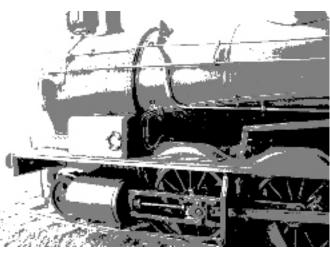
# Ideaven Heaven Modellers Group



\$7.70 inc GST



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## **Aus7 AGM Minutes**

Date 7/7/07

Present: T. Hodges, J Lee, M MacMilliam, A Mac Donald, P Chisholm, D Pallas, D Morris, J Hickey, T Ryan, J Hagan, R Porter, K Ryan, N Sheridan, C Harris, B Wood, G Imer, H Horgan, R Sebbens, D Peterson, W Clowry, J O'Neill, B Lovett, M Hartley, A Furniss, M Moore.

Minutes Taken: T. Hodges Meeting Opened: 1.30pm

**Presidents Report:** K. Ryan

Keiran detailed the yearly achievements of the last 12 months. These details covered membership issues; promoting the scale and the group. Name change proposal and standards committee broadly covered. He also mentioned that members can pay their dues and any other payments via direct credit. 7<sup>th</sup> Heaven sales were questioned and the most recent issue will be sent to the ARHS bookshop very soon.

Report proposed by Keiran, 2<sup>nd</sup> J Parker, carried.

#### Treasurer's Report: R. Porter

Election of Executive Officers – proposed by H. Horgan.

- President Kerian Ryan nominated by M Hartlry, seconded by N Sheridan and carried unanimously.
- Treasurer Roger Porter nominated by T. Hodges, seconded by J. Leeand carried unanimously.
- Secretary Trevor Hodges nominated by KM MacMillan, seconded by K Ryan and carried unanimously.
- Newsletter Editor Kim Mihaly nominated by K. Ryan, seconded by W Clowry and carried unanimously.
- Vice President Paul Chisholm nominated by C Harris, seconded by K Ryan and carried unanimously.

#### **General Business**

- 1. Nick Sheridan called for clarification of the purpose of the organisation. Kerian replied by reading the four aims of the group.
- 2. John Lee proposed a motion that:

The current group aims be changed to refer only to "O-scale modelling"

Proposed by J Lee, no seconder. Motioned failed.

- 3. Name change proposal. A wide range of speakers spoke to the proposal.
- John Lee spoke in favour of a proposal to change the name of the group.
- Keiran spoke to the proposal
- David Peterson spoke in favour of the proposal.
- Martin Hartley spoke against the proposal.
- Ron Sebbens spoke in favour of the proposal
- Chris Harris spoke to the proposal
- Trevor Hodges spoke against the proposal
- John Parker spoke to the motion.

Chris Harris moved the motion that, 2<sup>nd</sup> by J Lee:

The name of the group be changed to "NSW7 Modellers Group" Inc

In favour 8 Against 16, motion declared lost by President.

- 4. Martin Hartley made a short report on the Standards Committee.
- 5. Chris Harris asked a question about the Aus7 Yahoo! group. He was told that this already existed but it was rarely used. Keiran spoke about the web site.
- 6. John Parker raised the issue of renewals and questioned the number of renewals and what might be done to improve this situation.

Meeting closed 2.45pm.

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Editors Note:

Please note that the editorial address & phone number have changed to ;

1/13 St Kilda Cres Tweed Heads West NSW 2485 ph 07 5599 9678

Email details remain unchanged

## **One Modellers Opinion**

#### **Trevor Hodges**

It's probably already apparent that this issue of 7<sup>th</sup> Heaven is very late and both Kim and I apologize for this. Personal circumstances have disrupted the production of this issue in a way that simply couldn't be avoided. As an amateur production, based entirely on volunteer labour, delays like this are sometimes going to happen but we both hope to have caught up on the delayed issues over the course of the next 12 months.

With the production of this issue we have been forced to move to a new commercial printer and Kim also informs me that "the cupboard is bare" in terms of content for upcoming issues. We had a bit of a content crisis about eighteen months ago and the membership responded with a flood of material. Since then all of that material has been used up and we now need to call on members to once again hit their modelling benches and their computer keyboards and produce something for publication. So if you've been planning something for publication now's the time to do something about it. We all want to hear what other members are up to so my advice is get stuck in and start writing. Don't forget to dust off the digital camera too; pictures certainly are worth a thousand words for magazines like 7th Heaven.

An issue that has been at the forefront of the executive's attention has been the renewal rate of current members. For some reason the number of members who renewed their membership plummeted quite precipitously this year and we're at a bit of a loss to explain why. We've decided to send this issue to all current members, as of July 2007, so that we get the message through loud and clear; if you have not renewed your membership in July it has now lapsed and this is the last issue of 7th Heaven you will receive. On current membership numbers the present format of 7th Heaven, namely twenty pages in full colour, is going to be very difficult to sustain, so we're hoping that this last and final reminder will prompt a few lapsed members to get their cheque books out and renew their membership. We need your support.

