

# MainLine



**The Journal of NMRA Australasian Region**

**Vol 35 number 1 Jan Feb 2018**

# NMRA Australasian Region Directory

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All members of Australasian Region are invited to submit articles of a railway nature for publication in Mainline. Submissions preferably in Word or JPG format can be Emailed to

editor@nmra.org.au or to my home Email address rjtonkin@iinet.net.au

Original uncropped photo files would be preferred.

Please ensure any contributions of copyrighted material have written approval from the copyright holder.

## **Disclaimer**

All comments published are the views of the author/authors and not the views of NMRA AR

Articles are provided by members in good faith and the views expressed therein are not necessarily those of NMRA AR

## **Target dates for future issues**

### **March April**

**Content submissions**

**15 April 2018**

**Publish date on web**

**30 April 2018**

### **May June**

**Content submissions**

**15 June 2018**

**Publish date on web**

**30 June 2018**

## **Cover photo**

Arthur Hayes MMR's photo of Amtrak's Siemen's built ACS 64 class locomotive number 645 in Washington DC station.

## **Contents**

### **Articles**

- Walong Loop Rod Tonkin
- Grain Trucks Arthur Hayes MMR
- MG Sheep van Arthur Hayes MMR
- New Scratch Building SIG Newsletter Robyn Taylor

### **Regular features**

- President's Thoughts
- Education program
- Editorial musings
- Divisional round up
- Convention news
- Achievement program awards.
- Australasian Region directory
- Coming events
- Prototype observations

## From the President's Desk

Welcome to this edition of the electronic MainLine, the first for 2018.

As you will have seen from various NMRA emails, it is "election season". There is the election of Office Bearers for the Australasian Region Committee and for amendments to our constitution called our "Rules of Association". The returning Officer for this ballot is Dennis Clarke. The only contested position for the AR Election is that of Vice President.

The other election is the US National Elections and amendments to the US Board of Directors By-Laws. The only contested position is that of our Pacific District Director and I am the Returning Officer for this ballot.

Both elections close on 28 February 2018. I really encourage you to vote in both elections. I know many people think that everything is fine with the Association so there is no need to vote but we all want the best committees and governance possible for our Association.

On another important matter, the US has increased the fee that they take from your membership fees for their role. The fee has increased from US \$10 to US \$13.20. Our Australasian Region Committee (ARC) has considered the situation carefully and decided NOT to increase our membership fees but to absorb the extra cost impost. As our membership fees fall due on 1<sup>st</sup> July each year, our ARC will review the situation annually around March each year.

Planning is well advanced for this year's Convention which will be hosted by Division 1 on the Gold Coast. Check out the details on our NMRA AR web site. This year is a great year if you are thinking of visiting the Gold Coast as it has been "prettied up" for the Commonwealth Games.

Until next time, enjoy your modelling.

David O'Hearn

AR President

10 February 2018



## NOTICE OF ANNUAL GENERAL MEETING

The Annual General Meeting (AGM) of the NMRA (AR) will be held on Saturday 10<sup>th</sup> MARCH 2018 at the residence of Sowerby Smith, 174 Fullers Rd. Chatswood NSW.

Meeting to commence at 3pm after the Division 7 meeting.

### Agenda

- Present:
- Apologies:
- Minutes of 2017 AGM: Approved by the ARC.
- Significant Motions Carried by the ARC in 2017
- President's Report
- Treasurer's Report
- AP Chair Report
- Membership Officer Report
- Result of Australasian Region Elections for 2018/20
- Result of proposed Changes to the Rules of Association.

Peter Burrows

Secretary

NMRA (AR)





## Editor's Musings

Much of the content of this issue features the modelling of Division One members who will be hosting this years Region convention.

The attached photo shows there is a prototype for everything. Steam power around Sydney in 1968 was definitely on the wane while containerised freight traffic was increasing in leaps and bounds. The two species did co exist, albeit for a short time. The unknown Garret photographed heading to Cooks River yard on a mid winter morning in 1968 is clearly hauling a train of BC series flat cars loaded with containers. I snapped the photo from a train on the Bankstown line.



I'm sure Captain Phillip would have preferred roast lamb to the salted pork he was most likely served on the 26 January 1788

## Time for a change?

A recent look at some of the layout requirements for our Achievement Programs Model Railroad Civil Engineer award struck me as odd. The award requires the modellers layout plan to include locomotive turning, coal dump track, ash pit, scale track, transfer table, locomotive storage facilities and a terminal.

This is all very well for a 1950s or earlier era layout, but my layout is set in the late twentieth century. A late twentieth century era layout would be fully dieselised. Diesel locomotives in my experience neither burn coal nor require an ash pit. The only steam locomotives allowed to operate on my layout are oil burners. These beasts have no need of coal supplies or ash pits.

The scale track with point blades to direct the wagon to be weighed onto the weighing rails were replaced in the 1980s by load cells bonded onto the rails. These load cell weigh bridges look just like normal track.

The only transfer tables I can recall were at Eveleigh locomotive and carriage work shops. These devices dated from the early twentieth century as did the workshops. By the late twentieth century they were redundant along with the work shops they served.

Modern locomotives keep moving to earn their keep. They don't sit on storage tracks.

I model a section of a bridge line. Trains move across the layout. there is no need or reason for a terminal on my layout.

No mention is made of staging facilities. These facilities have been part of British railway modelling for many years and widely used by North American modellers over the last twenty five years.

Coal fired steam locomotives in regular service have been phased out for nearly sixty years in North America and nearly fifty years in Europe and Australia. You need to be my age to remember regular steam operations in Australia.

If NMRA really reflects railway modelling our Achievement Program ought to acknowledge current practice as well as the days of steam.

Your comments appreciated.

Regards Rod Tonkin

# Walong Loop

Rod Tonkin

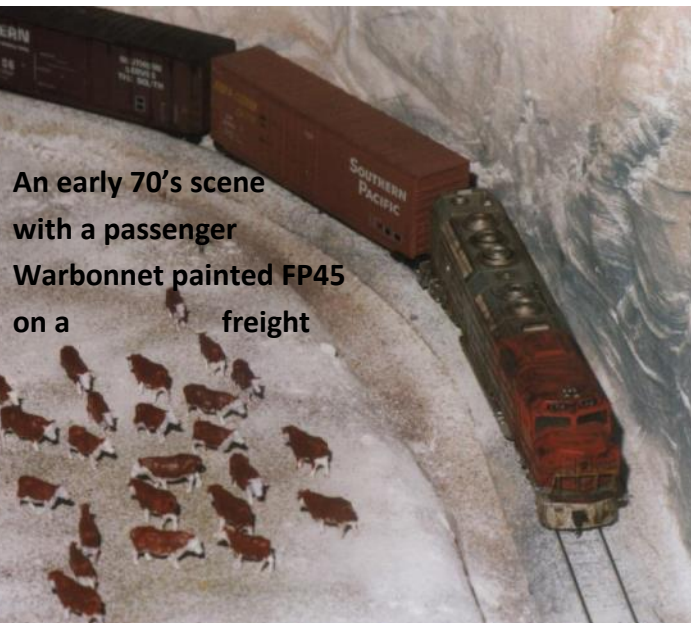
An exhibition layout is a good place to try something different. If I was going to try something different, why not be really different? Why not create and exhibit a replica of a prototype location at a particular time of the year and the trains that pass through it? I decided to build one for the Perth 2000 Model Train Show.

I selected Walong Loop on Tehachapi Pass in southern California as my prototype setting. The Railroad over Tehachapi Pass is an ideal prototype for an exhibition layout, it features;

- Two railroad operation
- Dense traffic
- Steep grades
- An identifiable setting

The preliminary design of Walong Loop stated in October 1999. The layout was stand 14 at the Perth 2000 Model Train Show from the 3rd to the 5th of June 2000.

I have never been to Walong Loop. The prototype information I needed to design the layout and select the rolling stock to operate on it was obtained from the internet. Two railways operate over Tehachapi Pass. Southern Pacific built the line in 1876. Santa Fe acquired trackage rights over Tehachapi Pass to access their lines in central California in 1899. Union Pacific acquired Southern Pacific in 1998 and now owns the line. The 1995 merger of Burlington Northern and Santa Fe means BNSF now has trackage rights over the line. This two railroad operation provides operational variety.



