

STEAM**LINES**

NORTHERN DISTRICTS MODEL ENGINEERING SOCIETY INC.

October 2003

'Speedy Gonzales' on Track

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Your Committee

President Ron Date	9246 2835
Vice President Dick Langford	9408 0081
Secretary Andrew Manning	9446 4825
Treasurer John Martin	9448 8843

Committee Members

Doug Baker	9341 1630
Phil Gibbons	9390 4390
Steve Reeves	9354 1395
John Shugg	9246 9549

Safety Officer

TBA

Publicity & Events

Jim Crawford 9276 5464

Newsletter

Jim Clark 9446 5870

NDMES
PO Box 681
Balcatta 6021
Western Australia



An elated Stu Martyn testing out his new "Speedy Gonzales" with its first run on the Society track.

Photo: Ray Shersby

Stuart Martyn, a prolific model builder, has been constructing his version of the 5" gauge LBSC designed "Speedy" locomotive (see recent article on its boiler construction in the July 2003 issue of Steamlines).

Stu has recently completed the engine and it successfully underwent steam trials at the Society's track site at the last Club Run Day.

Happy steaming Stu!

CALENDAR OF EVENTS

Annual General Meeting	Club Meeting Room Vasto PI, Balcatta	8:00 pm	Friday 10 October
Club Run Day	Club Track Site Vasto PI, Balcatta	11:00 am—3:00 pm	Sunday 12 October
Public Run Day	Club Track Site Vasto PI, Balcatta	11:00 am—3:00 pm	Sunday 26 October
General Meeting	Club Meeting Room Vasto PI, Balcatta	8:00 pm	Friday 14 November
Club Run Day	Club Track Site Vasto PI, Balcatta	11:00 am—3:00 pm	Sunday 16 November

Minutes of September General Meeting

by Andrew Manning

The September General Meeting opened at 8:03pm with the President Ron Date in the chair, along with 26 members and two visitors present. Visitors Kaye Raebel and Peter Turner were welcomed to the meeting.

APOLOGIES — Andrew Manning, John Martin, Jim Crawford, Steve Reeves, Bob Brown.

MINUTES of the Meeting held on 8 August 2003 as published in "Steamlines" were taken as read. Moved B. Lawrie seconded D. Langford, carried.

CORRESPONDENCE IN —

South West Model Engineers Association (Bunbury)
2004 - 48th Convention details
Castledare Miniature Railway - 40th Birthday details
October 2003
Cinders & Soot
Wheel Chair lift Quotation - Cotterell Electrical
Jim Crawford: Ordered 2 x 20 litres Steam Oil
Jim Crawford, Char costing
Laso Advertising account to John Martin
City of Stirling - Account "

TREASURER'S REPORT

Treasurer's Report was presented with August Run Day Income. Details of each Run Day income since the introduction of public running were on display downstairs in the workshop.

GENERAL BUSINESS — Secretary's Report on wheel chair lift was read to the meeting. BMX may be interested in sharing facilities, informally sounded out their new President. Many NDMES members were opposed to the BMX gaining access to the new Club Rooms for social events.

Doug Baker indicated that the law relating to disabled access was changed 2½ years ago. Stu Martyn queried the original decision by the Committee to acquire the "incorrect" chair lift. Phil Gibbons spoke for the Committee decision at the time. Cotterell's quotation was for \$21,400 and funding options were considered to raise this level of funding.

Annual General Meeting

The Annual General Meeting of the Northern Districts Model Engineering Society will be held at the Society's Club Rooms, Vasto Place, Balcatta, Western Australia on **Friday 10 October 2003**, commencing at 8:00pm.

Ballot papers for postal voting have been sent to all members by email or by post. If you cannot attend the meeting, please send in your completed ballot paper.

Please contact Andrew Manning if you have any queries.

Finally as an approach had been made to the Human Rights and Equal Opportunity Commission for a deferment, the matter was left in abeyance until the deferment request was answered.

Outlined move to draft a new constitution and this had yet to be considered by the Committee before being introduced to the members for consideration.