As a result of an unexpected medical crisis, combined with heavy work commitments, I've been unable to spend much time at my modelling bench over the last few months. I tend to see modelling as an activity has have its own momentum: when that momentum is lost or broken it can sometimes be hard to get back into a regular routine of modelling and pick up the momentum again. I was watching a documentary on advertising once and an advertising executive, who was being interviewed for this programme, referred to something he called the "vital last twelve inches". What he was referring to was the last twelve inches between the hand of the customer and the box of cereal (or whatever other product was being sold) on a supermarket shelf. If that customer reached out and picked up that box of cereal, then the advertising had been successful, if they didn't then it was a failure. Modelling has its own vital last twelve inches; sometimes you can have the tools, the work space and the modelling subject sitting there ready to go but for some reason the motivation to actually sit down and begin is missing. You may be like me and have lost your momentum, or you may be someone who has yet to reach a stage where you have the time to regularly model. Whatever the reason for this lack of progress the thing we all need to keep in mind is this; if the individual modeller hasn't made the decision to sit down and do some modelling then no one else is going to do it for you.

Continued next page...

## 7<sup>th</sup> HEAVEN

Editor: Kim Mihaly 1/13 St Kilda Cres Tweed Heads Ph (07) 5599 9678 kim.mihaly@tpg.com.au

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#### Aus7 Modellers Group Inc.

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www.aus7modellers group.com

All opinions expressed are those of the respective authors only, and do not represent any official view of the Aus7 Modellers Group Inc.

On the cover:

1993 crosses a bridge on Stringybark Creek

## **Aus7 Modellers Group Award 2007**

**Bruce Lovett** 

At "The Modelling The Railways of N.S.W. Convention" at Petersham, on Saturday, 28th July, 2007, our President, Keiran Ryan, presented Peter Berg of Berg's Hobbies, Parramatta, N.S.W., with the Aus 7 Modellers Group Award for 2007.

In his presentation speech, Keiran said that there had been a number of nominations for the award but Peter Berg was chosen by the Award Committee for his outstanding contribution to the promotion of modelling the local prototype in 7mm Scale.

Keiran quoted the following from the award nomination –

"Peter, like his father, has always put out his hand to assist small Australian manufacturers to market their products with free promotion and often a reduced profit margin. Companies he has helped in this way include Greg Waldon Scale Models, Milestone Miniatures and RJ Models.

The cost of promoting O Scale modelling of the Australian prototype and in a number of cases the financing of O Scale projects, has come out of Peter's own pocket, not Berg's Hobbies finances.

Peter Berg is not a man to seek awards preferring to work "behind the scenes", however, the unselfish efforts he has put into promoting and financing the modelling of the Australian prototype should be recognised".

#### **One Modellers Opinon continued**

O-scale modelling is a great scale to be working in whatever your prototype, exact scale or gauge. Because of the nature of the scale it tends to be pretty craft based because, if you want to see a train run, you're almost certainly going to have to put some kits together. The realization that the modeller needs to build pretty much everything he or she will see standing beside and running on the rails is perhaps one of the explanations for the drop in membership numbers this year. I like to think that the very best way to recruit new people to a hobby, or in our case a scale, is to

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Peter Berg receives his award from Keiran Ryan at the Modelling the Railways of NSW Convention Petersham on 28/7/2007

The Aus7 Modellers Group invites you to the NSW O-Scale Modellers Forum AKA the Big Day Out Saturday 27<sup>th</sup> of October, 2007

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have those outside the scale or hobby see how much fun those who are participating are having by being involved. Fun and enjoyment are infectious. So I'd encourage every member to get busy and get active; overcome your own lack of momentum or time and break through that last barrier to actually sit down and do some modelling. This is not supposed to be a spectator sport; get active and enjoy yourself. You are the hobby's best advertisement and your enjoyment will sell the scale and the broader hobby to anyone you speak to about it.

# Sound and Lighting for a Century 50 Class

Roger Porter

#### **INTRODUCTION**

These notes are a continuation of the 50 Class construction article published in issue No. 11 of 7th Heaven. I accept that sound in a loco can be an individual and subjective thing, and I had previously viewed sound systems as a poorly executed gimmick, but that was until I heard a good sound installation. That converted me from a sceptic to a keen advocate. By comparison, a non-sound equipped loco now seems so lifeless and cold.

Just imagine the realistic "pah....pah" of the air compressor, the whine of the turbo-gen spooling up as the headlight comes on, and the "chuff...chuff" in perfect synch with the motion (which is rare), and the exhaust even has a very slight "off-beat" to add to the realism. These systems are far removed from the crude "white-noise" sound generators of old.

I want to acknowledge the significant contribution made by John Parker to the sound and lighting installation described here. Whilst I did some experimenting, it was John who guided me down the correct path, suggested the chosen decoder, and played a vital role in programming the functions of the decoder.

