into the scene for the new station upgrade (Photo 5).

I started by measuring the space I had available and cutting a piece of 12mm plywood to act as a long, thin foundation for the entire scene. I then removed the QW platform and waiting shed from their original scenic base, ready to be reinstalled on the new base. The original construction of QW never envisaged a change of location so getting the QW platform off the old scenery base essentially required totally demolishing and rebuilding it. It may have been more cost effective for the real railway to use the old facilities but on the model it took a good deal of work to retain the old platform! After I'd installed the old QW platform on its new base I cut up some blue insulation foam and created a platform base for the new station extension and butted this up to the old platform. I dressed this front and rear with the ModelOKits wooden platform facing and began building and installing the A4 station building (Photo 6) following the instructions supplied with the kit. I used a piece of thin card as a concrete station apron which was painted grey with some cracks and expansion lines drawn in lead pencil. After the station building was essentially complete I decided to build one of ModelOKits gent's toilet kits and installed this at

ground level adjacent to the signal box (Photo 7). I also made up station signs and a billboard using Evergreen styrene and printed the decals for these on my Alps printer.

After the structures were built I glued these in place on the ply base and set about installing scenery to blend these together. I glued some more pieces of blue insulation foam at the back of the platforms, covered these with paper towel dipped in white glue then applied a range of scenic materials and trees, some of which were recycled from the old QW station scene. I was very pleased with the general look of the new station (Photo 8), not least because retaining the old platform provided me with an opportunity to draw a link between the old scene and the new. Things have come a long way in O-scale since I started building QW in about 2004 but the pleasure you can get from seeing a train draw up alongside a model you've built isn't one of them (photo 9).

On The Cover

This chap has been fishing on the creek for almost ten years now and no one has ever seen him catch anything. He makes it onto the cover because later this year it will be ten years since Arakoola made its exhibition debut at Liverpool and his patience deserves some recognition. Construction of the layout under the name “Layout 2011” commenced early in 2010 with an 18 month target for a first showing at the AMRA Exhibition in October 2011. The goal was achieved and since then it has been exhibited12 times at Liverpool, Thornleigh, Rose Hill, Canberra, Sydney Showground and of course at Telford in the U.K in 2016. Over that time it has collected many awards including Best Australian Prototype Layout six times, Best Scenery twice, Exhibitors Choice twice, Best Layout twice, Public Vote once and the Norm Read O Gauge Perpetual Trophy. Over the decade it has been a showcase for raising the profile of 7mm Fine Scale Modelling. Clocking up another exhibition attendance this year seems very uncertain so this is probably as good a time as any to recognise this milestone and hope that there is more to come.

Perhaps the fisherman would do better if he anchored further away from those noisy trains rumbling overhead.

44 TONS OF CONVERSION – ANOTHER AMERICAN JOINS THE FLEET.

STEPHEN PRESTON

Background

Following the pleasing completion of the Brownhoist crane project (see issue 64 of 7th Heaven) my thoughts turned to other similar "kitbash" opportunities using foreign models to recreate NSWGR units imported from elsewhere in the world.

In November 1943 four ex American army diesel shunt locos were brought to Australia for use by the Department of Munitions at their facility near St Marys in western Sydney. Colloquially known as "GE (General Electric) 44 tonners" these centre cab twin hood units were the first diesel units to be employed in NSW and were classified as 79 class due to the army numbers that they carried. While not successful enough to warrant more units being imported they provided good service with the last unit 7920 remaining in NSW service until 1974 when units 7920 and 7923 were sold to the British Phosphate corporation for use on Christmas Island. All four locos survive, one preserved at the Adelaide Port Dock and one at the Thirlmere Transport Heritage NSW museums with the remaining two still located on Christmas Island in a heavily converted and poor condition.

Before the 79's could enter service a number of modifications had to be made to enable them to operate on the NSWGR network, the modifications being performed by the NSWGR who had also agreed to maintain the locos. As they were interested in employing diesel locos the units were initially trialed by the NSWGR on shunting and short freight workings. 7921 and 7922 were relocated to Commonwealth service at Woomera in South Australia in 1948 and the remaining two spent most of their service days on shunting duties in Sydney and Redfern yards.