An early 70's scene with a passenger Warbonnet painted FP45 on a freight

The line over Tehachapi Pass from Caliente to Summit is 27 km as the crow flies. By rail it is 43 km. The line is almost all curves; even in the tunnels. The line has a continuous gradient of 1 in 40. To maintain this gradient, Southern Pacific's civil engineer William Hood constructed the spiral loop now known as Walong Loop. The Chinese labourers who built the line christened the spiral loop "Walong Loop". In Cantonese "Walong" means either the "Chinese Road" or the "Coiled Dragon".

Reduced to HO scale Walong Loop is 4130 mm diameter. The vertical track spacing at tunnel nine where the track crosses over itself in HO scale is 275 mm. The crossing siding on Walong Loop in HO scale is over 13 metres long. The layout had to fit the space I had for storage and transportation. It needed to fit into our family station wagon and be transported to the exhibition in one trip. This limited the size of the layout to a maximum of 1800 mm by 1200 mm by 450 mm.

Modelling Walong Loop in HO scale in a space 1200 mm by 1800 mm required some compression. To fit this space and operate a reasonable range of rolling stock I selected 457 mm (18 inches) radius curves. Using this curve radius meant the passing siding on the loop had to be omitted from the layout due to lack of space. The maximum vertical track separation I could achieve in the 1200 mm by 1500 mm space with 457 mm radius curves and 1 in 33 grades was 92 mm. This reduced tunnel nine, almost to an overpass.

This 360 metre diameter spiral loop on a steady 1 in 40 grade lifts the track 24 metres. Trains longer than 1250 metres cross over themselves. The loop is a renowned example of railroad civil engineering. It is listed as a United

States Civil Engineering Landmark. The line over Tehachapi Pass handles 30 to 40 trains, plus 15 to 20 helper movements a day.

I wanted to reproduce the setting and feel of the scene at Walong Loop that you get from photographs of the area. The features of the area to me are; long trains hauled by high power locomotives, sparse vegetation, the ring of rounded hills surrounding Walong Loop, the hill inside the loop, the ranch and the track crossing over itself at tunnel number nine. A rail fan at Walong Loop would see a train from Caliente pass through tunnel number nine, climb around the loop, and cross over the top of tunnel number nine and then disappear into tunnel number ten.



A late 70's scene with "Yellow bonnet" painted locos hauling a train with caboose

My aim was to recreate the spectacle of a train moving through the scene not just across it. To achieve my aim of trains moving through a scene, Walong Loop was set in a space deeper than it was wide. The visible scene was 1200 mm wide by 1500 mm deep. At an exhibition viewers of the layout were 900 mm from the front edge of the layout.

Trains from Caliente entered the scene 1200 mm from the audience. The entrance to tunnel nine was 1000 mm from the audience. As the train climbed the loop it moved away from the viewer to a distance of 2300 mm as it crossed the creek. After crossing the creek the train past behind the hill inside the loop and began to approach the audience. After crossing over tunnel nine 1000 mm from the audience, the train exited the scene into tunnel ten 1200 mm from the viewer. In travelling a visible 1000 mm across the layout the train travelled 4300 mm.

I wanted a light layout to make it easy to handle. The layout frame was a perimeter frame of 72 by 19mm side rails and 42 by 19 mm cross members at 300 mm centres. The layout decking was 3 mm plywood. All the track except from tunnel eight to nine and the track from tunnel ten to the track crossing over tunnel nine is on a grade. Risers from the frame support the three mm plywood track bed. The fold up layout legs were salvaged from the old 'Martindale Creek' exhibition layout. The completed layout was easily moved by two people.

While the layout was light, it was rigid. The cattle herd inside the loop was not glued down during the show. The fact that only a few of them needed to be put back on their feet during the show showed the layout didn't vibrate.

I decided to use Life-Like's "Power Loc" sectional track for the track work on Walong Loop. This code 100 steel railed sectional track had the sleepers and ballast moulded as a single unit. Life-Like "PowerLoc" track is connected by clips moulded into the plastic road bed. This system eliminates kinks where the sections of track are joined. The 457 mm curve radius allowed HO scale models of large diesels to operate on the layout. The sleepers on "Power Loc" track, as per North American practice are only partly buried in the ballast. This feature matches photos of the track at Walong Loop.

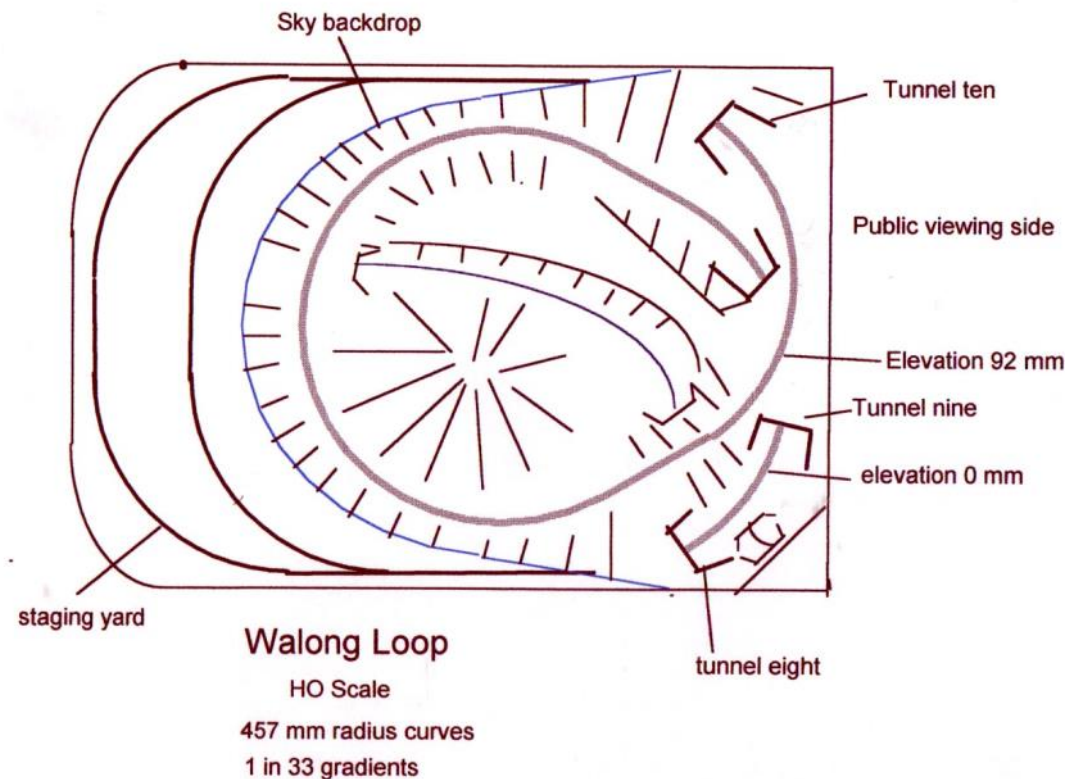
The decision to use Life-Like "Power Loc" track had an impact on the track plan. The design of this track means you have to use the track sections as is. The two straight sections of track in the loop were necessary to make the track plan fit together. The one just before the track passes over tunnel nine is a natural spot to photograph model locomotives.

The track on Walong Loop from photos is fish plated. The rail joints in Power-Loc track have a 0.5 mm gap between the rail ends. This gap produces a satisfying click as metal wheeled rolling stock moves over the track.

The DC electrical control system on Walong Loop was pretty basic. The main line was always live. To ensure adequate power to the mainline the power was fed from two locations; one in tunnel nine and one at the level crossing above tunnel nine. Power was fed to the track via Life-Like "Power Loc" curved rerailer power connecting tracks.

A screw terminal double pole, double throw centre off toggle switch, allowed the hidden trackage to be switched off. This allowed two train operations. Life-Like "Power Loc" track does not use fishplates to join the rails. The current path between "Power Loc" track sections is by contact strips on the moulded ballast and sleeper base. The hidden trackage needed to be electrically isolated from the main line. A small piece of packing tape across the contact strip electrically isolated the rail from the next section of track. There were no soldered joints in the layout electrical system. Train control was a Pace hand held throttle, borrowed from Martindale Creek.

