

March—April 2008

**Cruise on S.S. 'Shieldhall'** by Bob Tanner

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Above: The S.S. 'Shieldhall' at her moorings  
Photo: Bob Tanner

In August this year, I was on holiday in the Southampton area of the U.K. where 'Shieldhall' is based, and noticed the cruising itinerary for this fine vessel in the local newspaper. I booked immediately, as I'd heard that trips on her can fill up very quickly – and there was no way I would miss an opportunity like this, coming all the way from Australia.

I was staying with my aunt and she also welcomed the opportunity to go on a day's cruise. Cowes Week was in full swing, so it was wall-to-wall yachts on the Solent

and around the Isle of Wight and we were about to head out into it – should be an interesting trip I thought!

At 9am sharp there was a blast on both the whistle and siren (magic to my ears!) and I could hear the distinct ringing sound of the engine room telegraph being tested.

*(Continued on page 4)*

CALENDAR OF EVENTS			
<b>Public Run Day</b>	Club Track Site Vasto PI, Balcatta	11:00 am—3:00 pm	Sunday 27 April (ANZAC Weekend)
<b>General Meeting</b>	Club Meeting Room Vasto PI, Balcatta	8:00 pm	Friday 9 May
<b>Public Run Day</b>	Club Track Site Vasto PI, Balcatta	11:00 am—3:00 pm	Sunday 25 May
<b>AMRA</b>	Claremont Showgrounds	All weekend	31 May — 2 June

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## March General Meeting

The March General Meeting was held on Friday 14 March 2008 at the Society's meeting room commencing at 8:00pm, chaired by Milton Smith.

The full Minutes of Meeting are enclosed with Steamlines as a separate Supplement for members. Some highlights of general interest are reproduced here.

Some discussion took place regarding the positioning of the Ground Level Track and the station.

### Model Engineering:

**Milton Smith** showed his Super Simplex boiler with all of the backhead fittings in place and the set of  $\frac{5}{32}$ " stainless steel superheater tubes. The boiler and fittings are looking really good, it cannot be long before final assembly starts.

**Clive Jarman** showed a 5" bogie, made up from cast aluminum frames he has had for some years. Clive explained his difficulty cleaning up castings by machining and maintaining good fits. The bogie was a fine piece of work, well up to Clive's high standards.

**Phill Gibbons** explained that he had purchased similar sets 20-odd years ago, and had touched up the castings with a file, assembled them and has never had a scrap of trouble from the bogies.

The formal meeting closed at 9:30pm, and supper and a chat followed.

## April General Meeting

The April General Meeting was held on Friday 11 April 2008 at the Society's meeting room commencing at 8:00pm, chaired by Milton Smith.

Special guest Jeff Clifton from South West Model Engineers gave a presentation on track construction.

### Model Engineering:

**Ron Collins** and **Paul Costall** displayed their heavy Fowler Traction Engine gear wheel (made in six segments). Also a wire cut gear for an engine magneto for Tony Jones, and a boiler barrel for loco rebuild (ex Bob Hutt, for Luke Fenn).

**Ken Austin** displayed and discussed the making of a length of completed portable Ground Level track for use at AMRA.

**Milton Smith** showed a co-ordinate drilled header for superheater, and a regulator to sit in the dome bush.

This concluded the Model Engineering segment, and guest **Jeff Clifton** then showed a video taken for the Keirunga Park Railway at Havelock North, New Zealand. The video showed the construction of the line over 5½ years from 1986 through to its official opening. Unfortunately the NDMES video equipment was faulty and the sound track could not be played without loud electrical interference.

The meeting closed around 10:30pm, after the video.

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## Work Around the Track Site



Above Left: Andrew Manning attending to rampant undergrowth. Above Right: Andrew appears to have grown a special set of plastic fingers  
Photos: Milton Smith

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## President's Report for March-April

by Milton Smith

**MARCH RUN DAY** — It was great to see a good turnout of members, all helping in various ways, locos and public. The two groups that had made bookings enjoyed themselves. I think that there were seven steam locos operating.