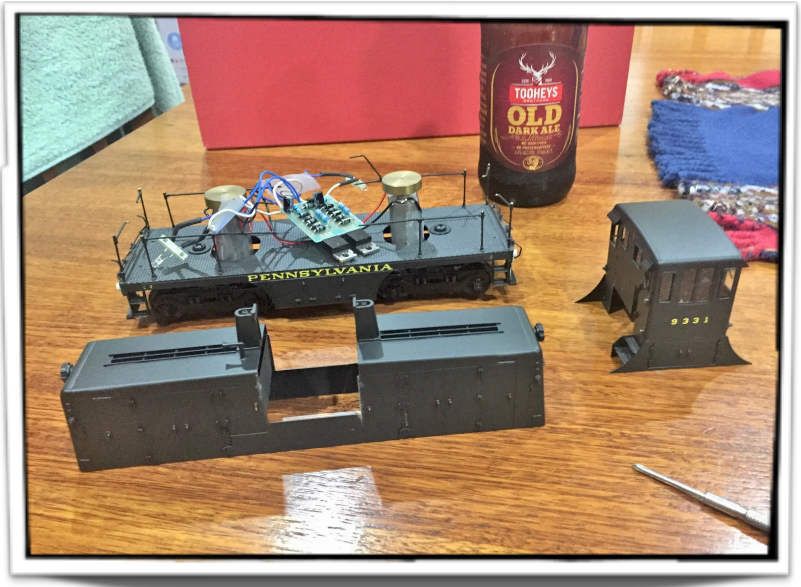
Previous experience with conversion of American built HO models to represent a 79 class suggested it likely that a suitable model would be available from the US with subsequent online searches including via Ebay and Brass.com providing many model examples to choose from. This also confirmed that all GE 44 tonners are not the same. A careful comparison of models and photos of the version sent to NSW identified that the closest model was the "GE 44 ton Phase IV" produced in Brass by RY models. While out of production searching over a few months identified a surprisingly affordable unit for purchase. Another similar version is produced in Brass by W&R Enterprises but the only example seen available for sale had a price tag over $1000 (US) and was a non working model.

The conversion.

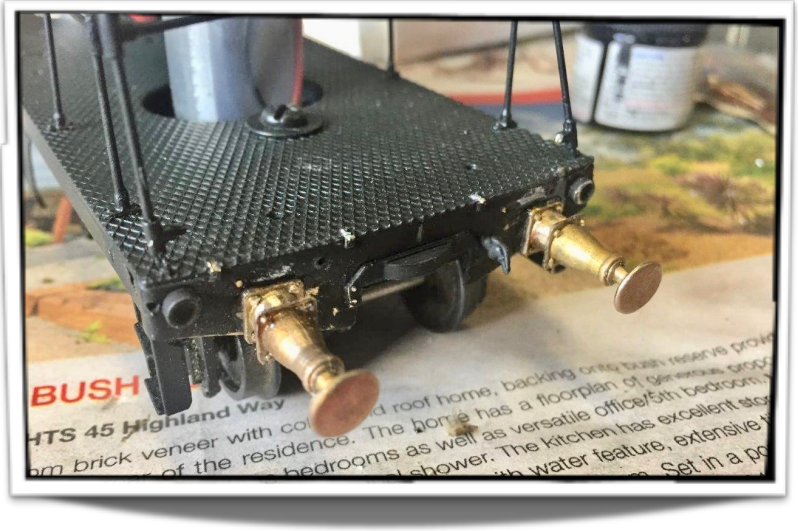
As the GE 44 tonners were built for American loading gauge and service arrangements several modifications were conducted by the NSWGR to make them compatible with local requirements. The changes required to convert the model to a good representation of a 79 class include:

1. Removal of end shunters steps and marker lamps.

2. Rearrangement of end handrails.
3. Provision of NSW marker lights and forming of headlight hoods.
4. Fitting of buffers and hook drawgear (if desired).
5. Fitting of hood top hatch.
6. Modification of cab roof profile
7. Repainting and decals.



After running the model to confirm its functionality (the RT model has two can motors and runs very nicely) the model was disassembled into its basic components. Like many models the cab structure is separable from the main body which allows good handling and access to conduct the modifications.



Armed with a Dremel cutting disc the end shunters steps were quickly cut clear of the bottom of the headstock but as they were a part of the headstock casting some grinding and sanding was also required to produce a flat headstock surface to later fit buffers.