I decided to try something different with the scenery. I decided to model Walong Loop in winter. This meant bare trees and snow. The main scenic features of Walong Loop are; the barren hills surrounding the loop, the hill within the loop, the cutting where trains emerge from tunnel number nine and the embankment between the hill inside the loop and tunnel



The hills surrounding the loop frame the scene. The outline of the hills was cut from a continuous sheet of 3 mm plywood. A web of cardboard strips ran from the hill outline down to the track level. This provided the correct shape of the hills, ready for the paper/plaster scenery surface. After the hills were formed the curved sky board, also of 3 mm plywood, was installed.

The hill inside the loop, the embankment and the hills at the portals of tunnels number eight and ten were supported by a grillage of corrugated cardboard. Into this grillage wads of wet crumpled newspaper were placed to form the shape of the hills, ready for the paper/plaster scenery surface.

The support for the ground between the cutting walls at the exit from tunnel numbers nine and the creek was formed from a sheet of polystyrene foam.

The scenery surface on Walong Loop was the method I had used successfully for many years. Newspaper strips dipped in a thin mixture of Plaster of Paris and laid in an overlapping pattern onto the scenery support shape. The classified sections of the newspaper provide the strongest scenery. These sections have plenty of clear paper for the plaster to stick to. A couple of thin layers of brushed on Plaster of Paris gave the surface some texture and hid the newsprint.

The Walong Loop area with its rounded hills and the ground surface studded with boulders appears to be granite country. To recreate granite I coloured the surface with a pink wash of thinned artist's acrylic paint. This is the basic colour of unweathered granite. Over this I added some washes of grey acrylic paint to weather the granite.

The light brown soil of the area was added by zip texturing the layout with plaster of Paris dry mixed with yellow and red oxide.

The bare bushes were made from multi strand electrical hook up wire. The wire was soldered together at the trunk and then the individual strands were bent out to form the branches.

The tunnel portals, highway surface and culverts were cut from 6 mm thick sturdy board. (Rigid plastic foam between two sheets of thin card) The tunnel portals were built to fit each specific location. The tunnel mouths were to designed to just clear the largest rolling stock operated (EMD FP45) on the layout.

The snow covering the entire scene was zip textured with plain Plaster of Paris. The bare ground scenery complete with bare trees was sprayed with water till it was damp. The plain

Plaster of Paris was sprinkled onto the scenery from a fine mesh kitchen sieve till the desired effect was achieved.

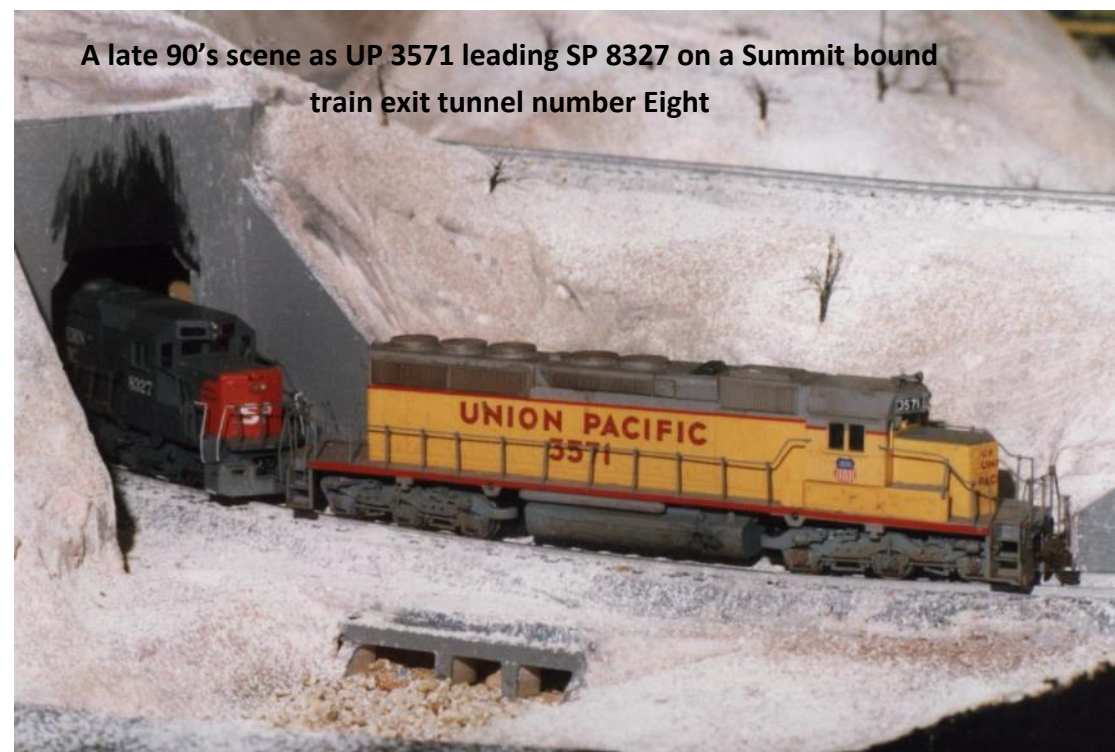
A one piece layout was a dream to exhibit. Once it was lifted out of the station wagon, the legs locked into place and the power cable plugged into the mains, it was ready to run trains.

To make the whole affair look neat and tidy ( a tall order in my case ) a black "modesty skirt" hid the junk under the layout.

I had intended to mount a flood light on a pole on the barricading to light the layout. When I was setting up, I noticed the lighting in the Silver Jubilee Pavilion gave the layout the appropriate weak winter sunlight I needed. I didn't use the flood light.

A sign above the front of the layout gave viewers some background on the prototype setting of the layout and the model locomotives operating on the layout. This background included;

- The location and a brief history of Walong Loop.
- The most likely meaning of the name of the loop.
- Photos of the some actual locomotives operated in miniature on the layout.
- The time period the locomotives operated in the colour scheme carried by the models.





Many of the questions we were asked during the show indicated it is not only railway modelers that don't read the labels.

Operation at the train show consisted as on the prototype of a succession of freights passing around the loop. The staging yard allowed either two trains to operate in opposite directions or two trains to operate in the same direction. Alan Burrough on the Sunday of the show developed a method of running two trains longer than the staging yard tracks continuously in the same direction. Most model locomotives, even of the same type run at slightly different speeds. The faster train can be kept from overtaking the slower train by stopping the faster train as it enters the staging yard tracks. After the slower trains have got far enough ahead of the faster train, the faster train is restarted. This operating method provides an exciting operating spectacle, but calls for strict concentration on the part of the operator.

