Mortdale Matters

February 2007

Around the Clubrooms

David Bennett and Mic Wade move the Mortdale Station sign in preparation for the installation of an air conditioner in the downstairs meeting room. January 12, 2007.
Photo: Glenn Percival

Work continues on the massive wiring task of wiring the "Stoney Creek" HO Layout. Peel Ridge and Deawy junction receiving attention on 7th January. Photo: Glenn Percival

On the Cover:
1243 departs Aberdeen with the 2 car connection from the Mail train on Mic Wade's "Aberdeen" layout.
Photo: Chris Winston

Welcome to the February Mortdale Matters

Once again I have the pleasure to report that there has been still more developments for *Mortdale Matters*. Many more members are now subscribed to *Mortdale Matters* which helps make putting *Mortdale Matters* together far more satisfying.

Further improvements to *Mortdale Matters* this month will see us being able to produce the colour hard copies in house, greatly reducing the time taken to put each edition together. It will also allow us to produce the entire edition in colour for the first time.

I do have to apologise for the delay in bringing this edition to you. Part of the reason is that the colour printer will arrive in the first few days of February, whilst at the same time I have been subjected to a large amount of overtime at work. That's great for my bank balance, and later my model collection, but not so good for this month's *Mortdale Matters*.

Finally I'd like to ask anybody who's got a camera or camera phone to maybe grab the occasional photo while you're at the clubrooms. They don't have to be high resolution "show stoppers" to make it into *Mortdale Matters*. Thanks to Glenn Percival for the all of the photos provided for this edition.

Chris Winston
Mortdale Matters Editor

Subscribing to Mortdale Matters

You can subscribe to *Mortdale Matters* by contacting our publicity officer, Philip Lee. Philip can be contacted either in person or by seeing a Duty Officer at the clubrooms,
by email: publicityofficer@amransw.asn.au or by via our website: www.amransw.asn.au.
Subscription is free.

The preferred method of distribution for *Mortdale Matters* is via email. The file size for *Mortdale Matters* is usually around 2 to 3Mb. *Mortdale Matters* is also available via snail mail or care of the clubrooms for those without a suitable internet connection. There is also a
limited number of copies at the clubrooms for those not on our mailing list.

Submitting to Mortdale Matters

With so much continually happening at our Mortdale Clubrooms, its easy for
something to slip through the cracks. If you've got any news that you'd like to submit to *Mortdale Matters* please email me at subeditor@amransw.asn.au or leave a copy of your submission in the Journal pigeonhole in the office.

Mortdale Matters especially needs photos. Prototype photos will also be included with each issue but the focus will always be on Branch activities and events. Any prototype will be considered. Photos can be emailed to me at the above address or you can leave a disk or CD in the Journal pigeonhole in the office. Image size does not need to be larger than 1024 x 768.

I must emphasise that ALL submissions must be original material, i.e. photos that you've taken yourself or articles that you've written yourself. Material is published in *Mortdale Matters* at the committee's discretion.

Mortdale Building Report

Bruce Harris and his son, Neil (a plumber), have installed the laundry tub in the workshop with the silt trap drum underneath it. It is now available for use when cleaning plaster and paint tools used on the layouts. This has been a long awaited item and we thank Bruce and his son Neil for their time and effort.

The two downlights have been installed in the Library so that when working at the desk, the librarians are not in their own shadows anymore.

A new air conditioner has been installed in the downstairs main meeting room. With the large numbers of regular attendees each day the clubrooms are open, this will certainly help to provide a much cooler environment over the summer.

David Bennett
<u>Mortdale Building Supervisor</u>

Mic Wade poses with the installed air conditioner in the downstairs meeting room.
January 12, 2007. Photo: Glenn Percival

Coming Up...

Friday, February 23rd, we'll be visiting the Hills Model Railway Society at Baulkham Hills. Own Transport, from 7 till 10pm with a BBQ at 8pm.

This month's *Stoney Creek* work day is on Sunday, February 4th.

The April Open days are over the weekend of April 28 / 29

Check the programme on page 10 for more details.

Layout Reports
N Scale Layout

Chris Gorring is applying some ballast to the Quarry. We have had some problems with the ballast being covered with Aquadhere and turning black, so we are going to try using Matt Estapol to glue the ballast down.

Ash Garard has continued with the greening of the layout and is currently working near Bownen oil depot area and along towards the platform.

Bownen platform will soon modified to have brick edging and a sand top. It can then be secured in place and the passenger ramps installed. The platform at Bennett will be modified in a similar fashion at the same time.