As supplied the model has additional handrails not used in NSW service and just like the prototype conversion the unwanted sections were removed leaving the required handrails. A minor conversion to better represent the 79 class is the relocation of the front upper handrail attachment point from the front to the side of the hood. This requires drilling holes in the hood sides and shortening the handrails slightly for insertion in the holes. To replicate exactly the front handrails across the locos should be lowered to the same height as the side handrails.

As was standard practice the NSWGR chose to fit marker lights to the sides of the hoods. The model is equipped with American hood end marker lamps which should be ground/sanded off and the holes

filled. The marker lamps fitted to the 79 class were not standard NSWGR steam loco markers but as I could not identify a casting for the style fitted to the 79 class I chose to fit the standard type produced by Waratah models. Standalone headlights are fitted to the model whereas the 79 class had a cowling around the headlight which ran back to the hood. To represent this putty was used to fill in and around the rear of the headlights, when dry the putty was sanded to form the smooth cowling appearance.

As delivered the GE 44 tonners had auto couplers which were replaced with hook drawgear to be more suited for coupling to passenger and other stock. I have seen a photo of 7920 refitted with auto couplers in its final days and as I wanted consistent coupling across my fleet I applied some modelling licence and retained auto couplers on my model. The buffers fitted to shunt hook drawgear vehicles were standard loco buffers but with an additional extension mounting section required to provide clearance due to the curvature of the headstock.

I considered several options to produce the extended buffers and decided that the easiest method to provide the desired base and bolt detail was to use 2 sets of buffers, cutting one set down only using the base and initial “bottle” section. For strength I chose to solder the brass sections together, if I did this again I would drill right through the buffer casting centre lines and use a rod to more easily align the components for soldering. As the headstocks are slightly curved the buffers require some packing on the outer sides to make their alignment parallel with the body/rails.

Fitting of the hood top hatch can be as easy or as complicated as you choose. Most photos of the 79 class units in service show them running with the hatch open (presumably to keep engines cool) but I chose to model the shut version. This was achieved by cutting to size and attaching a styrene strip to represent the hatch. Should you prefer the open version modifying the opening on the top of the hood and cutting out a hatch to suit would in reality not be difficult.

At this point I also contemplated relocating a small vent opening on the sides of the hoods which on the model is lower than on the 79’s but decided that I could live with this minor compromise.

By far the biggest modification to be performed is to the cab which requires its roof outer sides to be chamfered to fit within the NSW loading gauge. One of the significant variants between the various models available is the size and positioning of the side cab windows, I believe the RT version best supports the balance of easiest and closest to correct conversion to modify the cab. The method I chose was to mark out the section to be removed and first make both cuts along the roof parallel with the body sides using a Dremel cutting disc. Securely clamping the body in a position to

maintain a good steady cutting angle and depth is recommended and ensuring awareness of where the disc cutting tip is located. Cutting off the roof section strip to be removed then needs to be completed on the cab ends. I chose to ease the chamfer angle slightly so as to not cut into the end windows. The 79s have a small section cut from the upper outer corner of these windows due to the angle of the modified cab, this could be fully replicated if desired but I’m happy with the visual representation provided by the slightly reduced chamfer. To fill the cab roof void and form the chamfered roof surface I used a piece of thick styrene which could be easily filed, filled and modified as required. Note the model comes with a sun shade above two end cab windows which appears to have been removed and reinstated at different times in NSW service. Remove them while the roof modifications are performed and refit them if it suits the loco and era you are modelling.

The 79 class provides several livery variations to choose from, in their earliest form they ran in plain black with their original cabside USA and number markings (USA retained for a very short period then painted over), later standard NSWGR steam loco numbers were painted on in yellow and then later again coats of arms added to the cab sides. A single yellow waist band was later applied along the length of the hoods. The later application of the Tuscan Red body colour from 1959 also saw standard cabside numbers and the yellow waistband line applied. From very early days the loco numbers were also painted on the red painted headstocks being split and located on either side of the couplers.

Initially I’ve painted my model to represent 7920 in black with no line and later on when coat of arm decals are available I’m sure I wont be able to resist progressing its livery just like the prototype.

This modelling task was interesting in that the removal and modification tasks were generally performed in the same way as those done on the real locos and I’d recommend it as a relatively simple and satisfying project. At first I was daunted by the prospect of attacking a brass model with a Dremel but in the end the challenge was satisfying.

Thanks are due to Glenn Scott for assistance with the supply of the required castings and number decals and his usual encouragement to see the job done.

