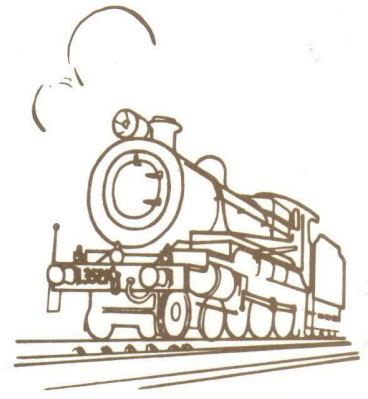


Sydney Live Steam Locomotive Society

Anthony Road, West Ryde, N.S.W.

'Newsletter'

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February 2022



Simon's B1 'Gazelle' superbly painted and finished seen here for the New Years Eve run.

The B1 Story

Simon Collier

I discovered the hobby of model engineering and miniature steam locomotives only because I happen to live near the club at West Ryde. I happened upon running day operations, observed through the fence, a couple of times over the years when food shopping. Eventually, one day I paid my money and went in. I was amazed and delighted by the magnificent engines, with the authentic smell of coal and hot oil, and safety valves blowing, not that I knew what safety valves were. I asked someone about how the engines were made and was advised to come along on a Saturday and talk to members. I remember steam locos in service. I loved them but knew nothing about them. The rare green ones were a treat, and I preferred the ones with lots of stuff whizzing around to the ones with not so much stuff whizzing

around. I loved the round port hole windows. I knew more about the names of British engines from the old Tri-ang catalogue my brother had. I remember the 9 o'clock and 4 o'clock steamer going through Guildford station and level crossing when I was a kid. From my Second and Third Form classrooms, 1969 and 1970, I was lucky enough to have an unobstructed view of a good stretch of the Western Line between Westmead and the Bridge Road underpass. There were occasional steam trains and also diesels which were a joy to see.

One non running day Saturday in June 2006, I did enter the members' gates to talk about the engines. I approached a group of blokes and asked about how the engines were built. I think they might have included Barry Tulloch, Bernie, Henry and maybe John Lyons. I was told you need a lathe and a mill (no idea what they were), a set of castings, a grinder, tools, and later, heating equip-



ment for helped enor-
boiler mously of
making. I course and it
started at- was only
tending on years later
Saturdays, when it
mostly sitting in the
club house investigate
talking to the dials.
Bill Rich- How primi-
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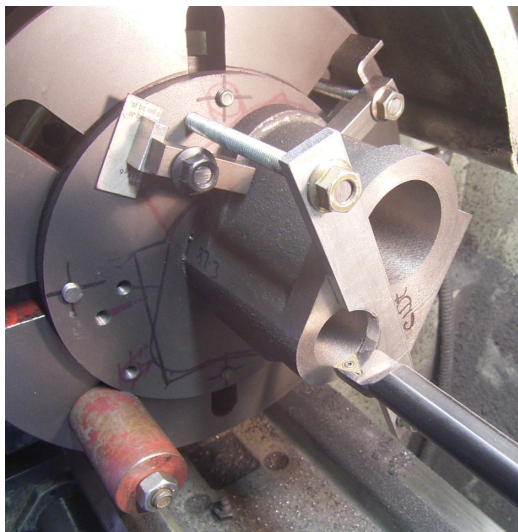


usual debate about what to build first, a beginner's engine or something you like. I decided I wanted a proper tender engine, and castings, plans and a build series of articles had to be available in Australia. I decided upon Martin Evan's Springbok design.

I did a lot of reading and a lot of talking and cleared out the garage and lined the inside of the corrugated fibro flat roof. At the Hare and Forbes sale that November I bought a 6" geared head Chinese lathe with digital readout and tool package, a Sieg SX3 mill drill, and an 8" grinder. The machines were delivered on a truck and installed in the garage. The lathe looked huge and terrifying and I did not dare touch it until Bill came over and got me started. I bought the castings and plans from Winters', but the castings were horribly chilled so I had them heat treated. I was none too pleased by the need to do this as, of course, the concept of chilled castings was new to me. Indeed the concept of castings was new to me! I borrowed the magazines from the club and had Sue

not have a DRO, so that kept me honest with dials. A replacement readout was quickly, if begrudgingly purchased. I found metal work easier than the woodwork I was used to, which actually required skill.