Ron Date arranged for his two locos to be available, Ian Huxtable, David Naesar, Phil Gibbons, Clive Chapman, and the club loco. I think the visitors enjoy seeing a variety of locos. Jeanie and Catherine do an excellent job in the canteen. It was good to see John Turney having a driving lesson under the watchful eye of Jim Crawford. (see also *Twilight Run* report on page 6).

**RAIL BRIDGE** — All the decking has been removed, the structure itself has been cleaned, and painting has commenced. The checker plate that we have has yet to be cut, so the old decking will be rested across the bridge for the next run day. Be careful if you have to walk across it!

**MEMBERS HEALTH** — Several of our members, including the Secretary and Treasurer, have been out of action and we wish for them all a speedy return to health.



Above: Ian Huxtable and Clive Chapman spotting holes from the drilling jig in one of the base plates for the portable track.

Below: Stan Armstrong sitting down on the job!

Photos: Milton Smith



Above: Ian Huxtable adjusting the chain tension on the Battery Loco.  
Photo: Milton Smith



**MEN IN SHEDS** — Andrew and I will be meeting next Tuesday at the track site with Beth Jasas and Jim McNeilly from the City of Stirling to discuss various matters, including plans for the future.

**PORTABLE GROUND LEVEL TRACK** — This is progressing well. All of the RHS for the rails has been prepared for pop riveting to the aluminium plates.

**STORAGE TRACK FOR ELEVATED RAILWAY** This is progressing, and when completed, will be a boon for our backs. There are, I believe, still problems with the rail upon which the removable track runs, particularly the rail trenches which accumulate water, dirt and leaves.

**NEXT RUN DAY (27<sup>TH</sup> APRIL 2008)** — This looks like being another day when we will have a large crowd, as the rotunda and two tables have been reserved. Again, a good turnout of members and locos will help make the day run smoothly.

**Milton Smith, President**

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## Locos and Workshop Equipment For Sale

Due to serious illness, long-standing member and past President Ron Date now wishes to sell his locos, rolling stock, workshop tools and equipment.

Please contact Ron Date on 9246 2835 for details.

Our thoughts are with you, Ron.

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## Cruise on S.S. 'Shieldhall' (cont)...

by Bob Tanner

(Continued from page 1)

Shortly thereafter, some astern and ahead manoeuvring took place, and we were off down Southampton water at a steady speed with 'half ahead' on the telegraph.

By this time I was really drooling with nostalgia as I had sailed out of Southampton a very long time ago as a 5<sup>th</sup> Engineer on Shaw Savills 'Northern Star' – a fine passenger/emigrant ship – the memories came flooding back.

Managing to attract the attention of one of the engineers, I explained briefly my background, and was there a remote chance of going down below? "Remote chance?" he retorted – "go down and you can spend all day below if you want." I could hardly believe my ears! Delicately explaining this potential scenario to my ever patient aunt, her reply was "go and enjoy yourself, and I'll sit in the lounge with a glass or two of wine." I did not need to be told twice, and I hastily departed for the engine and boiler room!!

'Shieldhall' is crewed by volunteers, although the engineers and 'mates' have the relevant marine certification. Descending down the engine room ladder, I imagined that access to certain areas would be restricted due to the insurance requirements etc, and I could not imagine getting the access that I did on some of the other preserved ships or industrial museums around, especially in Oz, due to the Insurance/State WorkSafe and other restrictive legislation. But as it transpired, I was given access, and made full use of it!

What a sight two 800hp triple expansion engines made, ticking over still at half-ahead (must have been a speed limit on Southampton water?)...

Of course on a ship of this vintage, everything is

'handraulic' control (or manual) so the engineer on watch has to be ever vigilant and keep his eye on the gauges – and there are plenty of them!

A double ring of 'full ahead' on the telegraph, and both engine revolutions were increased to full speed ahead, although her top speed has been reduced from the days when she was employed in commercial service. You could feel the surge of power developed by these three-legged behemoths of yesteryear, they were reminiscent of sewing machines I thought – just a bit bigger!