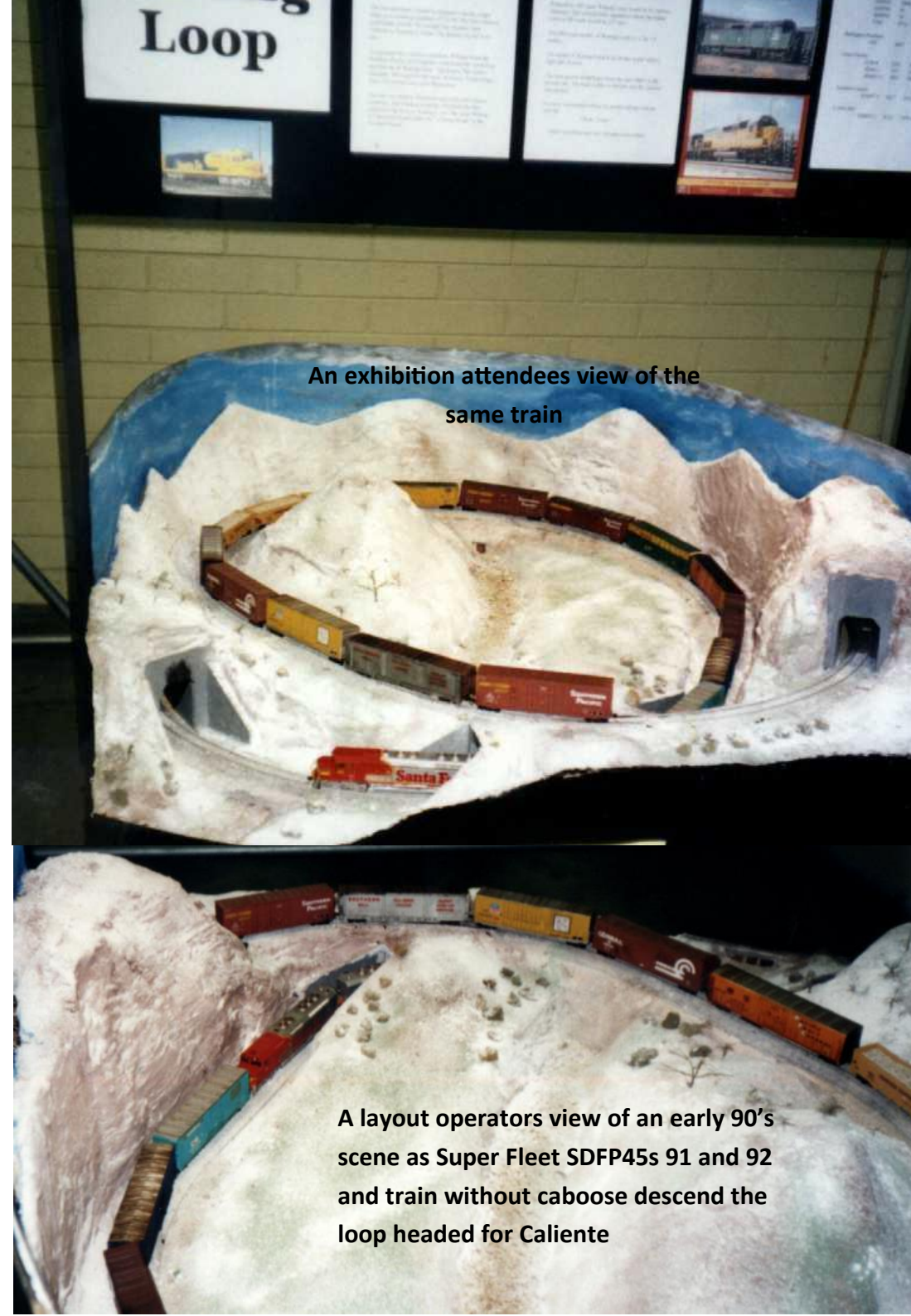
Late on the last day of the train show I decided to see how long a train I could reliably operate on the layout. At the close of the show I had a 3180 mm long train of two diesels hauling fifteen cars smoothly running around the layout. ( Not in the "Arid Australia" class but then they don't use 457 mm radius curves on 3% grades. )

Walong Loop was the smallest HO scale layout at the show ( 1.2 metres frontage ). Someone with a sense of humour positioned Walong Loop across the aisle from the vast HO scale "Arid Australia" layout ( 17 metres frontage ) A small layout at a train show always attracts questions from the viewing public. Seeing a small layout exhibited they can see the practicality of building a small layout at home.

Assembling trains to descend the loop was a challenge. The hidden trackage, like the track on the visible loop was on a continuous 1 in 33 grade. The locomotive of a train that would descend the loop was on the top of the grade on the staging track. A free rolling freight car that was inadvertently left on the track would sail down the grade and hurtle out of tunnel number eight at a rate of knots.

Trains operated smoothly on the steel railed "Power Loc" track. The steel rails plus the iron wheels of the Athearn diesels meant traction was not a problem. The track required minimal cleaning during the show. The combination of sharp curves, steep grades, RP25 wheels, body mounted E-Z couplers, double headed large six axle diesels and reasonably long trains gave reliable operation during the show.

The exercise showed me it was practical to build and exhibit a working model of a specific prototype scene in a limited space and it was a lot of fun.



# Grain Trucks

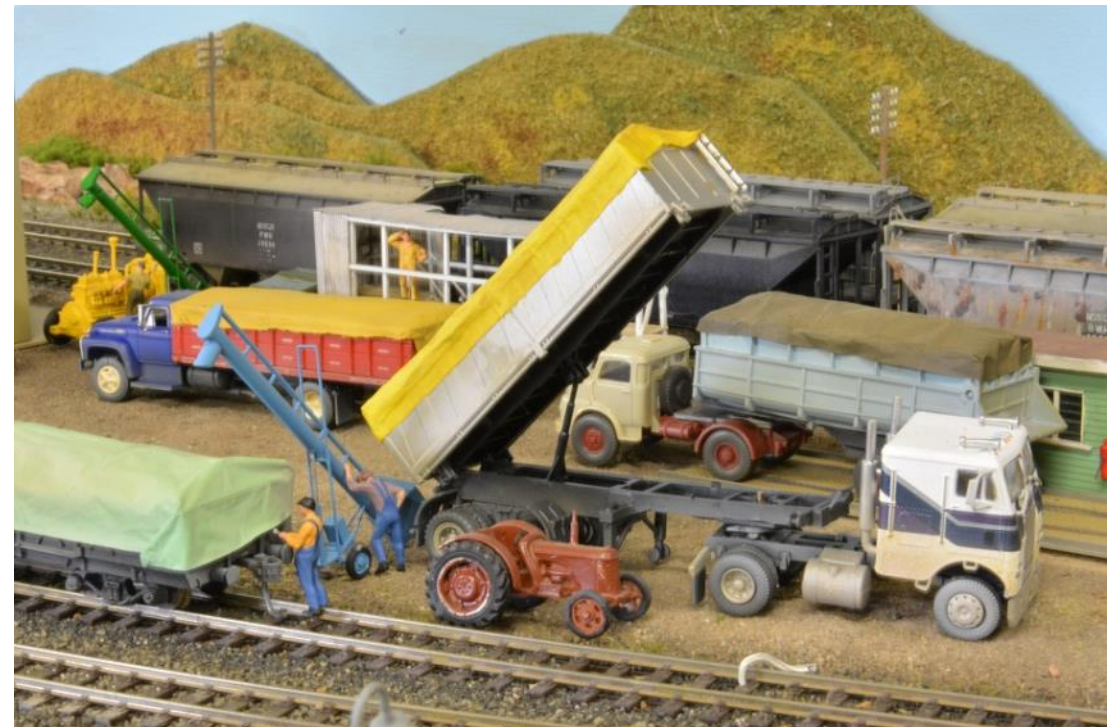
Arthur Hayes MMR

Each year after my holidays I spend time on doing various tasks on the layout, maintenance, cleaning, dusting, etc. The plan is to have trouble free operations until the next set of holidays. I also use the time to change and refresh some scenes, this keep the regular visitor looking around the layout and asking questions.

One area on the layout that was not quite finished was the grain silos at Wyandra. From time to time I have add a structure or a vehicle or two. Modelling the 60/70's I'm always looking for vehicles of that era. Given most trucks carrying grain to the rail would be owned by local farmers, no two trucks would be the same. I would also think local trucking companies would also be in the act in peak times.

In looking for variety, recently Athearn released a CoE Freightliner with 2 and 3 axles in various Owner-Operator colours. To me, a non-truckie, they look similar to vehicles used on our roads across Australia. The Athearn website shows the era as 1970 – 1990. I used H0 78759 with 2 axles (White / Purple) Owner – Operator model. The 3 axle prime mover in the same colour is H0 78760, other colours available are White/Orange and Orange/Brown. To me the twin exhaust pipes up the back of the cab looked to high, plus they didn't fit in my grain unloading shed. The fix was simple, the side cutters came out and they were trimmed down a little.

To transport the grain I purchased a Herpa H0 005288 26' Gravel Trailer. The trailer has a tipping mechanism which could be put to good use on the layout. The tow pin didn't match the Athearn prime mover, a modification was required. The Herpa tow pin was cut off and the area filled flat with the frame. A piece of .040 styrene was added to cover the frame and a 1 mm brass rod was used to make a new tow pin. The front top and rear bottom spill plates were cut off. A grain door made from styrene was added to the tailgate to finish the trailer. .030 styrene sheet was cut to form "A" frame tarp supports, these were fitted across the trailer about 4 feet apart. A used Lipton tea bag was washed out and allowed to dry to make the tarpaulin. Once the tea bag was dry, the tea was removed by gently opening up the seam. The trailer was measured up, some overlap was added and the tea bag was cut to size. The tea bag was glued to the supports and sides. When dry it was painted with one coat of Vallejo Model Color 70-915 deep yellow, this allowed the tea stain to show through providing some weathering effects. Herpa H0 006527 Peterbilt Coe Dump Semi (Red/White Cab)



looks very similar, but was unable to find out any details, era etc.