#### THE DECODER

The decoder chosen was a "Soundtraxx Tsunami TSU 1000 Light Steam", which came from the Model Railway Craftsman at Blacktown. The decoder was installed loose inside the boiler, it can't fall out. The smokebox door was made to be removable. The weight supplied to fit inside the boiler was omitted, as there are other places where weights can be added. To provide for sound escape from the speaker, and ventilation for the decoder, three longitudinal slots, 20 x 7 mm should be cut into the bottom of the boiler, and I also drilled out the funnel to 6 mm. It seems that ventilation is important for the decoder, as I did have an instance

of the decoder shutting down for a while during continuous exhibition running.

The circuit connection diagram supplied with the decoder is clear and easy to follow, but take particular care with the polarity of LEDs when making connections. All soldered connections should be insulated to prevent shorts, don't be tempted to use tape, but use the very small heat-shrink tubing from DCC Concepts. Part no. "HT-ShrinkSet", a \$6 pack will do several loco's, and it's easily shrunk by touching with a soldering iron

#### THE SPEAKER

The speaker is known as a "28 mm dia round speaker", from the MRC at Blacktown. This speaker gives excellent sound reproduction, and comes with its own enclosure, so you don't need to worry about baffles or speaker boxes.

The speaker was installed in the rear half of the smokebox, facing rearwards into the boiler shell. The smokebox must be filed or ground out to 29 or 30 mm dia, a coarse wood rasp worked well. To prevent the speaker from falling right through into the boiler, I glued three styrene blocks, about 5 x 5 x 5 mm, spaced at 120 degree intervals at the junction of the smokebox and boiler shell. To hold the speaker lightly in position against those blocks, a cube of soft foam was cut to partly fill the front half of the smokebox. There will be many wires and resistors in that space also.

#### **LIGHTING**

For reliability, I elected to use LEDs throughout instead of incandescent lamps. I did experiment with some trials using LEDs with fibre optics, but found much better results by mounting the LEDs directly into the marker light and headlight castings.

LEDs and accessories can be sourced from many places, but I bought the LEDs, fine silver connecting wire, resistors, and heat-shrink tube from DCC Concepts in Perth. They're modellers, so they know exactly what we need, they have a prompt mail-order service, and can be contacted on (08) 9455 6421.

#### **MARKER LIGHTS**

The front and rear marker lights used DCC Concepts Micro LEDs, part no "HL-LED-PW1 smt", a 10 pack costing around \$20. Unlike the more conventional domed LEDs with the rear exiting connection tails, these are a flat LED, measuring 0.8 mm x 1.0 mm, and two wires must be extremely carefully soldered to two tags within those dimensions. This is a very delicate operation, be prepared for a couple of casualties, but the very fine insulated wire ( silver cored ) from DCC Concepts made the task easier.

The marker light castings, front and rear, were drilled out to 2.5 mm for almost their full depth, with a 1.0 mm hole exiting the rear. Then a corresponding 1.0 mm hole was drilled into the rear plate of the tender shell, and in the case of the front markers, into the smokebox just behind the marker light casting. Note that the tender body must be detachable from its chassis, and the smokebox door must be removable.

The tiny flat LEDs light up on one side only, so naturally that side should be installed outermost. To confirm correct orientation, test the LED across a 9 volt battery, not forgetting the 750 ohm resistor in series. Also, before installation, the LEDs with their exposed soldered connections should be given a generous brushed coating of ACC, and allowed to dry. This will form an insulating skin to prevent the exposed connections from shorting out onto the shiny brass interior of the marker light castings.

The marker light LEDs were installed by poking the wires through the castings from the outside, and nestling the LED into the cavity of the marker light casting. The LEDs were secured in place with a tiny blob of Araldite applied with a sharp toothpick, the blob being formed to a lens-shape on the outside. Because these LEDs shine very brightly with a stark white light, a more realistic subdued effect can be achieved by touching the formed lens with a dab of grey paint.

The 750 ohm resistors were then wired to the LEDs and the decoder, following the circuit diagram provided, and ensuring that all bare connections are insulated with heatshrink tube. Note that the polarity of the LEDs is critical. The connections between loco and tender were made using a miniature plug / socket, Jaycar # PI-6470, photo's of which are shown in Issue 11 of 7th Heaven.

#### **HEADLIGHT**

The headlight uses a DCC Concepts 3 mm Protowhite LED, part no. "HL-LED-Pw3". Despite the "protowhite" name, these conventional domed LEDs have an orange coloured enclosure, and shine with a more natural softer, slightly yellowed light, rather than the stark lunar white of a white LED.

A 3 mm hole was drilled through the bottom rear of the headlight casting, and continued through the top of the smokebox into the smokebox interior. The tails of the LED were coated with an insulating layer of ACC, and curled up and wriggled through these holes from the outside, such that the LED ended up at the far rear of the headlight shell, facing forward, with the tails inside the smokebox. With the LED exactly in the centre of the headlight casting, it was secured in place with araldite.