David Bennett
N Scale Layout Supervisor

Two Santa Fe trains meet near the quarry on the N scale layout. Recent progress has seen further work carried out to the scenery in this area.
Photo: Chris Winston

HO Scale Layout

Layout Supervisor, Denis Gilmore and Alex Brown discuss the block wiring at Deavy West Fork (behind Peel Ridge yard.). January 7, 2007. Photo: Glenn Percival

What can I say? Recent progress on the HO layout has seen more and more of the block wiring being installed along the mainlines of the layout. I know that we say this every month, but the task truly is massive in scale.

Why so much time to just run a pair of wires from each section? It comes down to two main reasons, the sheer number of sections involved and the need to do it right the first time so that we'll never have to touch the wiring again.

Philip Lee has spent an untold number of hours drawing up the documentation for the wiring of layout. Each section has been planned so that when the layout catches up to the documentation it will work exactly as required, first time.

The Block wiring that is being installed now is permanent. Each wire is labelled and connected to a specific terminal at the local terminal panels. When it comes to trouble shooting, we want it to be as quick and as painless as possible. Once the task is complete, the section breaks will be added (if they don't already exist) and the layout will be one step closer to operator control.

The number of sections involved is quite large as well. With 10 controllers being able to access each and every mainline block, in some cases in both directions as well, and the need to be able to trigger the signalling on the layout, the numbers soon add up to well above anything the average home layout would need.

The more hands we have, the quicker this process will go. Much of the job doesn't involve any great skill, so please don't let that put you off. I hope to see you at our next work day.

Chris Winston
<u>Stoney Creek Layout Committee</u>

O Scale Layout

Neil Sorensen continues to improve the scenery around the layout with the area approaching Hoganvale being the next to receive his attention.

The layout's popularity is continuing to increase with an ever growing number of people interested in operating the layout and getting into O scale.

A 46 class electric crosses all the way over as it departs Central with a passenger train.
Photo: Chris Winston

Pre-paid Facility Fees 2007

Pre-paid facility fees for 2007 can now be paid for 2007. We offer two options, a full year or six-monthly. To pay your pre-paid facility fee please see either a Committee member or the Duty officer for the day.

Pre-paid facility fees for 2007 are as follows:

	12 Months	6 Months
Adults	$300	$180
Juniors	$180	$100
Seniors	$180	$100

Pre-paid facility fees can be paid up until January 31, 2007. Pre-paid facility fees for 2007 are applicable from January 1, 2007. No reduction in price will be given for pre-paid facility fees received between January 1 and January 31, 2007.

HO Scale Layout - Operator Control

Much has been said in recent editions of *Mortdale Matters* that the HO "Stoney Creek" layout is moving towards "Operator Control". But what exactly is it? How does it work?

When the HO scale layout began operating back in 2004, it was set up to run in "Display mode", the idea being that the operating capacity of the HO layout could be shown off at an early stage of construction at Branch events such as our open days. The layout has continued to run this way ever since.

The next step is to bring in operator control of trains on the layout. The idea being that every train on the mainline has its own driver. Whilst this is something even a basic train set has (1 train, 1 driver), we've set the bar much higher at 10 trains, 10 drivers. This is where it starts to get tricky.

For everyone who remembers our old layout at Rockdale, we had 5 train with 5 drivers running on the layout, with a 6th person at Centralised Traffic Control (CTC). CTC had the unenviable task of following each of the five trains around the layout and connecting the right controller to each section of track. With 5 trains it became something of a frantic rush to follow each train around and only a few members were able to successfully operate CTC with 5 trains.

Ten trains therefore is obviously well above the capacity of one person in CTC so we're introducing some automation. This is where the Programmable Logic Controllers (PLC's) come in. They will take over the job of following the trains around the layout and connecting controllers and they will do it without breaking a sweat. At the same time they will also handle the signalling, making sure that the correct indication is displayed on each signal as the trains move around the layout. CTC will be left with the job of changing the points to direct traffic around the layout and to and from the various yards - much like a real signaller.

THE BASICS

The layout has been divided into 24 blocks. Each mainline has 10 blocks with additional blocks allocated for other areas such as the bidirectional third road. As trains move around the layout the PLC's will connect the driver's controller to each block, thereby allowing multiple trains on each mainline.

Each block is divided into various sections with each section connected to a detector. The number of sections per block will vary depending on the length of the block, the points and trackwork within the block and the standard train lengths (more of which later). However the operation of the sections within each block is based on the same principle.

The Detectors used are a current detecting type. They will detect the presence of any part of a train that is drawing power, usually a motor or light, from that section. They will not detect the presence of a stopped train. To get around this the PLC will be programmed to assume that the train is still in the section until it is detected in the next one. This is why it is important to not take your train off the track while it's on the mainline.