Safety Officer: Ernie Redford proposed, seconded by Alan Mathie, that Doug Baker be appointed to the position of Safety Officer. This prompted some discussion as Doug Baker believed he had been accepted into that position at the last Committee Meeting. An email from Andrew Manning indicating he too wished to nominate and that Doug's CV had been held over, was read. Stu Martin proposed, seconded by Brian Lawrie, that Andrew Manning be Safety Officer. Agreed that the matter be resolved at the next Committee Meeting.

Alan Mathie requested that he be sent Drivers Exam booklet. In hand.

An independent 4 jaw chuck (donated by David Naeser) and the Quorn Tool and Cutter grinder castings (donated by Ken Austin) were to be auctioned at the meeting in November. An open bidding system is to be followed.

Bruce Weir-Smith, alluding to the financial issues over the Wheel Chair Lift, suggested that the Treasurer be advised now of any current projects and their associated costs involving reimbursement by the Society, to allow for their inclusion in the budget.

MODEL ENGINEERING — **Doug Baker** displayed a small section of aluminium rail of 7.25 Gauge with prototypes of Pan fastenings to plates to hold rails to gauge. A power press had been purchased to fold the sheet and subsequent treatment would have hidden countersunk screws under the rail.

Russell Dunn displayed a map of Train Mountain track and spoke of recent extensions to this major US miniature railway.

Bruce Weir-Smith commented about the Toodyay Society's acquisition of track and turntables from the Lake Leschenaultia site, as noted in the last issue of AME.

RAFFLE — Plier Set etc. Drawn by Kaye Raebel - won by Stu Martyn!

There being no further business the Meeting was closed at 9:07 pm.

Andrew Manning

President's Annual Report

The main two objectives for the Society over the last three years have been achieved — i.e. Public Running and the new Club House and Workshop.

These objectives were achieved by the dedication of the members, especially the retirees, who just pitched in and got on with it. Unfortunately, the pesky requirements for the wheel-chair lift are yet to be sorted out.

Public running has proved popular with both patrons and members alike, the proof of which is the number of members who sign on at each Public Run Day.

We have also erected the new boundary fences at some expense to us, but with considerable financial assistance from the City of Stirling. Again, the "old blokes" did the job, the last section being completed in oppressive heat.

Our elevated track is tiring now and work must commence shortly to make it right again. I personally would like to see a break from major projects for a while to let us catch our collective breaths and attend to these sorts of site maintenance issues.

Thank you one and all who have unreservedly pitched in over the past three years to get us where we are today.

Ron Date

Driver's Licence Update

Drivers Licences — Eight members have recently completed examinations for the issue of an NDMES steam locomotive licence:

Class 2: Dennis Lord, Terry Kain, George Palmer, Vince Devine, Stu Martyn (includes road locomotive endorsement) and Ray Shersby.

To qualify for a class 3 (unrestricted licence), Class 2 holders are required to accumulate a total of 3 hours driving experience, during supervised public running, within a three month period. Conditions apply at these times.

Class 3 (Unrestricted): Mike Rogers, Steve Briggs and Andrew Manning (road locomotive endorsement only).

Congratulations to the successful candidates. New licences will be issued as they become available.

Our patient, but long-stressed Stationmaster Ernie Redford, will soon have a pool of qualified personnel to provide relief for regular drivers on busy run days.

Any member, keen to become a licenced driver, may obtain the relevant examination papers from me. For those on the "Net", I can arrange to forward an electronic version.

Jim Crawford
Asst. Safety Officer.

Air Braking Systems

The air brake is the standard, fail-safe, train brake used by railways all over the world. In spite of what you might think, there is no mystery to it. It is based on the simple physical properties of compressed air.