A shallow 3 mm hole was drilled into the rear of an MV Products 10 mm Dia headlight lens, which was pushed over the 3 mm LED and lightly glued inside the headlight casting. Make the connections to the resistor, and decoder, noting the polarity of the LED, and insulating all connections with heat-shrink tube.

#### **FIREBOX LIGHT**

The firebox light used a conventional 3 mm white LED. You could try almost any LED, in red or yellow. The LED is fitted inside a styrene box, roughly 7 mm x 7 mm, with the open side of the box glued over the inside of the firehole door opening. The LED faces towards the firehole, with its tails poking out of the back of the styrene box. About 4 or 5 layers of orange cellophane were folded over and pushed into the small space between the dome of the LED and the inside of the firehole door to give the emitted light a "firey" colour. Make connections to resistor and decoder, noting polarity.

When connected to the decoder, the LED flickers at a random rate and gives a very good representation of a fire. However, the Tsunami decoder has a "Smart Firebox"

function which can control two LEDs,... say,... one yellow, and one red, which will flicker at independently random rates, to give an even better representation of a fire. I haven't seen the smart firebox operating, I'll try it on the next loco and report.

#### **PROGRAMMING**

The Tsunami decoder supports an amazing number of sound and lighting functions, all of which can be independently adjusted for rate or volume. For me, programming the decoder was the most difficult part of the installation, and I'm grateful to John Parker for his assistance in this area. Because of the high degree of standardisation built into American DCC equipment, most of the programming can be done using the handset of your DCC system, in my case the NCE DCC handset worked when I could figure it out. This included synchronising the exhaust beat to the loco's wheel speed. More detailed programming information can be found in the various user manuals and installation guides on the Soundtraxx site,

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## A Place for Everything

**Trevor Hodges** 



In issue 8 of 7<sup>th</sup> Heaven I wrote about the lighting on my workbench in Light Of My Lifestyle. I got a bigger reaction to this single piece of writing than anything else I've ever had published! As this piece was a bit of "filler", to be used by the editor when he couldn't find anything to fill an empty corner in the magazine, I'm not sure whether I should be flattered or insulted. The people who have contacted me about my workbench have reacted in two ways: they were either amazed at how neat my workbench was or wanted details on how I built the bench itself. The photos I've included with this article have deliberately been taken with absolutely no changes made to the junk and projects scattered across

it. What you see is my workbench in its natural, undomesticated state. There might be a place for everything but they are rarely in that place!

Details of how I built my workbench perhaps need a little background. For the ten years I modelled in HO I worked at a fully fledged wood-work bench I built in a garage that was located in the backyard of mother's home. This bench was my "dream" workshop bench: built after years of never having my own space or workshop. The only problem was that it spent 99% of its time being used as a modelling surface and very little of its time as a wood-workers bench. In fact the only time it was

used as a woodwork bench was when I was making model railway benchwork! About seven years ago I moved into a 2 bedroom home unit with no workshop space and about 6 hours drive from my workbench and layout. If I was going to do any modelling I would need a workbench that could be used inside the unit.

The workbench you see in the photos is made entirely from second hand materials I picked up through family friends for about \$30. The base of the bench is a bog standard student's desk (photo 1). These were manufactured in their thousands during the 60's, and 70's and possibly still are today. At least two of my childhood friends had almost exactly the same type of study desk while we were at school together and needless to say these desks saw very little study. As mine was in extremely good condition when purchased it looks like my friend's desks weren't the only ones that sat under-utilized in some adolescent's bedroom. It has a small cupboard where I store vices, jigs and a box of old decals and five drawers which are filled to overflowing with sheet styrene, plans, glues, DCC decoders and a thousand other pieces of modelling paraphernalia. The work-surface of the desk is Formica from the days when you could get it in any colour you liked, as long as it was brown wood-grain. I use one of those green modelling mats on the surface and I've made myself and small tool tidy (photo 2) from odd pieces of timber. This is essentially a place to keep all the small hand tools that I use every time I sit at the bench and do some modelling. As you can see in the photos other, larger tools are hung from hooks both inside and outside the hutch section if the bench.

In spite of the fact that the base desk and the hutch section of my workbench are of a very similar shade of wood they did not start life together. I purchased both the desk and the plywood sheet that was used to make the hutch from a family friend who had been appointed executor of a deceased estate. He sold me the desk and threw in the plywood for free to save him the trouble of having it hauled away. The plywood sheet had obviously been kicking around for years and was approximately 1.8mx600mm in size. I cut it into three sections: 1.2mx600mm for the back and two 300mmx600mm sections for the sides. The sides were attached to the back using a simple butt joint with screws and glue. These dimensions allowed the hutch to sit flush along the rear edge of the desk. The bottom of the hutch was "trimmed" with some 3x1 pine which drops over the edge of the desk (photo 3) and provides a way of securing the hutch to the desk. Two screws were driven into the each side of this trim at the front and this is plenty to hold the hutch in place.