MODEL KITS
specialists in O gauge model kits & accessories

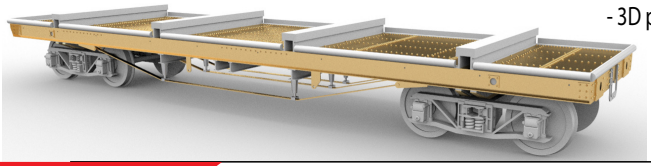
THE WARATAH MODEL RAILWAY COMPANY EST. 2002

Fine Scale 1:43.5 (7mm) O Scale kits

MODEL KITS
specialists in O gauge model kits & accessories

COMING SOON

E Flat Wagon
7mm Scale



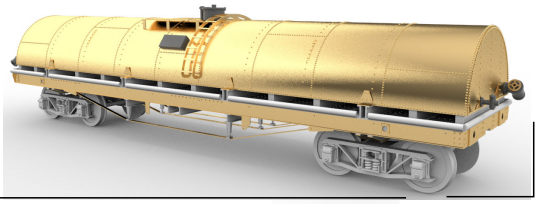
Available July 2020.

Kits Include:
- Etch Brass panels & detail components
- Laser cut acrylic chassis
- 3D printed bogies and detail components

(Prices TBA)

E Flat Wagon With Riveted Water Tank
7mm Scale

COMING SOON



AVAILABLE NOW

Dapol GWR Signal
7mm Scale

Newly arrived!

Can be modified to a close to NSWGR home signal.
Fully operational, comes with servo motor and fitted LEDs.
Ready to install with toggle switch.

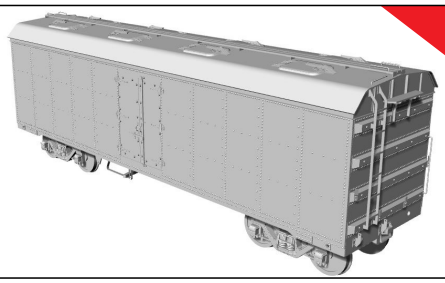
Prices $98

THE WARATAH MODEL RAILWAY COMPANY EST. 2002

"TRC" WAGON KIT
7mm Scale

Kit Includes:
- Etch Brass sides/Roof/detail components.
- Laser cut acrylic chassis,
- White metal bogies,
- 3D printed ends and detail components.

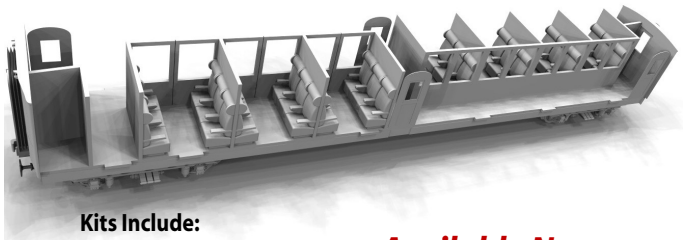
Price: $275 per kit.



AVAILABLE NOW

AVAILABLE NOW

NSWGR FS & BS CARRIAGE KITS
7mm Scale



Kits Include:
- Etch Brass sides & detail components
- Laser cut acrylic chassis
- Single piece styrene roof
- 3D printed ends, bogies and detail components

Available Now
Price: $425 each.

British O Scale RTR

dapol Model Railway Company — **Dapol Now in Stock**

HELJAN — **Heljan Now in Stock**

MINERVA MODEL RAILWAYS — **Minerva Now in Stock**

We are now stocking in our Yagoona showroom a range of modelling products including:

- Peco O Scale Track and Accessories
- Micro Engineer Track and Accessories
- Testors & Tamiya paints, weathering products and materials
- MIG Paints and weathering products
- Slaters Wheels, parts and Accessories.
- Xuron Tools
- ESU
- Slaters Plastikard sheet and strip
- K&S Metal
- Evergreen plastic profiles
- Zap-a-gap glues
- Mininatur Scenery Materials
- Mount Albert lumber
- Tortoise Switch Motors
- Proses tools, Jigs and rolling roads
- Range of Tools
- Noch and Faller Scenery Material
- Badger Airbrushes
- Woodlands Scenery Materials
- Kadee Couplers

Visit our shop at Unit 4/61-71 Rookwood Rd Yagoona NSW 2199. Shop Open Fridays from 10am - 2pm or by Appointment Monday to Thursday
Visit our new website & online store at www.modelokits.com Telephone: 0404 935 663 Email: sales@modelokits.com
Now incorporating the full range of Waratah MRC, O-Aust Kits & Model O Kits products

DJH Modelloco UK

- Fine Detailed Brass & White Metal Kits
1:43.5 (7mm) O Scale kits

MODEL KITS
specialists in O gauge model kits & accessories

DJH MADE IN UK MODELLOCO

NOW AVAILABLE

NSWGR Z13 Class Tank Locomotive

In fine scale 7mm kits and Batch Build Ready-to-run by DJH.