The vehicle was added to the layout to join another Athearn vehicle H091952, a 1968 Ford F850 Grain Truck (Blue). Before the purchase I asked an M/R mate who worked at the Ford plant for a number of years if F850 were used in Australia. He indicated they were not, bugger. I did a Google search and found one for sale at Dalby. That's all I required to acquired one for the layout, a tarpaulin was add was per above. The model is available in various colours. I like to add a bit of colour to the layout and vehicles give you that opportunity.

The other two primer movers are Wiking Mercedes-Benz "L" series units which had rock/gravel trailers attached which I have had for many years, they were painted yellow. I don't see them available today, but similar units are showing up on the internet. Some time back one trailer was made into a flat top trailer for general freight. The other trailer was repainted and covered with a tarp as above. Both prime movers were pulled down and repainted. A Herpa dump trailer HO 076036-002 was purchased and covered with a tarp to make the fourth grain unit.

All vehicles were weathered with an air brush using acrylic paints thinned with ArmorAll Glass Cleaner (available Supercheap Auto) as follows, Vallejo Game Air 72 – 762 Earth, Model Air 71 – 133 Dirt, and finished with AK Interactive AK 723 Dust. These paints were purchased from a near by war gamers shop. Of late I have noticed some local hobby shops are now stocking the range, the 17 ml eye dropper bottle is about \$ 5.00. The product is very easy to use and clean up, a drop or two goes a long way.

From time to time to change the scene, the vehicles are moved around to different locations within the terminal. This is something I do every year with other scenes as well.



**Editors note: The length of the tipping body of a semi trailer tipper is usually limited to twenty eight feet (8.5 metres in French). This length limitation minimises over turning side ways during unloading.**



## MG Sheep Van and stock movement in Queensland.

Drawing 2649, (P159 dated 5/1/14) shows MG sheep vans/wagons were 20' long by 8' wide. They were the lowest of all the sheep wagon on the network coming in at 9' 7½" high. This is much lower than most wooden box wagons, some AG covered goods wagons were 10' 5½" high. The wagon had an average tare of 7 T 10 cwt and carried approximately 110 sheep. The wagon were similar to most other sheep wagons, covered two decks, side and end gates. The two decks are less than three feet apart. Drop down gangs on the end allowed for strings of wagons to be loaded from a single end or side loading ramp without the need of an engine to move the wagons as loaded.



Charleville end loading stock ramp

The wagon was fitted with Grover's Bogies with 2' 2" wheels, with 8" x 4" journals. Many QR

wagons around the 20' length had Grover's Bogies. In short they had a single axle swivel bogie at each end which was diagonal connected with rods. This allows the two wheelsets to turn into curves together to reduce rail and wheel wear.



The rolling stock report for 30th of June 1960 showed 127 wagons in service. The class remained in service until the mid 80s. The wagons were painted Red Oxide until mid-1969, after that date they were painted QR Freight Grey. During the early to mid-70, wagons of both colours could be observed working on the network.

The wagons were mainly used for single orders to convey sheep, pigs and calves to sales and small goods processing plants/abattoirs. It was common to see three or four 4 wheeled sheep wagons sitting in most stations yards on the Darling Downs. They were regular visitors to KR Darling Downs at Willowburn in Toowoomba and in Brisbane they would turn up at Cannon Hill and Doboy.

The General Appendix to the Book of Rules has a lot to say about the conveying of livestock. Clause 477 indicates staff generally must exercise special care in the transport of livestock and do everything possible to avoid bruising. Care must be taken to avoid undue shunting. The overcrowding of calves or pigs in MG and L vans must be given attention. Large calves must not be forced into wagons in which they are unable to stand. Calves and pigs must not be loaded in the same tier of a livestock wagon unless they are effectively separated by a hurdle. When the hurdles are not provided by the consignor, the calves and pigs must be loaded in separate compartments and charged accordingly.

Trucks containing livestock must be tightly coupled together. Wagons containing livestock must as far as possible be marshalled towards the front of the train and not in the rear of empty and lightly loaded wagons. Wagon containing pigs attached to trains conveying passengers must be placed as far as possible from the passenger vehicles. Drivers were not over happy with pig wagons being on the engine, generally these were to be marshalled towards the centre of the train.

Small consignments of livestock must not be accepted for places beyond the direct train service (i.e. stations west of Brisbane must not receive small consignment to station north thereof or vice Versa), without clearly intimating to the sender the delay which must take place. Consignment of livestock must also have the attention of the guard who must show on his Time and Occurrence Sheet any instance of livestock travelling badly together with cause, if this be know. All livestock wagons must be in a clean condition and all cattle wagons ashed before being loaded. Smoke-box ash, when available, must be used in preference to fire-box ash.

A permit to travel, issued by an Inspector of stock, must be presented for each consignment of stock (except pigs), including stock in crate and consignments of a single sheep or goat conveyed in dog boxes, before such are accepted for conveyance by rail. The permit must be held by the person travelling in charge of the stock, but if there is no attendant it must be attached to the waybill, invoice or consignment note, and handed over to the consignee at destination.

Sheep vans gates were sealed in a similar fashion to box wagon doors. Lad Porters were given the job of seal all eight doors on each sheep wagon. Unlike box wagons, the old seal could be left in place. This task often took place during the shunt move to place the wagons on the train, it was an awesome ride with one foot on the end of each wagon with the wagons bunching up and then running out. The main role of the seal was to keep the door pin in place. However, if the seal was missing on arrival at the destination, there was a good chance the door had been open in transit and gave cause to check the wagon contents. Each seal press stamped a number on the seal. The General Appendix showed the allocated number for each location, should one go missing the replacement press would be shown in the Weekly Notice. Larger stations had more than one press, i.e. Toowoomba station # 409, Toowoomba Goods Shed # 165 and # 257, Toowoomba (Downs Co-op Dairy Coy) # 3. The Ambulance Officer had # 1 and # A0 for sealing First-Aid boxes.

Scale of Rates for livestock. "MG" vans shall be charged at "L" van rates plus 50 per cent. Half an "L" of sheep or pigs shall be charged two-thirds the rate for a full "L" van, provided only one tier of the van is used. But the charge shall not be less than the minimum charge for a full "L" van for 32.19 kilometres. Rockhampton to Cannon Hill is 664.92 kilometres. In 1973 that cost \$ 68.40 for an "L" van of sheep and \$ 67.45 for pigs. I will let you can do the sums for one tier (½) a "MG" wagon of sheep. You can see why I didn't work to many livestock stations.

Having grown up as a kid in Western Queensland where most stations had sheep/cattle trucking yards, it was a given for Westgate to have one. Most western locations had separate sheep and cattle yards, with most sheep yards having an end loading banks. Due to the limited area available on the layout a combined yard (sheep/cattle) was selected. Most combined yards had side loading for both cattle and sheep. I really wanted an end loading bank for the sheep yard. In the late 60s I recalled a new set of private yards being built at Sommariva, about 30 miles east of Charleville.

These yards were unusual in that they were a combined sheep and cattle yards with an end sheep loading ramp. I also had a set of photos for the yards taken in the early 70s. On deciding to build the yards for the layout I started looking for some measurements, so next time I visited home I would stop and get a few more photos and run a tape over various areas. You guessed it, it had been knocked over, and even the siding was gone. A few mates were able to dip up some plans of both sheep and cattle yards. The next trick was making them fit into the area I had allocated for the yards. Both sheep and cattle loading ramp was much longer than I expected. With a pencil, some graph paper and a scale ruler a revised ramps were

drawn up that looked right, selective reduction is the name given to the process. The ramps were reduced by about a half, the size of the holding yards were also reduced to fit the allocated space.

Now in having sheep and cattle yards, wagons are required to

provide operations on my railway. Over the years various cattle wagons have been available, the current cattle wagons on the layout are some of the first produced going back to the 70s. For the time being they are OK for now. The plan is to replace them one day. Very little has been available for sheep wagons resulting in various thinking sessions looking over plans and photos searching for a simple method to make them. Sorry to report nothing has come up to dated. Maybe a brass etch for the bars could be the go ???.