The lead of 26 thou was thought by Bill to be excessive so the valve gear was modified with the help of the guru himself, the late Don Aston, using the Wallace simulator. Lead was reduced to 6 thou but at the expense of unequal leads, which made valve setting slightly nightmarish. In retrospect I would simply have used the valve gear as designed as it had very good events, and in practise, I doubt the lead would have been noticed. The steam chest liners were re-designed for proper piston valves with rings. The valves are not perfect as I made the beginner's mistake of assuming the parting insert I used for the ring grooves actually cut grooves to the nominal tool width. One day I might make new valves so that the engine notches up as sweetly as the design says it should.



photocopy them, in stages, at work.

Peter Dunn kindly drew the main, bogie and tender frames in Autocad for me. These were water cut. I learned CAD basics and had the rods laser cut, and the expansion links were wire cut. I took to machining like a duck to water, find-

The boiler was a whole new project, but a challenge which I enjoyed. I modified the design slightly to comply with the Code, dropping two tubes to get the 3 mm ligaments. The regulator was as advised by Barry Tulloch. Mark Gibbons helped me with several of the heat ups, manning the second torch. When I got a bad joint of the butt strap, it was over to Tulloch's for Barry to get me out of trouble with his oxy-acetylene and experience. These trips usually resulted in a nice lunch provided by Elizabeth. Barry also set up his lathe jig for quartering the wheels early on in the project.

The boiler passed its test with only a little pepper for calking, a tip from Peter D. Stainless radiant superheater elements were purchased but making the headers with multiple copper elbows and about 40 silver soldered joints was a horrendous job. With 7/8 flues, there was no wiggle room with four 5/16 elements having to slide home and the wet header bolts line up. The front end proportions were as calculated by Julian Atkins in the UK after I sent him the numbers for tubes and grate area.

ing it enjoyable and none too difficult. The digital readout

The engine took exactly 15 years to build. Way too long, but

Editorial

With our first Newsletter for 2022 we could well wonder where this year will take us. Despite the disruptions of the last two years we have still managed to make reasonable progress with the maintenance and development of our grounds. Mick and our executive have had to make decisions that we could never have imagined all following health advice aimed at keeping us all safe. It will be interesting to see if we have to maintain the online booking system and the operation of the kiosk; will it have to stay closed? As the Government adjusts the regulations we can hope that we all stay well and keep safe.

Despite all this we have some excellent models on the way so we have something to look forward to. We have seen images and previews and it will not be long before the finished models are at the grounds. I think the most important issue for the Society is that all members can make a big contribution to make the time to lend a hand with whatever work is on hand.

Fill in Editor. John Lyons



I had to learn everything as I went, along the way I built the majority of Nick's Blowfly, a couple of Gauge 1 locos, various tooling projects including



some very demanding ones. I hated the most, probably because it was hand work that required skill, unlike dialling up a cut on the lathe. I bought laser cut brass tender and cab kits from Model Engineers Laser. I think building up the tender kit, with tab and slot, and the necessary accurate bends, was more difficult than the traditional method using sheet and angle, and Andrew Allison reckons the same. It is also only 1 mm brass instead of 1/16. I procrastinated for nine years then built the tender kit. I found soft soldering extremely difficult, and sealing of the tender was achieved with a petrol tank sealing kit, designed for pitted and rusty motor cycle and car petrol tanks. I recommend it. It made a sieve watertight.

I ran the engine, unfinished and unpainted and without tender for about nine months, including some running days. It went very well with no problems. Eventually I stripped it down for finishing and painting. Painting a lined apple green LNER tender locomotive is no mean feat. It was an ordeal, with disasters rivalling those in Chris Vine's book, "How Not to Paint a Locomotive". However I didn't drop my tender to the floor out of an inadequate holding jig as Chris did. I won't go into the saga of trying to have the green matched in automotive enamel, and use it before it went off in the tin, and the difficulty of spraying said enamel despite buying a quality spray gun. Suffice to say that any future locos will be two pack polyurethane, taking reasonable safeguards.