SIMPLE BLOCK OPERATION

As a train moves through the sections in each block, the detectors report the trains progress to the PLC. At various stages, during the progress through the block, the PLC takes actions to continue the train's progress. At its simplest, the block is divided into sections as shown in the diagram below.. The train shown is assumed to be a standard train length.
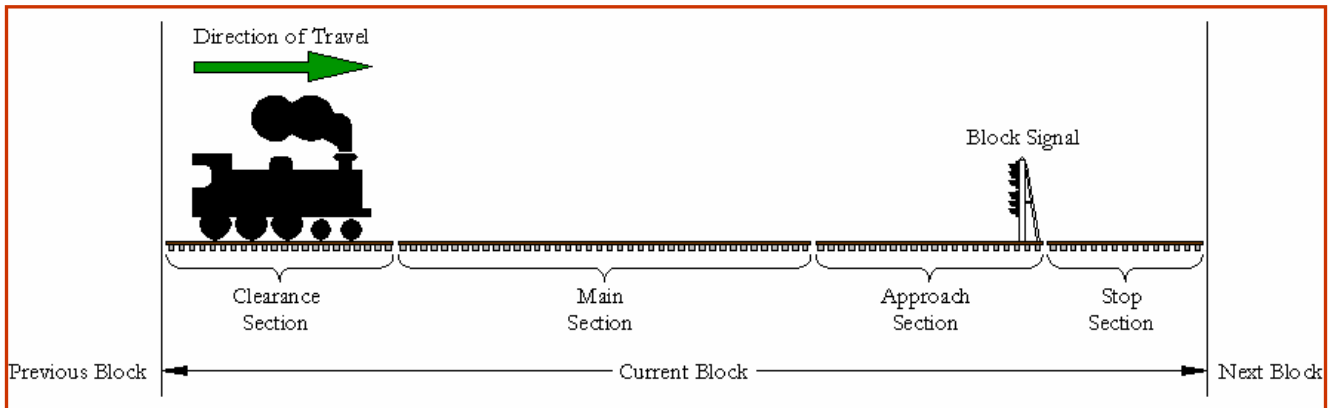
As the train enters the Current Block, the driver's controller is connected to both it and the previous block. The first section the train encounters is the Clearance section. The length of this section is a standard train length. As the train leaves this section and crosses into the main section, the PLC will know that the back of the train must now be within the Current Block. It will then disconnect the driver's controller from the Previous Block enabling the Previous Block to be connected to another controller for a following train.

When the train reaches the end of the Main Section and enters the Approach Section, the PLC now knows that the train is coming the end of the block and that steps must be taken to move the train into the next block. To do this the PLC first checks that the Next Block is clear (i.e. released by the previous train). If the Next Block is clear then PLC will connect the driver's controller to the Next Block and allow the train to proceed into it.

However, if the Next Block is occupied by another train the signal will be showing Stop and the driver must stop at it. If the driver is not paying attention and runs past the Signal into the Stop section then the PLC will disconnect all power from the Current Block and bring the train to a halt before it can enter the Next Block.

TRAIN LENGTHS AND OTHER COMPLICATIONS

The basic system gets more complicated by other needs, such as longer trains and points and junctions etc. So that the PLC can get the additional information that these things require additional sections have been built into each block.

The standard train length has been determined at 2.1m. To cater for trains 2 and 3 times this length additional Clearance sections have been added to each block. On allocating a controller to a train, the PLC will know what the train length is and which Clearance sections to use. Junctions and points within a block also require additional clearance sections provided for these as well for both the standard and multiple train lengths.

When you start to look at the combinations based on the track plan, its easy to see why the wiring for the layout is such a huge task - one that will be worth it in the end.

AMRA NSW Programme   Jan'07 - Mar '07

JANUARY

Wed	3rd	"Daylighters" Work & Run	10am until 4pm	
Fri	5th	*Wingecarribee* Work Night	7pm until 10pm	no Facility Fee
Sat	6th	Layout Operation (see Notes)	10am until late	
Sun	7th	*Stoney Creek* Work Day	10am until 4pm	no Facility Fee
<u>Wed</u>	10th	"Daylighters" Work & Run	10am until 4pm	
Fri	12th	Feature Night – **Play Back** *(Members Owned)*.	7pm until 10pm	
Sat	13th	General Activities & Monthly Forum (see Notes)	10am until late	
Wed	17th	"Daylighters" Work & Run	10am until 4pm	
Fri	19th	*Wingecarribee* Work Night	7pm until 10pm	no Facility Fee
Sat	20th	Layout Operation (see Notes)	10am until late	
Wed	24th	"Daylighters" Work & Run	10am until 4pm	
Fri	26th	Layout Operation (see Notes)	7pm until 10pm	
Sat	27th	General Activities (see Notes) & *Wingecarribee*	10am until late	
Wed	31st	"Daylighters" Work & Run	10am until 4pm	