**MG Kit.** The kit was first made available by Three Foot Six Models for a limited period in the mid 1990s. About three years ago the kit was added to the Caintode Flats Model range. The kit contains brass etches, white metal lost wax and resin components. The main body etch is made from 2 layers to achieve the correct profile. To assemble the kit the manufacturer suggests good soldering skills are essential. I put off purchasing the kit and was waiting for someone to do theirs first. One was available at the May Show last year so I took the punt.

The instructions for assembling and fitting the sliding gates suggest you take your patience tablets as his where the fun starts. Over Christmas I plucked the courage to have a go. A good soldering iron is required, instructions suggest a temperature controlled iron of at least 50 watts with a 3 mm tip. A good supply of drills is required, the following sizes are needed .3mm, .35mm, .4mm, .5mm, 2mm and 2.5 mm.

Getting small drills is not easy, so I asked Gary where to get them. He suggested McJing Tools at Yagoona in Sydney. [mcjing.com.au](http://mcjing.com.au) They have the small drills in packs of 10 for \$ 10.00. Postage was \$ 10.00. A phone call with credit card details had the drills in my hands within 24 hours.



Young Lad Porter Billy Hayes sealing the wagon on "Westgate"

All up you drill out about 200 .3mm holes in the etch parts. I did break a few drills, overall not The kit starts by assembling the underframe / lower floor. You have a choice of fixed or compensating bogies, I made mine compensating, one end is fixed and the other end rocks.

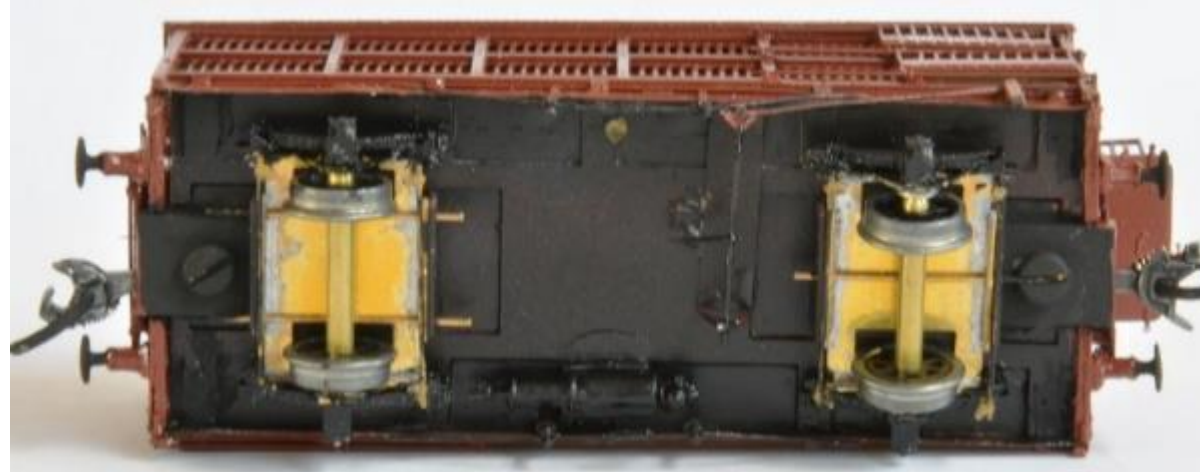
During construction, some small parts did join the frequent flyers club, thus some changes were made with substitute parts. The wagon was completed with all side gates working. I didn't think to much about this during painting, you guessed it, I paid the price and they don't open anymore. With the end gates I made one end top gates open with the gang down for the loading ramp. At times they did run in service with open gates and walkway down. The gangs on the other end still work after painting. Just take your time and test fit parts before soldering. I did fit the underframe etch the wrong way around, closing off the brake cylinder mounting hole. That's just me, if there a choice of two ways in doing things, I always manage to do it the wrong way.

The only sheep I had were Keroby Models, I purchased them unpainted in a bulk pack, and painted ones are available. These are white metal, thus have little weight to them. Sheep were only add to the outer sides to give a full load look. They were a little high and needed to be kneecapped a little. The Signals Branch Shapeways shop have 3D sheep which could be a better choice. All up the wagon comes in at 70 g, which is about NMRA standard for a H0 model of that size. To date the wagon has been marshalled on the lead of all trains and has run and pushed back without any issues.

The completed wagon was first painted with a etch primer. Dulux **Metal** shield etch primer (grey) available from Bunnings was used. The paint from a rattle can was decanted into a plastic cup and applied to the model with an airbrush for more control. The finish colour was PGC Oxide lacquer. Underframe and buffer heads were picked out in black by hand.

Over all I very happy with the end result, but I let you be the judge.

The kit is available from Caintode Flats Models <http://www.caintodeflats.com.au/>



Arthur's MG class sheep van





# SCRATCH BUILDING SPECIAL INTEREST GROUP

JANUARY 2018

NEWSLETTER

## WELCOME TO OUR FIRST NEWSLETTER

I heard a song recently with one line that sums up the Scratch Building SIG, "From little things, big things grow" In October of 2017 I was working on a model at our club when two members made the comment that they wished they could make models like that. My reply was simple, "I can teach you." The following week I did a demonstration to show what

could be achieved and the journey had begun. We started with a simple HO scale NSW MLE wagon that required a number of processes to build and all the styrene strips and parts had to be hand cut in order to help develop skills in working with styrene.

Two people made a start and we had a number of members who were observers and in most cases suggested that they did not have the skills to hand make models. Eventually the 'lookers' became participants and over six Mondays the results astounded everyone when we painted and placed couplings and bogies on the models and then ran them around the layout.

It must be made quite clear that none of those within the group that had now expanded to eight had any real model making experience and yet over six days they achieved their first hand crafted model. The confidence this exercise created has seen the development of a group that are working with each other and sharing their ideas and skills and above all

else having tremendous fun. The group was formalised through NMRA Australasian Region on the 7th December 2017.

This has been a very rewarding experience with all members actively involved in the administration and decision making processes for the group. This year will see us move further ahead with some great plans for a modular layout that the modules have been built for as well as some exciting ideas for new models.

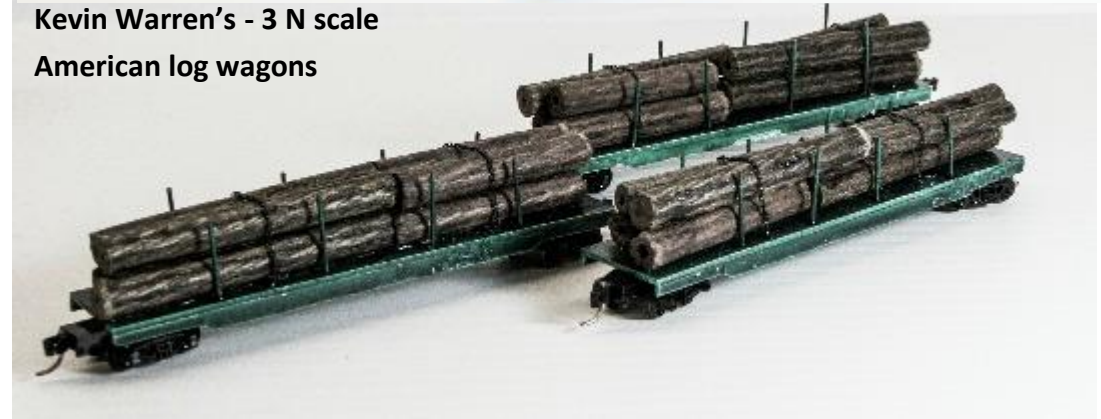
The following photos will give you an idea of what we have achieved in just 3 months.



Rob Lucas' parts for the MLE cut from styrene and a completed model ready for painting



Phil Warren made the decision to build a rake of 5 wagons with different loads



Kevin Warren's - 3 N scale American log wagons



Aubrey Hughes has done a magnificent job of his N Scale bridge



Robyn Taylor's Albert Street Church is scratch built using styrene. The model is a freelance design based on the Church in Brisbane City.

Ron Daniels scratch built Victorian Signal Box. This model was made using plans from The Australian Model Railway Magazine and is constructed using Evergreen styrene and strips. The windows and steps are purchased items that have been modified to fit the model.