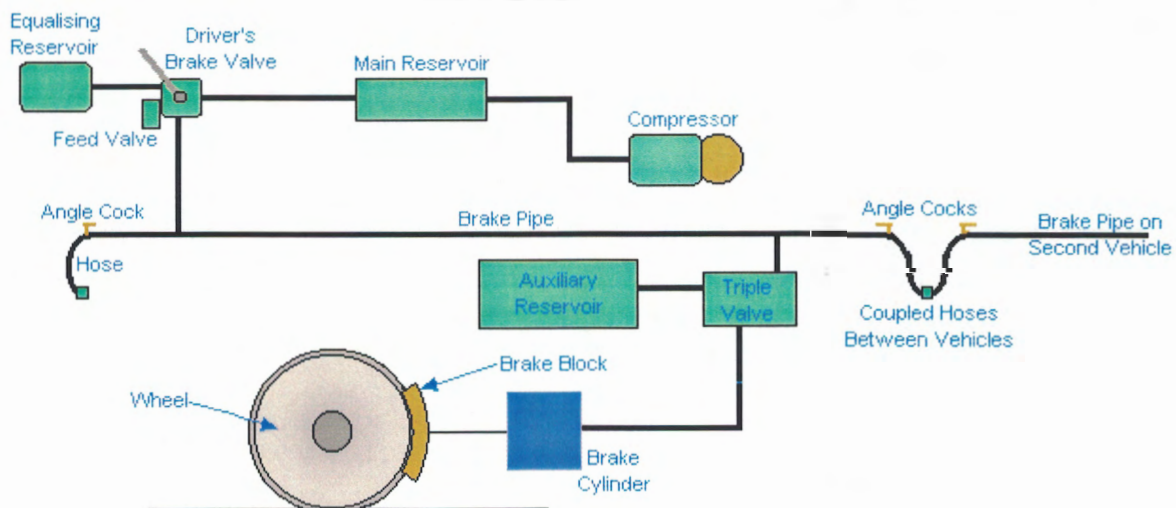
There are some excellent descriptions of train braking systems, complete with diagrams and photographs, on the Internet. For those of you who are interested, the

following links were kindly provided by Ernie Redford and are a good starting point to read up on it:

<http://www.trainweb.org/railwaytechnical/air%20brakes.htm>

<http://www.sdrm.org/faqs/brakes.html>

Note: Even if you don't have a computer or Internet access at home, you can always access the Internet at your local public library, or even from one of the "Internet Cafes" that you see around Perth.



Block Diagram of Basic Air Brake Equipment



Northern Districts Model Engineering Society Inc.

Track Site:-
Vesto Place
Balcatta
Western Australia

All correspondence to:-
PO Box 681
Balcatta
Western Australia 6021

<http://www4.tpg.com.au/users/jimclark>

Run Day Report

by Ron Date

We set a new Public Run Day attendance record this month, on a lovely spring day. We also had 26 members on site, most of whom were present all day.

David Hunter excelled himself collecting entrance fees and checking in Birthday Party guests, while running the shop and selling badges—such versatility!

At one time we had six trains in action, but unfortunately for George Palmer his C38 sprung a leak and had to retire. My C32 had a pipe break on the injector line

and had to work on the axle and hand pumps only. Hard work for Brian Lawrie and Steve Briggs but they stuck to it for the day. 'Speedy' had steaming problems which turned out to be clinker in the grate.

For those of you who prowl around the Steaming Bays, you would have noticed a beautiful Beam Engine built by Ken Austin. As usual with Ken's work, it featured lots of stainless steel — perhaps Ken will bring it in to our next meeting and tell us all about its ongoing progress.

The Blowfly worked away all day, nicely maintained by Ernie Redford who mans the station all day while others drive it.

If you happened to see Bruce Weir-Smith occasionally, you may have realised that he was extending the signalling wiring and wasn't just playing around in the bush!

A few more members have got Class 2 licences, several of whom need only a couple of hours more to be upgraded to Class 3, so soon you will have to queue up to get a drive — or finish your own loco off!

All in all, a great day.

Lastly, a reminder to members with locos, you should have your own driving car and on members-only Club Run Days, you have to either pay for, or provide, your own fuel, be it gas or char.

Ron Date



Left: General view of the busy station area during the August Run Day



Below: Steve Reeves and 'Helen' having a good run

Photos: Dick Langford

BRAZING DEMONSTRATION

Bob Brown and Phil Gibbons will give a practical demonstration of copper boiler brazing at the next Club Run Day on Sunday 12 October, between 10 am and noon. This follows on from the recent talks and articles on boiler making and is in response to the high level of interest shown by members in the subject. Be there!

If you are at a stage where you have something ready to be brazed up, please bring it along and Bob and Phil will help you with the brazing. Bring some brazing rods, or you can purchase them from Bob on the day.

FOR SALE BY AUCTION

Independent 4 jaw chuck donated by David Naeser.

Quorn Tool and Cutter grinder castings set donated by Ken Austin, with some additional parts donated by Phil Gibbons.