The fittings on the hutch start with a set of shelves from 3x1 pine. The shelves inside the hutch were constructed specifically to allow the plastic parts drawers (photo 4), which I picked up at K-Mart, to fit in place. The shelf along the top of the hutch is slightly wider 4x1 pine. Spotted around the hutch, both inside and outside, are a range of hooks from which to hang tools and parts. After the hutch was made I rounded off the front corners to prevent bashing my forehead on a sharp edge, sanded it down and gave the whole thing two coats of Estapol clear finish. I put a piece of Peco flex track along the 2<sup>nd</sup> top shelf (photo 5) which is a good place to store rolling stock out of the way while I'm working on something else. This piece of track is not hooked up to an electricity supply.

This project was cheap and made an incredible difference to my modelling. Everything is within easy reach and I get a lot more modelling done in the same amount of time prior to making the bench. It's one of those "how did I get by before I made that" projects.



Photos:

Above: shelves and drawers

Top right: tool tidy

Centre right : trim

Bottom right: everything in its place







## **An Experimental Diorama**

#### **Roger Porter**

The following photo's were taken on a small diorama that was built about ten years ago to practise some scenery techniques, and to provide a backdrop on which to photograph models, knowing that it would be some years before I had any sort of 7 mm layout.

It was a valuable exercise, which taught me these main points:

(a) The materials and techniques for 7 mm are very different to those for HO.

- (b) A lot can be achieved in very little space, and very quickly too.
- (c) It's critical to have contours both above and below the track, and for there to be a smooth transition between them.
- (d) A basic painted backscene is very important for good presentation.

Photo 1 Shows loco 1957 at a level crossing. The gate was built to departmental drawings, using brass wire for the frame, and individual strands from an electrical flex for the horizontal wires. The posts are code 100 rail, and the hoop type gate latch works. The "beware of trains" sign is an etching from Stephen Johnson Models. The FJ Holden ute is a Trax model, lightly weathered with pastels. Because the loco cab and loco crew is in a dark shadow, it was illuminated with a pencil torch when photographing. Each of the photo's were taken outside in overcast natural light.



Photo 2 Is an "S" truck at a work scene at the crossing. The Waratah "S" truck has been modified by carefully cutting out the door so that it can open, with a hinge at the bottom, and working pin type latches at the top. The stark and blank appearance of the background emphasizes the need to have a backscene. Even a very simple distant painted backscene would have added so much to this photo.



Photo 3 was taken on a Stringybark Creek module, and was just mucking around with the camera. Loco 4910 is, of course, a HO model, positioned closer to the camera than 5163. The bushes are located so as to hide the couplers, and the block of wood on which 4910 is balanced.

Photo 4 shows loco 5163 on an embankment, which illustrates the elevated effect that is achieved by having contours below the track level. In this instance, the difference in level is about 50 mm, and that's all it needs to produce a dramatic viewing angle. Note the coarseness of the ground cover material, very different to that used in HO. See how the lack of a background detracts from the picture.





# Review: The Waratah Mk IV Coupler

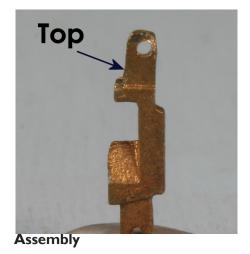
**Trevor Hodges** 

After a longer than expected development phase the Waratah Mk IV coupler has finally arrived and is available to 7mm modellers. The new version of the coupler will be very familiar to anyone who has used Gago couplers in the past. They are cast in the same type of brass, using the same lost wax casting process as earlier versions of the coupler. Upon initial examination the only obvious visual difference this reviewer could detect was that the brass seems a little darker than previous versions and, upon cutting the brass, seems a little harder.

The Mk IV coupler features two main areas of improvement over the Gago coupler. The first of these improvements is that the shank of the coupler has been thickened to a more prototypical dimension (photo 1).

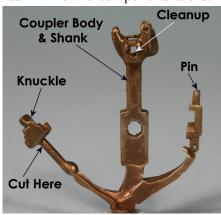


The second, and more important improvement, is in the area of the coupler release pin. The new pin (photo 2) has a thicker base which fits more snugly into the coupler head slot and features a provision for bottom release. This type of release is a method employed on wagons such as the NSWGR KF. Earlier versions of the Gago coupler had no provision for this bottom release feature and, while it was possible modify the old pin, it was a fiddly job. Overall the castings appear crisper so that the time required to clean them up and get them operating reliably is reduced.



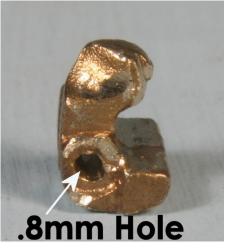
The three main components come on a single sprue (photo 3).