A couple of quick 'stops' on the telegraph broke the constant rhythm of the engines – and I had felt the ship zigzagging to avoid the hundreds of yachts off Cowes. During a quick trip 'up top' to check on aunty, I visited the steering engine compartment – this engine was definitely working overtime during these manoeuvres, and I noted that the rudder quadrant and gear was suitably covered with grease to prevent wear on the teeth.

We started for home during late afternoon, and as we headed back down Southampton water to Berth 48 in the old Eastern docks, I repaired to the bar for a refresher and to retrieve aunty! All in all, a very memorable day.

A few facts on 'Shieldhall':

She was built in 1955 for the Glasgow Corporation by Lobnitz & Co of Renfrew, to carry treated effluent from Glasgow out to sea for dumping. In 1977 she was sold to a group of preservationists known as The Solent Steam Packet Ltd. Length: 268 ft, Breadth: 44ft 7 ins, Draught: 13 ft 4 ins. Steam is supplied by two oil fired, Scotch boilers at 180lbs/in sq.

Ships owned by Glasgow Corporation were affectionately known as: 'Clyde Banana Boats' I'm not quite not sure where that humorous title originates from? We can only speculate!

**Bob Tanner**

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## NEWS ITEMS WANTED

As always, I need more items for Steamlines. Don't leave it all up to the few stalwart correspondents – surely you have seen, been or done something of interest to other Model Engineers recently?

How about a few words and photos showing your current project? Or an article about somewhere you've been? Or a short article on how you solved some workshop problem? Please email your material to:

[jimclark@hardwareandsoftware.com.au](mailto:jimclark@hardwareandsoftware.com.au)

or post c/o Secretary, PO Box 681, Balcatta, WA 6914



Above: John Shugg digging square holes through very hard road base for the elevated track siding. Photo: Milton Smith

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## Progress on "Andrew G. Trigg"

by Milton Smith

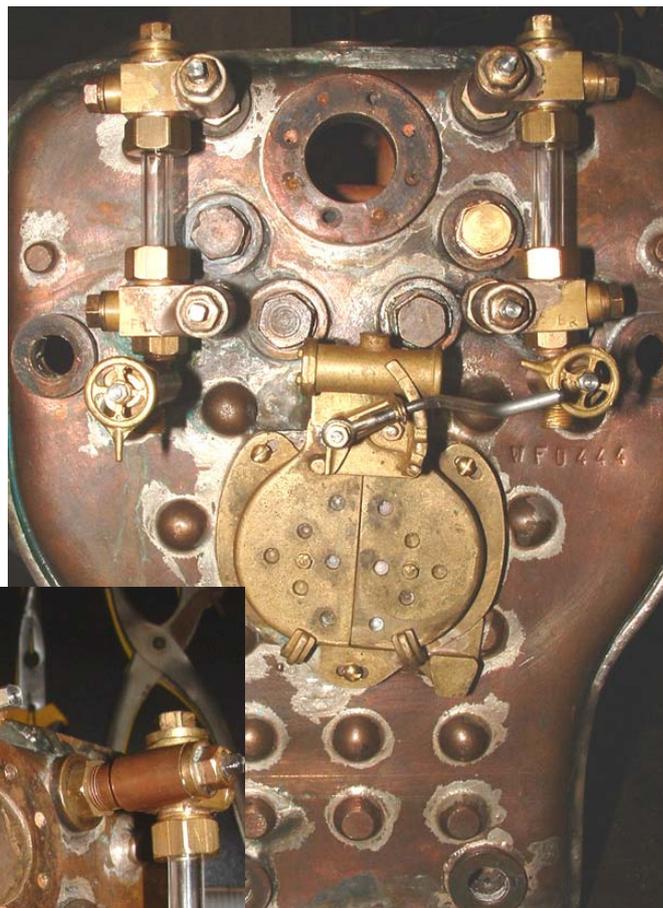
Work is proceeding on the boiler attachments. The accompanying photos show the backhead with the water gauges and butterfly doors in place.