Both the above items are to be auctioned at the November General meeting, with proceeds to the Society. If you might be interested, please have a look at the items and be ready to place your bid.

WANTED

Horizontal Milling Machine—small to medium size.

Please contact Steve Poland on 9446 2922.

A Birthday Story

by Gerald Jones

Tony Jones' brother sent him this account of his birthday treat, reproduced here for your enjoyment.

I must report my day out. It wasn't a bad day; I enjoyed it really. Warm with some cloud about - a typical early summer day I suppose. We left here about 8:30am and drove to Worcester where we stopped for a cup of tea and a stretch. Then on to Kidderminster, a total of 62 miles. Worcester is about half way. We arrived there and drove straight to the main railway station - following the "Steam Train" tourist signs.

Once we had established where you board the steam trains, we had a walk around the empty, 10:30am streets to have a look at the town centre of Kidderminster. Not bad. Fairly clean for a pommy town. Modern layout with modern buildings well integrated with old municipal and commercial buildings. There were a lot of beautiful, Victorian, brick textile and carpet factories all clearly visible from just about everywhere you walked. So we headed back to the steam railway station about 11:05. Bon sat in the car and I went for a look-see at the station. Our train left at 12:00 midday.

There was a lot of activity on the two platforms with a full six-coach train waiting in each platform. The train nearest the car park (which I had to walk down the full length of - on the other side of the platform) was a set of LNER coaches looking well matched and excellent condition, a pale brown wood grain finish on all the panels. A shiny black loco was hitched up and ready to go. By the time I had walked around, entered the platform and walked down to the loco, she was ready to pull out - 11:15am.

The driver saw me watching and casually half sat, half leaned on the 9" x 9" wooden seat, gave a swift pull on the whistle chain and in the same movement, gave a small nudge on the handle of the regulator. There was a slight hiss and very slowly she moved. He was still watching me and gave another casual tap on the regulator increasing the hiss and developing that lovely chuff - chuff - chuff.

It was hair-raising to see that machine pull all those hundreds of tonnes of coaches out of there as easy as ABC. So now it was our turn. As I went back to the car to get Bon, our loco was passing around the train to hitch to the other end and change the tail lights over. So I watched this operation for a few minutes.

The driver was about 45 and the fireman was a female (I think!!) about 35 and enjoying being briefed by the driver. She did all the work and was complete with her chipped white enamelled billy can! The loco and the coaches were unreal. All were

like new. The loco was "Bradley Manor", a 4-6-0, number 7802. Green, black, red and gold. Absolutely lovely. The coaches were GWR. There was a dining set of two, which we were to occupy for our lunch on the run. The tables were set with white linen cloths, all the cutlery and glasses like a 5 star hotel. Then we were off at 12:00.

You wouldn't believe the amount of rolling stock and track equipment these people have. There were hundreds of all sorts on both sides of the track as we pulled out. It is a single-track line to Bridgenorth with about 8 stations between. We stopped at every one as this was the only place the other trains could pass each other.

The first stop was Bewdly. There were lots of sheds and workshops on the sidings there. And there were literally hundreds of workmen working on the rolling stock refurbishment there. There was a GWR third class coach being fitted out on the track next to where we stopped so I could see all that was going on in the coach. All brand new. And the finish on the outside was incredible - the outside was finished.

Anyway, an enjoyable lunch of salmon etc. all the way to Bridgenorth. At Bridgenorth we got out for a $\frac{3}{4}$ hour break. There was even more rolling stock here. There were two 0-6-0 GWR pannier tanks, idle on a siding. But they are in working order - number 5764 and 813, an old timer with the rounded top to the tank. I then started to talk to the owner of a Fowler traction engine that was parked in the station car park - number 13284, built 1913. It was a ploughing engine and he had had it since 1971 when he bought it off the original owners. It was still working on the farms at that time. And he said it has worked just about every week since. It was parked there as an added attraction to us tourists. It wasn't going.

So we got back to our seats and commenced the downhill run back to Kiddi. We had the tail coach on the way up but had the loco headfirst next to us on the run back. A lovely day. Very interesting. I am collecting all sorts of stuff to give you but I am afraid you will have to wait until we return before you see them. It will be worth the wait. So that was it. "Another 21 years, the third".