Clean out the holes and file off any flash while the components are still



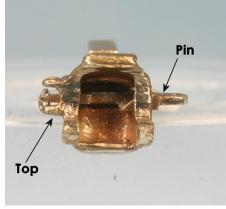
attached to the sprue, which gives you something to grip. Run a fingertip over the surface of the castings to find any rough spots and lightly swipe these with a small file. There was a tiny spot of flash inside the coupler head on the castings supplied for this review (just visible in photo 3 and labeled "cleanup") which need removal, the work of a few moments. The components were cut from the sprue using a cutting disk in a motor tool.

Cut the sprue attaching the knuckle as close as possible to the component but don't cut too close and damage the face of the knuckle. The small pimple left after cutting can be removed with a file. Clean out the hole in the knuckle (photo 4) with a .8mm drill. An alternative method is to use a drill



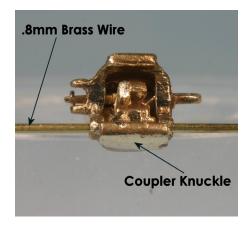
of a slightly smaller dimension and finish off with a taper broach. Run needle files of various types around this component lightly to remove any rough spots or sharp edges. Give the face of the knuckle a slight radius (photo 5) with a file to allow for smooth operation.





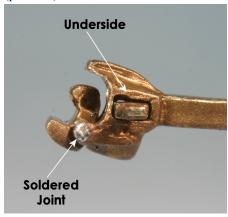
After cleaning up the pin, test fit into the coupler head (photo 6). It should be a snug fit but not tight, as it needs to move up and down freely. If there is no binding test fit the knuckle with an overlong piece of .8mm brass wire (photo 7).

You should check the action of the

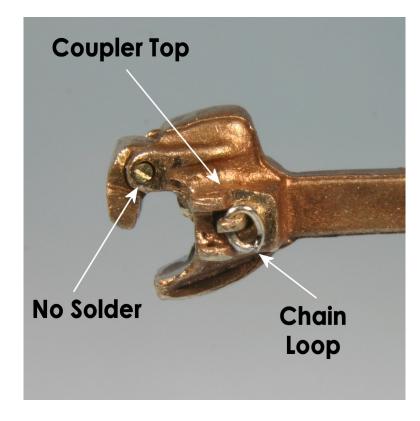


coupler at this stage and this is made a little easier by looping a single link from the larger chain (supplied with the coupler) through the top hole of the coupler pin to prevent it dropping out.

Once satisfied that the coupler is operating properly you can solder and trim the brass wire. Do not trim the wire to length at this stage; solder it first and trim later. You need to ensure that the solder does not migrate into the workings of the coupler and the best way to do this is with Carr's solder paste. Dab some of the dark gray paste onto a cocktail stick and apply a small amount onto one end of the brass wire. Draw the wire back along the hole until its end is flush with the outer face of the bottom side of coupler head. Apply a hot soldering iron to the end of the wire which will set the wire in place, allowing the hinge action to operate unimpeded (photo 8).



Trim the wire off flush at the opposite end. There is no need to solder this end. Not having both ends soldered makes removal at a later stage, in case there is a need to service the coupler, much easier (photo 9).



Test the coupler action and lubricate with graphite from either a lead pencil or using a commercial product such as Kadee *Greas-em* which is available from most good hobby shops. The coupler should now be ready for fitting to your wagon of choice. If the top release option is to be used the bottom pin can be trimmed off with a pair of side cutters and filed smooth. It is recommended that you blacken these couplers using a chemical blackener rather than painting them; the paint will almost invariably chip off.

#### Conclusion

The coupler assembled for this review was a significant improvement over Gago couplers. The castings were crisp, relatively free of flash and required minimal clean up. The modeller needs to ensure that operating surfaces are free of flash but this is the work of a few moments and, with a little care, the result should be a good looking, prototypical coupler that will operate reliably for years. The Waratah Model Railway Company is to be congratulated on their perseverance in developing this coupler. This reviewer was a well known Gago coupler skeptic; I worried about the difficulty of assembling these couplers and their long term supply. As someone who

saw their involvement in 7mm scale in terms of decades rather than years, this was no small consideration. Chris Harris and Dave Morris, the proprietors of the Waratah Model Railway Company, have converted me to the new Waratah coupler. Their commitment to supply the coupler on an ongoing basis has given certainty to local 7mm modellers.

Any NSW outline 7mm scale modeller who has even a passing interest in the prototypical look of their rolling stock would be well advised to give the new Waratah Mk IV coupler a try. There is no point in pretending that fitting these couplers is as easy as using Kadees, there is more work involved and time needs to be spent to get to operate properly, however they are not as difficult to fit as one might think. In terms of aesthetics and prototypical operation they are in a different realm to Kadees. Using Waratah Mk IV couplers means there is no need for the large, unprototypical coupler pockets needed to fit Kadees. Modellers should make an assessment and decide for themselves and if they choose to fit these new couplers there's the side benefit that they will be supporting a small, local manufacturer.