# Division One Happenings

Saturday 17th February was the Division 1 Meeting at Eddie Stavleu's place. Division Superintendent Martyn Jenkins presented Greame Prideaux with his 25 years membership plaque.

Eddie Stavleu models QR in H0n3.5 and is modelling the Cleveland Branch in the 1950/1960s before the line was closed in 1964.



Greame Receiving his award from Martyn



Station Master's Residence



2000 Class RM

Photos by  
Arthur Hayes MMR

Cleveland School  
of Arts Hall



RM81



RM64



Cleveland Goods Shed



Cleveland Loco and coach sheds



Cleveland Central Station

## Division Four

Division Four's traditional post Christmas meeting was held on the 28th of January in lieu of the last Sunday in December due to our host Peter's travel arrangements.

On a pleasant summers afternoon, we gathered to toast the new year and most importantly present Peter with the plaque commemorating his 25 years membership in NMRA.



**Peter with his 25 years membership award**

## Division Three Happenings

A couple of Allan Ogden's (Division Three's Superintendent) photos of his Welsh narrow gauge layout.



**Peter's covered hopper car**



At show and tell Peter displayed his new Atlas covered hopper car with crisply printed lettering so fine non of us could read it, a far cry from the smudged silk screened lettering of not so many years ago.

Alan brought along his latest acquisition



**Alan's new book**

Kalmbach's "43 Track Plans from the Experts" featuring layout plans ranging from tiny to large shed sized. (14th Army definition of an expert: an Ex is a has been, a pert is a drip under pressure. Editor)

Rod showed his progress detailing the approximately 1/24th scale caboose out of his chain store "G" gauge train set and the assembled OO Scale card kit included with the December 2017 issue of Railway Modeler.

**Rod's card kit and caboose**



# Division Six January chronicles

What a great start to 2018! We all met at Ray Applebee's place for the January meeting on Saturday 13th.

Ray Brownbill presented Bob Bevan with his AP Certificate for Association Volunteer.

Max reported on progress with the back boards. Sol spoke about the AMRE exhibition for this year.

Show and Tell consisted of Hutch presenting several boxes of terminal strips donated by his neighbour. Members collected a few of them as required. Trev Seddon presented some new Arduino creations for stay alive and stepper motors used in turnouts.

new

**Bob Bevan receiving his Association Volunteer award**



**David Orr's practical use for a coffee grinder**



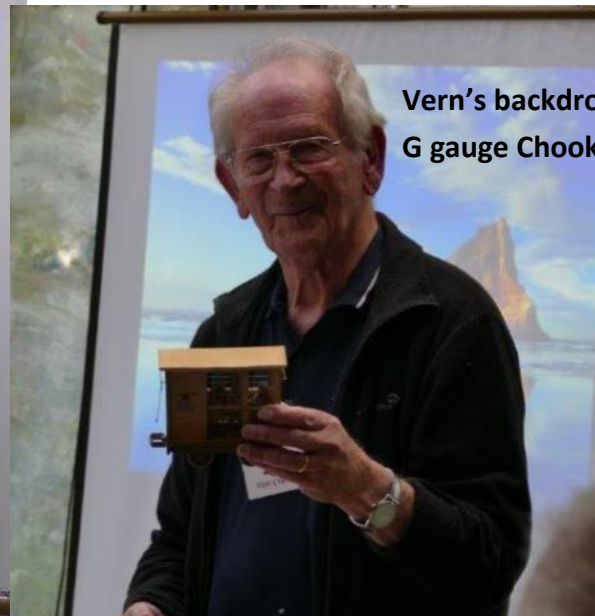
chook wagon in G gauge; and how he made cloud effects from white corflute and blue paint. John Prattis donated a set of DVDs on airbrushing and allied subjects.

David Orr gave a presentation on creating low cost crumbled foam, using a coffee grinder and then creating pine trees from Christmas decorations, using the crumbled foam.

Marcelle then presented another of her excellent afternoon teas to close the afternoon; while we split into small groups for general and social discussion.

Photographs courtesy of Michael Robinson.

**Vern's backdrop painting and G gauge Chook car**



## Division Six February chronicles

The February 2018 Division 6 meeting was held at the home of Jane and Michael Robinson at 2.00 p.m. on Saturday 10th.

There being no new AP announcements, we moved to general business. Ron Solly gave a presentation on the importance of voting before the deadline of the 28th.

Max presented the new flyers which have arrived from the ARC and it was resolved to obtain a Stamp It with Jane's name and contact details, before they are distributed to the hobby shops.

A general discussion ensued regarding this year's Adelaide Model Rail Exhibition. Max has completed the back boards, but they will have to be found a new home, as his space circumstances have changed. He will bring them to AMRE, but they will have to go to their new home from there.

Vern's show and tell was a new G scale diorama for his exhibition layout. A Butcher Shop (complete with cow), and a General Store. Up to his usual high standard. Congratulations, Vern.

Afternoon tea followed with warm Hot Cross Buns – is it that time already? And other various delectable goodies.

Two clinics were provided – one by visitor Ron Dunkley; showing his scratch built hot wire foam cutter – and one by Michael using a food processor the create ground cover from dry gum leaves.

Then we repaired to Michael's train shed to check out the inevitable improvements.

The raffle was won by Trev Seddon; who bought seven tickets!

Photos courtesy Michael Robinson.

Attendees: Bob Bevan, Ray Brownbill, Vern Cracknell, Hutch, Peter Jackson, Darryl Jones, John Marsh, John Prattis, Jane Robinson, Michael Robinson, Trev Seddon, Ron Solly, Peter Starr and Max Wright.

Regards Max WRIGHT JP MMR 578 Division 6 Superintendent

Michael's train room



Vern's butcher shop



Ron Dunkley's hot wire foam cutter



Michael's lit roundhouse



## Coming Events

The Union Pacific Model Rail Club's TABLE SALE Sunday March 11th  
9am-2pm. At 49 Abbotsleigh St, Holland Park.

Phone 0439435366 for information.

The Bundaberg Model Rail Club's TWO DAY SHOW Saturday and Sunday  
March 17th and 18th 9am-4pm.

At the Civic Centre, Bourbong St, Bundaberg.

Phone 0407559086 for information.

The Union Pacific Model Rail Club's BRING/BUY  
is Tuesday March 20th at 8pm.

The address is 49 Abbotsleigh St, Holland Park.

Phone 0439435366 for information.

### Model Railway Discussion Group

Meets at Whitfords Library, corner of Marmion Ave & Whitfords Ave,  
Hillarys WA 6025 at 2.00 pm on the first Tuesday of the month,  
facilitated by NMRA AR Division Four.



## The 2018 AMRA WA Model Railway Exhibition

RAS Showgrounds Claremont

June Long Weekend. June 2, 3 and 4.

Opening Times: Saturday and Sunday – 0900-1630,

Monday – 0900-1600



**2018 Toowoomba  
Model Trains  
& Hobby Expo**

**Saturday 2nd June 9am - 5pm  
Sunday 3rd June 9am - 4pm**

**Toowoomba Showgrounds**

**Model Railway Layouts in all the popular Scales  
Various other Hobbies, Historical Societies  
Trade Stands and Refreshments  
Artisan Market**

**ADMISSION**  
Adults: \$14.00  
Concession: \$10.00  
Children: FREE  
(Must be accompanied by an adult)

Enquiries: (07) 4638 0997  
Website: [www.toowoombamodelrailwayclub.com.au](http://www.toowoombamodelrailwayclub.com.au)  
Email: [expo@toowoombamodelrailwayclub.com.au](mailto:expo@toowoombamodelrailwayclub.com.au)  
Facebook: Toowoomba Model Railway Club Inc.

Proudly brought to you by:

The bottom section of the poster features four logos: the Toowoomba Model Railway Club Inc. logo, the LAK logo, the AWK logo, and another logo with a microphone and the text "www.lak.com.au".