ARTICLES WANTED

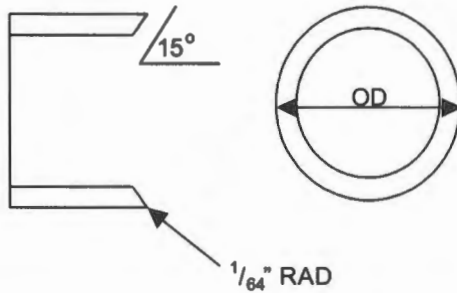
Articles, photos, progress reports, or any items of interest to model engineers are urgently needed for future issues of Steamlines. If you have something you think may be of interest to other members, please let newsletter Editor Jim Clark know.

Gasket Making Part II

by Phil Gibbons

Continued from Gasket Making Part I in Steamlines Supplement September 2003

Making a wad punch. To make a cylinder cover gasket properly, you will need to make a wad punch to remove the centre of the gasket cleanly. This can be made as shown in the diagram below.

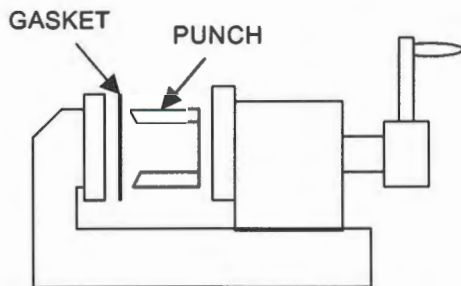


The OD of the punch is the smallest size of the undercut that you made in the bore register of the cylinder cover (see part 1 of this series). Taking a vernier size reading of the undercut will be fine.

For material, 4140 is good, mild steel will do at a pinch. Commercial punches are hardened, but they are used by fitters with gympies, ours are not.

The best results I have obtained are with about 15° on your compound slide and with a small 1/64" radius on the cutting edge – just use some emery to round it off. The back of the punch must be faced square.

How to use it. Do not use a hammer! Use it in your machine vice with flat ground jaws as shown below.



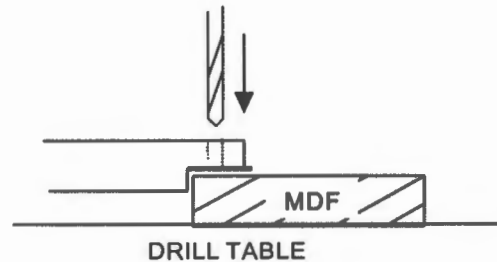
Cut the gasket material a little larger than the outer diameter of your cylinder cover, place it under the punch and close the machine vice gently on the punch and gasket.

Now gently tap the vice handle and it will build up a little pressure. Tap a little more, and you will feel the punch pop through the gasket. Stop! Don't be tempted to give it a final bash at the end or you will damage your punch.

Repeat for all four cylinder cover gaskets. Once you have done them all using this method you will love it – quick, easy and accurate.

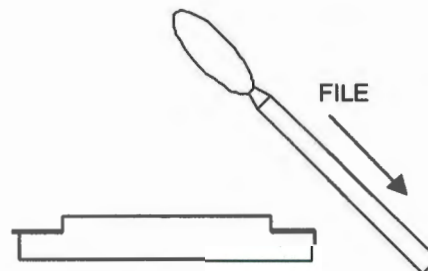
Remember how you put a tyre on a push bike, by sliding one side down into the centre of the rim. Do the same with the gasket, sliding one side down into the undercut in the cover, then press it down firmly.

Cutting the screw holes in the gasket. Put a piece of scrap MDF wood on the drill table. Use the same size drill as the holes in the cylinder cover. Press down firmly on the cover and drill through the gasket and into the MDF, using the hole in the cover as a drill guide, as shown below.



Repeat for all the other cover holes, using a new section of the MDF for every hole.

Trimming the outer edge of the gasket. File off the excess gasket material where it overhangs the cylinder cover using a nice sharp file, holding the file at about 45° to the job. Hold the cover in your fingers and not in the vice.



Fitting the gasket. Just lift the gasket away from the cover slightly a bit at a time and pour some steam oil onto both faces. Leave it to soak in for an hour or so, and then fit the cover and gasket to the engine.

In the next instalment we will look at making gaskets for steam chests.

To be continued...

Phil Gibbons