# **NSWGR LHG - A Scratchbuilding Project**

Paul Chisholm



I am no expert scratch builder, in 7mm or any other scale. In fact this was my first 7mm scratch built vehicle and the purpose of this article is not to teach anyone how to build an LHG but to encourage others to have a go at any piece of rolling stock they want. If I can do it so can you. Accordingly what follows are a few rambling observations gleaned from the experience, some of which may be of value. These methods may or may not work for you.

Firstly I can't stress how valuable I found it to have access to the prototype. At Thirlmere I was lucky enough to find their preserved van in a good spot for copious photographs and measurements. When transposed onto the general arrangement diagram I have had for many years there were glaring differences between measurements that would have resulted in a severely distorted model if the drawings had been unquestioningly followed. This access may not always be possible but every effort should be made to verify the accuracy of the plans. Also take photographs of everything from every possible angle and even do some sketches of difficult to view parts. Even so, as soon as you start the model you will still find some part you wished you had observed more closely.

As an HO modeller I had become reasonably adept at working in styrene but was unsure how this material would translate into the larger scale, particularly with respect to strength. For example I believed that O scale model vans would need some sort of metal underframe at the very least but the publication "Carriage Modelling Made Easy" by David Jenkinson - Wild Swan Publications (1996) convinced me that the whole vehicle could be constructed from styrene with adequate strength. Hence the van body ended up being constructed from various laminations of styrene from .010 to .040 in thickness. For those of you who really want to get into the nitty gritty of scratch building 7mm rolling stock this book is highly recommended.

The floor is a solid piece of .060 with

suitable styrene channel at the edges to simulate the underframe. The resulting body is very strong and rigid in every direction and performed flawlessly for three days on Stringybark Creek at the 2006 AMRM exhibition

I was not happy with the commercially available scribed sheets as they were not the correct spacing and to my eye the grooves were too deep and pronounced so I scribed my own. This is not as laborious as it sounds and is quite was easily done with a scriber and engineers square to keep the grooves parallel. You have to accept a few throw aways but not many.

One approach that I developed which is more psychological than real was to divide the model up into modules, rather than treat it as a whole. By this I mean don't look at the van and see it as a whole but as two ends, two sides consisting of three sections each, a roof, four sliding doors etc. By doing this I was able to break it down into smaller achievable projects and focus on them one at a time, getting a sense of achievement as each module was completed. Sure you have to put a lot of thought into how it's all going to fit together but it's a bit like constructing your own kit and then putting the parts together. Another advantage of this approach is that if you make a mistake on a component part you don't have to start the whole side or whatever over again. One important thing to consider right from the start with this approach is how the sides and ends are going to meet at the corners. On some vehicles





the ends are better placed between the sides and on others, such as this one, the sides went between the ends. Sometimes they can meet at a point and the gap filled with a cover strip.

The roof was formed from balsa overlaid with cartridge paper strips. This looked fine until painted but then the joins became too apparent so I would not do it this way again. One learns! I was going to try and make the sliding doors operate but as the project neared it's end I became impatient and just wanted to get it finished in time for the exhibition so I opted to secure them in place, some closed, some open.

The hardest part of the whole thing was the forming of the guard's lookouts (duckets) and these were built up from styrene and Tamiya filler filed to curvature. Several sets were made before an acceptable result was achieved.

The bogies were a big problem as nothing like them was available anywhere. After following a few false leads I was looking at an O Aust ACM owned by Roger Porter when "the lights went on". Except for the wheelbase and the unusual suspension of the Dean bogie there are a lot of similarities between it and the 7 foot wheelbase 2BK under an LHG. An order to O Aust ensued and a week later the side frames had been cut down and resoldered to give the correct wheelbase. Things were looking good but there was a mighty big gap where the leaf springs were to

go in the centre of the frame. Fortune intervened again when a chance discussion with Dave and Chris from Waratah suggested there could be a few left over castings of leaf springs from their forthcoming PHG project. Just what was needed. Assembled with Slaters disc wheels the resulting bogie is still not complete in every detail but certainly looks the part and tracks reliably and smoothly.

The only other commercial parts used were the torpedo roof vents, buffers, generator and brake cylinder from O Aust and the Gago couplers from Waratah.

Another extremely time consuming and stressful part/s to make up was the running boards and steps. These had to look spindly but still be strong enough to be practical. This dictated soldered brass construction built up on a series of wooden jigs with bits clamped everywhere. The result is pretty good but is still very prone to damage. In fact the compromise between strength and appearance is another lesson learned from this model. In my desire to stick as closely as possible to the measured dimensions of some components they have turned out to be a little impractical for everything but the most careful handling. The handrails are a case in point. Those along the side are very delicate and easily bent; so guess where most people put their fingers when they pick the model up? This compromise is one you will have to consider for your own circumstances. Depending

on if it's going to be in a showcase on the mantelpiece, on your own home layout or handled by others in a club or exhibition situation you will have to think about how you approach these things.