The lining was difficult and unpleasant. I relied mostly on Tamiya masking tape in various thicknesses. I've written about the wheels previously. The letters, numbers and tender panel lining (the panel perimeters were painted) were Fox Transfers. Expensive, something like nearly four pounds for each numeral. I took the precaution of buying almost twice as many lining corners and straights as I needed, reckoning that I'd stuff up a lot before I got the knack. I did just that and by the end had very little spare. It was very frustrating, but I took my time, accepted and corrected mistakes, and got there in the end

pipes and coupling hooks took ages but I gave myself a deadline of New Years Eve to run the engine at the club. The 3 weeks leading up were frantic, finally adding the etched (Andrew's toner method) name and builders plates the night before.

I got many compliments from members but the gloss was taken off somewhat by the fact that I simply could not reach the controls at all, reaching over the tender. Worse, the gloss was taken off quite literally on the running day when I derailed on the elevated with the left hand drivers jamming between the 5" and 3-1/2' rails, removing my lovely lining! The cause was too soft springs causing the axle boxes to be hard up in the horns, so effectively zero suspension.

The springs were replaced and extension controls were made, but I don't like driving with the latter. Too remote and no feel. Scary in fact. A weekday run with Garry and his B1 on the Outer, and without my tender, proved the springing. With some spirited runs through the station and all the points, the engine felt very sure footed and secure, even at silly speeds. I can fix the wheel paint and lining but it won't be as good as new unless I remove the wheel sets, and that isn't going to happen in the near future. The tender is a bigger problem. I could modify it to sit on but it is not a big tender, or persist with extension controls. The former would restrict me to the ground. Why didn't I anticipate decrepitude and build a tank engine?

All in all, I am extremely happy with the engine. I have come a long way from not knowing why engines puffed, or what a milling machine was, and the end result is tremendously satisfying. I have great respect for anyone who

builds an engine, be it a Tich or a Blowfly or an AD60, as I consider it a truly worthwhile achievement.



with excellent results. Re-assembling the painted loco, and making and adding bits like oil boxes and sand fillers, lamp irons and steam heat

December Running Day.

After our Covid-19 lockdown December 15th was release day when things could start to return to normal. With on line bookings we had enough takers to open up for the public for the December running day. It was a hot day as we would expect for the first summer run. We had a good crew on hand to set up for the day after some very hard work over the previous weekends to clear the grounds of the vegetation that had grown during the lockdown period. Trimming around the elevated took John L a bit longer than usual with some of the trackside bushes having got well out of hand. Ross B was there to assist even though he was unable to stay for the afternoon. We were prepared for seat



J as guard. They provided a good service for the afternoon. Arthur H was intending to run the Hurst Mountain 4-8-2 but a problem with a tender bogie saw the 4-8-2 returned to loco and booked for repairs.

On the elevated we had the blue car set with Evan driving the heritage 2-8-2 when we started and was eventually joined by John T with 2-8-0 Z2904. John L started as guard and was later relieved by Jo Anne T.

Garry B steamed B1 "Impala" 4-6-0 but had trouble with the brake ejector and ran with only one car for the afternoon. The loading was reasonably easy to handle and the station was attended to by

Jo Anne, Paul T and Wayne F.

Track Superintendants were Mick M and David T and the signal box was operated by Mark G, Mike D and Warwick A. There were some minor issues with some point mechanisms but these were sorted very quickly. Elizabeth T was on hand to hand out some cool drinks that were greatly appreciated.

After such a long break from public running it was good to get into the swing of things again.

cleaning and other surface cleaning while the public were on our grounds. John H was set up at the gate with his laptop and scanner to check the details of our patrons. Fortunately there was a power point not far away so multiple extension cords were not needed.