The water gauges are to the design of Fred Cottam and were described in the "Model Engineer" of 15 August 1964. Some fairly delicate silver soldering was required in their manufacture. The principal advantage of the design is that the gauge glass can be isolated from the boiler, and replaced whilst under steam if desired should a gauge glass break. In assembling the gauges I formed the opinion that it could be fairly difficult with every thing being hot, and as well, the "O" rings are quite firm on the glass, but being able to isolate the breakage would mean that the loco can still remain in service.

In assembling the water gauges it became clear that the hollow stay for the blower would have to go. I have been in contact with Steve Reeves about this and will fit a new solid stay and connect the blower to its control valve by means of an external pipe, which is the usual way of doing it in full size and on many miniature locos.

The butterfly doors are available from Barry Glover who advertises in AME. I have been in recent contact with Doug Hewson concerning the superheater, and with this information I now feel confident to proceed. The regulator is virtually finished and so it should not be too long before a steam test can be carried out. Yippee!

**Milton Smith**



Top: Water gauges and butterfly doors mounted on the "Andrew G. Trigg" boiler.

Inset Left: Close up of the "Cottam" water gauges.

Photos: Milton Smith

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## BR STANDARD LOCOS IN 5" GAUGE

Doug Hewson, as you know, writes excellent articles in EIM. I received an e-mail from him last week in response to a query that I had regarding the superheater I am building for "Andrew G. Trigg" which is based on the type used by British Rail in their standard locos, and as described for the BR Class 4 standard 2-6-4 tank.

The point of this item is that he is now working on publishing a book which will cover all the BR standards that are available in 5" gauge, and it will be divided into sections on the Chassis, Cylinders, Lubrication etc. The book will be well illustrated with photos and drawings.

(I must say on a personal note, a photo in the July 2007 EIM was of particular use in adjusting the Martin Evans designed smoke box and boiler for "Simplex", to fit the superheater into my modified smoke box and boiler front tube plate.)

Further, Martin Platt, a New Zealander, has made new patterns for the cylinders that are properly cored for steam and exhaust passages, and another New Zealander is CNC machining aluminium patterns for the wheels, which have proper "V" rims and oval spokes.

**Milton Smith**

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## Twilight Run on 16 February

by Milton Smith

Whilst the attendance at this function was small, those who attended had a great time. With only two locos in steam it was good to be able to drive around and "race" through the station without having to stop. We had four guests from Castledare. They had a good time and were happy to be at a function in which they had no responsibilities.

George's C38 performed well. I had a drive of it; my first, and I must say that being perched up on the tender was not a problem. I thought it might have been, as I am not good at heights. It was a very stable ride. George followed me, and towards the end of what proved to be a fourth lap without any coal having been put into the firebox, the loco ran out of steam! There **is** a lesson here!

It was pleasing to see John Turney having a go on Torquay Manor, I believe it was his first drive ever. Clive did some good running on the track and it was good to see his friend Doug from Canada also having a drive. Castledare would like us to help test their 5" gauge track later in the year. This will be in preparation for next year's AALS Easter Convention.

**Milton Smith**



Above: Three Castledare members at the twilight run — Richard Stewart, Craig and Ken Belcher.

Below: George Palmer driving his C38 with John Turney and Paul James as "observers".

Below left: New member John Turney driving Clive Chapman's "Torquay Manor". Photos: Milton Smith



## A CONCRETE / BALLAST DUMP TRUCK

by Tony Jones

The beast shown here is the concrete dump truck cum front tip truck for ballast. It is sitting on John Shugg's bogies. It is built for 7.25" gauge. The sheet metal hopper was constructed by Ron Collins. I think it will be very useful. **Tony Jones**

*(An article on John Shugg's "BEWAT" bogies will appear in a forthcoming issue of Steamlines, also some photos of the dump truck in use).*



Photos: Tony Jones

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# 7<sup>1</sup>/<sub>4</sub>" Rail Construction Report

by Tony Jones

Since the last episode, not much has been achieved, another 2 lengths of straight rail has been produced and put on our stockpile.