Painting was done by airbrush using my own mixture of Humbrol enamels to give a well-used but not decrepit appearance. Don't forget to paint the interior before you put any fixed roof on! Also leave glazing until after painting. This means that some components have to be painted before being fitted into the final assembly. The very sparse lettering was done using decals kindly made for me by Trevor Hodges.

As I said at the start this was my way and I'm very pleased with the result. I have learnt a lot from the experience. There are now things I would do the same way again and others I would never repeat but I am encouraged to attempt other projects. In fact I have already commenced another goods vehicle and with the editors consent an article on this may follow in good time. Meanwhile, stop thinking about that commercially unavailable model you have long wanted and have a go. You may be waiting a long time for the kit.

## **Commercial News**

Paul Chisholm

#### **Keiran Ryan Models**

Keiran Ryan Models, 39 Coachwood Picton, NSW. 2571, (02)46772462, krmodels@gmail.com & www.7mmkitsnbits.com.

Keiran has released a number of O scale signal items. Now available are kits for NSWGR lower quadrant home signal, bracket signal and landmarks. These consist of etched brass components to be mounted on urethane post. Early production samples of these parts were used for the signals on Stringybark Creek at the recent AMRA Hurstville exhibition and they considerably enhanced the scene.

Also now available are brick patterns in etched brass sheet, 200mm X 50mm. Patterns available are stretcher bond. English bond and Flemish bond.

#### **O-Aust Kits/Century Models**

O-Aust Kits/Century Models, pa rl krause@bigpond.com oaustkits.com.au or PO Box 743, Albany Creek, Old, 4035, mobile 0419680584 anytime or on (07) 3298 6283 between 7 and 9 p.m.

Peter Krause had some patterns for the C32 locomotive on display at the AMRA Hurstville exhibition and advises that that all patterns should be completed by the end of the year with production to commence in February or March 2008. They will be initially produced in batches of ten.

The BCH and BWH hoppers are now available, both at \$295. The SRC is still under development and will include etched brass detail parts. Finally, the Shell 3000 gallon tank cars should be available early next year.

#### Waratah Model Railway Company

Waratah Model Railway Company, PO Box 509 Revesby NSW 2212, (02) 97851166, charris@nigelbowen. com.au and waratahmrc@bigpond. com. Dave and Chris advise that the completion of the ICV kit has been delayed due to health scare for the pattern maker Trevor Hodges. It is hoped that the main pattern work will be completed by Christmas. The BD kit is well under way. The body was on show at Hurstville and drew many favourable comments. The floor is currently being worked on and diamond pattern bogies have been patterned. Work is still progressing on the BWF with the bogies (2SE) needing some additional detail and should be released early next year.

Aside from the rolling stock, an etched brass and timber kit for the standard web girder bridge installed in NSW between about 1898 and 1930 is now available in either one, two or three span sections.





- assembly is required.
- One piece body casting ensures accuracy and simple construction.
- Detail components in brass and white metal.
- Kit comes complete with wheels. couplers and components for double roof.
- Various versions can be constructed from the one kit.

**Order Today To Avoid Disappointment** 

Waratah Model Railway Company, PO Box 509, Revesby, NSW, 2212 Ph: (02) 9785 1166 email: waratahmrc@bigpond.com or charris@nigelbowen.com.au

# **O-Aust Kits & Century Models**

www.oaustkits.com.au

## What's New?

The arrival of the first production batch of the NSWGR BCH coal hopper is imminent

The kit will be supplied with North West Short Line wheelsets as standard

Alternatively and by prior arrangement it can be supplied with Slaters wheelsets (some minor adaptation of the bogies will be necessary)



A new production run of the NSWGR ACM Branchline Sleeper kit is currently underway and it should be available shortly

We already have a number of backorders to fill but there are still a few left for those who are quick enough



A pre production sample of the NSWGR Shell 3000 tank car. The pattern work is now finalised and the kit will be released as soon as assembly instructions are completed.





KITS AVAILABLE		KITS BEING DEVELOPED			
Century Models	O-Aust Kits 7mm	O-Aust Kits 1:48	Century Models	O-Aust Kits 7mm	O-Aust Kits 1:48
NSWGR Z19 NSWGR D50 (to order)	NSWGR S wagon NSWGR CW NSWGR UME NSWGR BHG NSWGR BCW NSWGR MRC	QR QLX	NSWGR C30T NSWGR C32	NSWGR MLV SHELL 3000 tank SHELL 5000 tank NSWGR LLV NSWGR CR	QR K wagon QR BBV van

## O-Aust Kits & Century Models

PO Box 743 Albany Creek Qld 4035 Phone 07 3298 6283 (7.00pm to 9.30pm ONLY) Fax 07 3298 6287 (24 hours) Mobile 0419 680 584 Email parl krause@bigpond.com

www.oaustkits.com.au