***Spring Carnival of Aussie  
Model Railroading.***

***You are invited to join us***

***21<sup>st</sup> - 25<sup>th</sup> of September 2018***

***Helensvale Culture Centre on the Gold Coast***

***Something for all Modellers of all Prototypes/  
Gauges/Scales.***

***Modelling and Prototype Information***

***Friday 21<sup>st</sup>.*** *Layout Tours and Operations. Registration.*

***Saturday 22<sup>nd</sup>.*** *All day program, choice of 12 Presentations*

*Plus, Demonstrations, Hands on, Displays, Trade, Society Stands*

*Convention USB with Presenter's Notes*

*Complimentary Tea and Coffee between Sessions*

*Morning & Afternoon Tea, Box Lunch provided*

*Banquet Dinner at local Club with Speaker*

*Ladies Tour*

***Sunday 23<sup>rd</sup>.*** *Presentation to 11:30. Visit local club and layouts*

*Or ride the "G:link"(own cost). Layout Tours*

*Ladies Discount Shopping*

***Monday 24<sup>th</sup>*** *Self-drive & paced Layout Tours/Operations*

***Tuesday 25<sup>th</sup>.*** *Self-drive/paced/own expense Toowoomba Tour*

*Visit Downs Steam Railway/Museum, Award Winning Gardens,*

*Toowoomba Railway Station. Ride a heritage diesel Train to Spring Bluff*

*Or drive to Spring Bluff with some train spotting. (Nov-Dec 2017 MainLine)*

*Visit Toowoomba Model Railway Club (100% NMRA)*

**NMRA-AR Regional Convention 2018  
Helensvale Culture Centre  
Gold Coast**

This year the Regional Convention will be held in sunny Queensland on the Gold Coast in September. After winter there is nothing better than a "Spring Carnival of Aussie Model Railroading" in the sunshine state. A committee of well-trodden modellers have come together to plan the convention. Presentations and Venue Co-ordinator Martyn Jenkins, Layout Co-ordinator Duncan Cabassi, Treasurer Eddie Stavleu and Chairman Arthur Hayes MMR.

Conventions provide so much for modellers, it's a chance to see what others are doing, learn new skills, pick up a few tips, maybe have a go at something new, see what's new in the shops, meet likeminded people, make new friends and catch up with old mates for a chat. I am sure your modelling skills will be much improved from the experience of attending. This is your personal invitation to come along and have a great time.

Planning for a following draft program is under way and a number of new concepts are also being explored.

**Invitation to Participate:-**

We also invite you to participate as well, conventions are a good place to earn AP points in various certificates. This can be by entering a model in the contest, information will be available on the convention website. If you would like to do a clinic or share some modelling skills in some form, we would love to hear from you. Researching and presenting a clinic can be a very rewarding experience, you will be surprised by how much more you learn from putting it all together. I encourage you to think about it and have a go.

Layout Tours:- If you live locally and have a layout, maybe you would like delegates to come over to view/operate, please contact us.

**Accommodation:-**

This weekend is the start of a very popular Queensland school holiday period, if you are not staying with family or friends we suggest you look for accommodation very soon. Some motels have already taken their reservations off line, you may need to call.

I look forward to meeting you in September.

Arthur Hayes MMR. Convention Chairman.

**Website:** <http://nmra.org.au/conventions/conventions.html>

**Enquires:** Arthur Hayes MMR Email [abchayes@optusnet.com.au](mailto:abchayes@optusnet.com.au)

# Prototype Observations “Silver Meteor”

Amtrak’s “Silver Meteor” passenger service travels along the eastern Atlantic Coast of the USA between New York City and Miami Florida, some 1,389 miles (2,235 Kms).

Train # 97 departs New York at 3:15 pm and is timed to arrive at Miami 6:55 pm the next day. Train # 98 departs Miami at 8:20 am and is timed to arrive at New York City 11:06 am the next day, a journey time of approximately 27 hours. Three train sets are required to provide at daily service between to two centres. The train provides both coach class seaters, roomette and bedroom sleepers. A full meal service is provided on the train. Much of the journey is on CSX owned track with freight services taking priority.

Due to tunnel clearances in the New York area, single level rolling stock is used on the train. The train consist is a Baggage Car (new Viewliner), 2/3 Viewliner sleeping car, Dinning Car (recently the heritage cars have been replaced with new Viewliner cars), Amfleet Cafe Car and 4/5 Amfleet seating coaches. Between New York and Washington the train is hauled by a single Siemens ACS-64 electric locomotive, these units have a continuous power output of 5,000 kW (6,700 hp). At Washington DC, a traction change takes place, two 3,170 kW (4,250 hp) GE Genesis P 42 DC locomotives are attached to the train for the journey to Miami. These locomotives also provide head-end power (HEP) to heat, light and air condition the carriages.

A pair of GE P42s at the head of the “Silver Meteor”



Siemens ACS-64 at Washington DC Station



Washington DC Station

The sleeping cars are 85' 4" long, 10' 6" wide and 14' high. The cars have 12 Roomettes, one Accessible Bedroom and two Bedrooms, the two Bedrooms can be joined to make a Bedroom suite. The bedrooms are located down one end of the car with a side corridor. The roomettes have a centre corridor on the other end of the car. Showers are also located down this end.

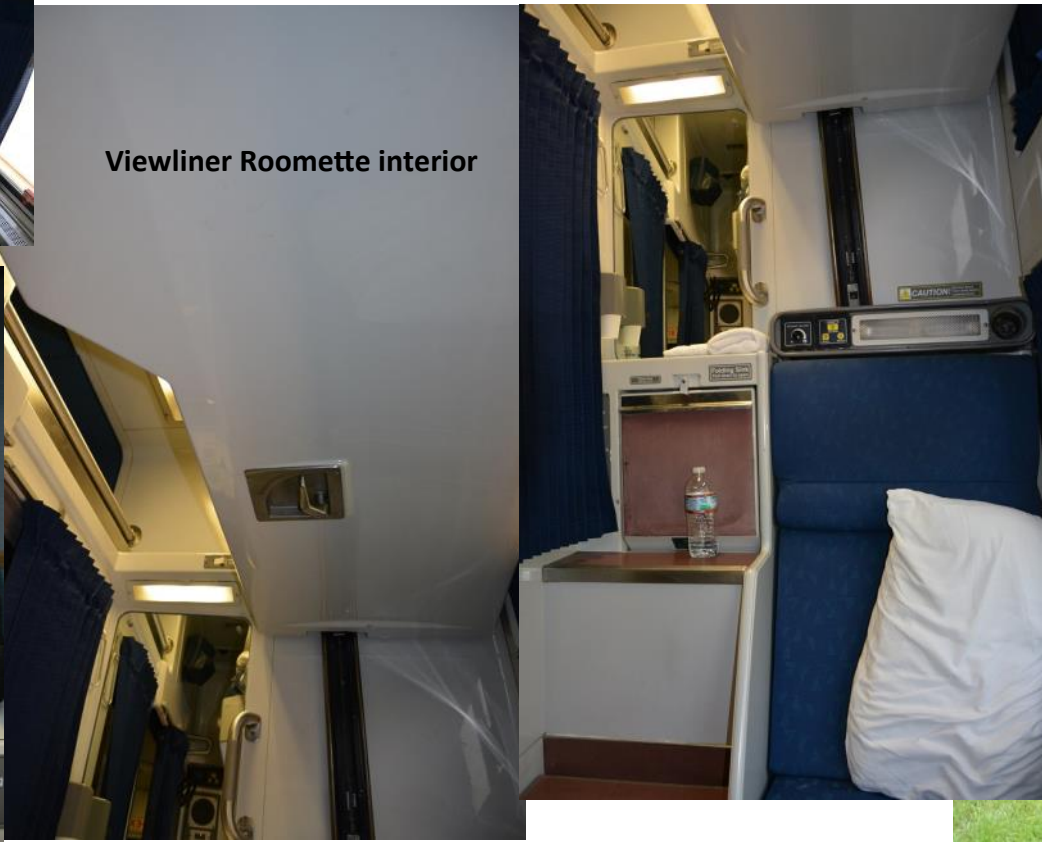
The roomettes accommodate two, the cabin is 3' 6" wide by 6' 8" long. The top sleeping bunk forms the cabin ceiling by day. At night it drops down on tracks located on the end walls. Access to the top bunk is via the toilet seat and wash basin (no ladder). The best part is the top bunk has two windows which allows one to see what's outside unlike most other sleeping car designs.

Sleeping car passengers enjoy a full dining car service for meals. All in all a great way to see the country side and other trains.

Arthur Hayes MMR.



Viewliner Roomette interior



Viewliner passengers disembarking