Straight lines became boring so I set up the jig to do the two 15m curves. It was decided at our last Committee Meeting that we would adapt the latest findings of the AALS and make the track gauge 187 mm on the curves and 184 mm on the straight. Sounds simple doesn't it, but the first fly in the ointment was the fact we needed more guided plates, which have 20x20 angle stops welded to them.

We needed 9 of these to provide offsets to produce a smooth curve. We could have put one on each sleeper but I deemed that unnecessary work. Well, the extra guides were put down and we found when the rails were dropped into place we could not get 187 mm due to the guides which were originally set for straights (184 mm) being too restrictive.

Sounds like poor thinking but the fact was there was a week between both operations so continuity was lost. That's my excuse. It meant I had to grind off all the outside angles to accommodate the new gauge plate. It worked out OK and a smooth rail was produced. The second curve is now set up and will be welded this weekend. Our techniques are improving all the time.

During these hot afternoons I retire to the air-conditioned office and chip away at producing an assembly drawing of the 17m points. It is very complicated and I am working from Steve's sketches. After 2 weeks I have just about nailed it and will put assembly bubbles all over it to identify the detail drawings. Then we need volunteers to make the small components.

**Tony Jones**



Above: Tony Jones and George Palmer with the rail set up for welding in the jig.

Right: A completed 15m radius curve after being painted by John Hudson.

Photos: Milton Smith



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## WANTED / POSITIONS VACANT

**Blacksmithing Equipment** — The Society needs the loan of some basic blacksmithing equipment for a couple of days in the middle of the year. If any member can help, or has a contact that may help us out, please let Andrew Manning know.

We are planning to put on a school education day similar to the one successfully done several years ago. It will provide some income, as well as creating an awareness of engineering for some children and raising awareness of our facilities. More details of the activity will be given at the next meeting.

**Grounds Maintenance** — The leaf fall is continuing to build up during autumn, and the onset of winter with its rain and high winds is not far off. It would be of great assistance if members could come down for an hour or so and help rake up and move the litter. We have all the kit you will need, just bring your own gloves. Come down any Saturday or Tuesday morning.



Northern Districts Model  
Engineering Society Inc.

Track Site:-  
Vasto Place  
Balcatta  
Western Australia  
Site phone: 9349 0693

All correspondence to:-  
PO Box 681  
Balcatta  
Western Australia 6914

## Arbroath Miniature Railway Calendar



Above: The cover photo from the  
KMR Calendar.

Photo: Robert Marr



Kerr's Miniature Railway (K.M.R) at Arbroath in Scotland has been operating now since 1935. It is the oldest miniature railway still operating in Scotland, being founded by Matthew Kerr (Senior) who died in October 1979. Originally K.M.R. was built as a 7<sup>1</sup>/<sub>4</sub>" Gauge line but it was re-gauged to 10<sup>1</sup>/<sub>4</sub>" Gauge during the winter months of 1935/1936, due to the line's success! The passenger loading demands on the locomotives of the day dictated the need for bigger boiler capacity, hence bigger engines.

It was a successful family business in those early years, but became a hobby operation in 1977 after Matthew Kerr (Junior), then a full time teacher, took on its management and operation, along with the help of some willing volunteers. Sadly Matthew Kerr (Junior) passed away on 17 April 2006 and the line then vested in Matt's wife Jill and young son John.

One of the volunteers, Alistair Grant, is portrayed on the cover of the 2008 Arbroath Calendar. driving one of the K.M.R. steam locomotives, "Firefly". Not so

obvious is the fact that Alistair is wearing an N.D.M.E.S club badge on his cap (see left of inset photo).

This excellent photo was taken by Mr Robert Marr of Arbroath, (to whom we are very grateful for permission to reproduce the photo here). The calendar itself was sponsored by The Old and Abbey Church of Arbroath. The Abbey was founded in 1178!

For more information on K.M.R. please visit:  
<http://www.matthewkerr.wanadoo.co.uk/>

Alistair is the K.M.R. web-master. A booklet about the line written by Lawson Little (ISBN 0 9507 169 9 5) entitled "Kerr's Miniature Railway - Scotland's oldest small-scale line" is also available for purchase from K.M.R.

**John Shugg**

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