- RTR locomotives are fully built/running/tested, Includes number plates , decals, standard paint (black), working lights, 8 pin DCC interface (plug-in).
- Detail includes: slow running , real coal, detailed back head. Specific paint requests will incur additional charges. - Minimum radius: 6'

Kits Available Now $1500
RTR Available Now in Black $2750
or Preserved Green $2900

COMING SOON

NSWGR Z12 Class Locomotive

In fine scale 7mm kits and Batch Build Ready-to-run by DJH.

- ***RTR locomotives*** are fully built/running/tested, Includes number plates , decals, standard paint (black), working lights, 8 pin DCC interface (plug-in).
- ***Tender options:*** C Class 6 wheel or Baldwin L Class Bogie Tender
- ***Detail includes:*** slow running , real coal, detailed back head. Specific paint requests will incur additional charges.
- ***Minimum radius:*** 6'

Available in 2021
Prices to be confirmed

NOW AVAILABLE

NSWGR D59 Class Locomotives

In fine scale 7mm kits and Batch Build Ready-to-run by DJH.

Kits and RTR loco available in either Oil Burning or Coal Burning formats.

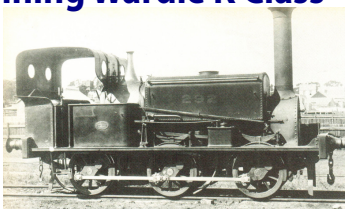
- ***RTR locomotives*** are fully built/running/tested, Includes numbers , decals, standard paint (black), working lights, DCC interface (plug-in).
- ***Detail includes:*** slow running , real coal, detailed back head. Specific paint requests will incur additional charges. - ***Minimum radius:*** 6'

Kit Price $1799 **RTR Price $3700**

NOW AVAILABLE

Minerva Manning Wardle K Class

Versions available:
Black Lined Yellow/Red
Dark Red, lined Yellow
Deep Blue lined red/straw



These locos saw service on the NSWGR as engines 292 & 293 under P(127) class (Later 532 &533)" on the Camden Tramway, Clyde – Carlingford Line and Private Industrial Lines. If there is enough interest we may put together a conversion kit.

Prices: DC-$495 DCC-$595 DCC Sound-$725

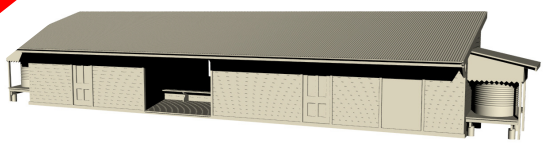
NEW

ModelOkits New 7mm Scale Releases!

Quality Laser Model Cut Kits with Plastic Details

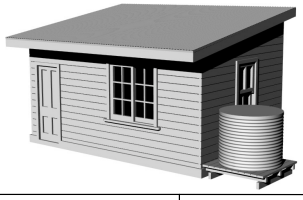
MODEL KITS
specialists in O gauge model kits & accessories

NSWGR A4 Station Building Kit



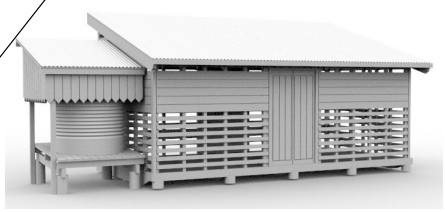
Kits Available Now *Price $129*

NSWGR Timber Platform Signal Box Kit



Kits Available Now
Price $49

NSWGR Cream Shed



Kits Available Now *Price $65*

NSWGR Inspection Pit

Kits Available Now *Price $20*

Visit our shop at Unit 4/61-71 Rookwood Rd Yagoona NSW 2199. Shop Open Fridays from 10am - 2pm or by Appointment Monday to Thursday
Visit our new website & online store at www.modelokits.com Telephone: 0404 935 663 Email: sales@modelokits.com
Now incorporating the full range of Waratah MRC, O-Aust Kits & Model O Kits products