FEBRUARY

Fri	2nd	*Wingecarribee* Work Night	7pm until 10pm	no Facility Fee
Sat	3rd	Layout Operation (see Notes)	10am until late	
Sun	4th	*Stoney Creek* Work Day	10am until 4pm	no Facility Fee
Wed	7th	"Daylighters" Work & Run	10am until 4pm	
Fri	9th	Feature Night – **T.B.A.**	7pm until 10pm	
Sat	10th	General Activities (see Notes)	10am until late	
		Ladies Needles & Natter	2pm	
<u>Wed</u>	14th	"Daylighters" Work & Run	10am until 4pm	
Fri	16th	*Wingecarribee* Work Night	7pm until 10pm	no Facility Fee
Sat	17th	General Activities & Monthly Forum (see Notes)	10am until late	
Wed	21st	"Daylighters" Work & Run	10am until 4pm	
Fri	23rd	**Visit to Hills Model Railway Society**, Baulkham Hills	7pm until 10pm, light BBQ at 8pm	
		Unit 8, Balcombe Hts Community Centre, Seven Hills Rd.	Own transport. no Facility Fee	
Sat	24th	General Activities (see Notes) & *Wingecarribee*	10am until late	
Wed	28th	"Daylighters" Work & Run	10am until 4pm	

MARCH

Fri	2nd	*Wingecarribee* Work Night	7pm until 10pm	no Facility Fee
Sat	3rd	Layout Operation (see Notes)	10am until late	
Sun	4th	*Stoney Creek* Work Day	10am until 4pm	no Facility Fee
Wed	7th	"Daylighters" Work & Run	10am until 4pm	
Fri	9th	Feature Night – **H.O. Signal Construction**	7pm until 10pm	
Sat	10th	General Activities (see Notes)	10am until late	
		Ladies Needles & Natter	2pm	
<u>Wed</u>	14th	"Daylighters" Work & Run	10am until 4pm	
Fri	16th	*Wingecarribee* Work Night	7pm until 10pm	no Facility Fee
Sat	17th	General Activities & Monthly Forum (see Notes)	10am until late	
Wed	21st	"Daylighters" Work & Run	10am until 4pm	
Fri	23rd	Layout Operation (see Notes)	7pm until 10pm	
Sat	24th	**Visit to Canberra Model Railway Club,** Lyneham, A.C.T.	12noon until 5pm, light BBQ at 1pm	
		The "Ukraine Catholic Centre" Hall, Archibald Street.	Own transport. no Facility Fee	
		General Activities at Mortdale (see Notes)	*10am until late*	
Wed	28th	"Daylighters" Work & Run	10am until 4pm	
Sat	31st	**Members Auction** Lodgements until midday	Viewing strictly 12-1pm	<u>Hammer 1pm</u>.

NOTES

- WORK NIGHTS: Mondays & Fridays unless otherwise indicated, 7pm until 10pm. No Facility Fee.
- LAYOUT OPERATION: O and N Gauges operational, HO (fixed) *as permitted during construction*.
- GENERAL ACTIVITIES: the facilities may be used *as permitted* e.g. layout construction, some running, modelling, library, etc.
- Members Facility Fee unless otherwise indicated: Adults $5, Juniors/Seniors (70+) $3.
- Guests are welcome unless otherwise indicated.
- This programme may be subject to change without notice where necessary. Updated programmes available from the Clubrooms, by e-mail to **publicityofficer@amransw.asn.au** or from **www.amransw.asn.au**.

Address: 48 Barry Avenue (PO Box 277), Mortdale NSW 2223. Phone (02)9153-5901, Fax (02)9153-5905.

12 Inch to the Foot Scale

After tending to the derailment of CLP13 at Sefton Park Junctions, the Railcorp 120T Crane toppled over, allegedly whilst packing up on January 21, 2007. Glenn Percival captured these images from publicly accessible vantage points.
Photo: Glenn Percival

Another view of the crane in the dirt. The train loco, 42202, ran out of fuel shortly after this photo was taken and had to be refueled from a road tanker. January 21, 2007.
Photo: Glenn Percival

On the back cover:
The Aberdeen yard shunter enjoys a break with his loco, 7321, parked in a quiet, shady part of the yard. Taken on Mic Wade's "Aberdeen" Layout. Photo: Chris Winston