As we were getting ready after lunch John S handed out masks for those who did not have their own.

Before starting Arthur H tried out his French locomotive to test the clearances on the curved sections of the track and has discovered that some more work is needed.

On the inner GL Ray L ran C3803 on one train. Very successfully till about 2.30pm retiring to escape the heat. The second inner train was the Pullman set hauled by Mick's Shay with Scott M at the regulator. John S was guard for the afternoon. The Shay ran well and handled the passenger requirements with ease after Ray had departed. The stations were attended to by Craig D and Chris D on the inner and the outer was covered by James, Tony K and David T.

On the outer track we had Graeme K with pacific 2401 double heading with David L and the CR GM's with David



Diary

26-27 February	Orange All comers weekend
4-6 March	LMLSLs Birthday Run at Edgeworth
19 March	Public Running Day
15-18 April Easter	AALS Convention-Wagga Society of Model Engineers

Note: Any post convention runs not known at this stage.

16 April	Public Running Day
5 May	Board Nominations close.
21 May	Public Running Day
4 June	President's Breakfast

January Running Day.

Our first 2022 running day was able to proceed even though some of the freedoms from the 15th December had been reined in. With limited online bookings we knew we could expect a relatively easy afternoon which was good because of the heat and the excessive humidity. There was some cloud and even a few spots of rain. Dennis O'B cleaned all the passenger cars to prepare them for the afternoon. David C was able to steam his 2½" gauge 2-6-0 and run on the elevated with some success after some work had been carried out. Also on the elevated Wayne F was able to complete a hydro test then a steam test for the 0-4-2 "Ajax". This locomotive was constructed by the late Ted Esdaile and last held a boiler certificate in 1984!

We were to have double green B1's with Simon's magnificent Gazelle ready for its first run in revenue service double heading with Garry's Impala on the blue car set. Before public running began the two locomotives were coupled up to the blue set. It was not long before Simon had some teething troubles and was forced to retire the locomotive back to the elevated depot. While we were expecting an easy afternoon we found that a well attended



fifth birthday party was set up at the top end of the ground just across from the elevated station, we had a lot of passengers all afternoon and we even directed some waiting to the empty outer GL trains. On

starting out with our passenger hauling Garry had some trouble with his fire and with Wayne as guard struggled on the bank. John L replaced Wayne as guard allowing him to fire up the 0-4-2 and then double headed with the B1. This would have to be one of the strangest locomotive combinations we have ever seen on a SLSLS running day and certainly not seen in real life. The locomotive combination looked interesting and ran exceptionally well for the rest of the afternoon. We did try to manage the passenger loading so as not to be expecting too much of the locomotives. The station was attended to by Bill P and



As for last month John H was again gate keeper checking in all of our online booked patrons. The signal box was staffed by Mike D, Martin D and Warwick A (some of the time). Track superintendents were David T and Mick M. Mick had the Shay in loco but it was not steamed as the loading did not demand its use. A couple of times through the afternoon Mick came round handing out cold drinks. These were greatly appreciated as the humidity was probably the

Simon and Gazelle leading Garry and Impala. Photo: Ross Bishop



Paul T. Carriage seats and end boards were cleaned at the end of each lap.

On the outer main the Allison C3609 was running three cars and van. With Andrew A at the regulator there was a problem with slipping early but after some track sanding the locomotive settled into its stride. James was guard on



this train. The second train, a full car set, was hauled by David L and his pair of CR GM diesel outline locomotives. This combination ran well all the afternoon with John S as guard. The station attendants were Peter D and David J.

The GL inner had one train and this was Ross B and the 0-6-2 Fowler "Toneya". This loco was coupled up to the Pullman set and with Paul B, I think, as guard ran without fault all afternoon. The station was taken care of by Chris D and Craig D.



David T, John L, Simon C and John T.

Early in the week the skip bin was removed from the grounds, being loaded in about four minutes, a much quicker disposal than the first lot. John L stacked away the sleepers for reuse and took one bar-

row load home to work on during the following week. While the demolition was going on Simon was welding components for the beam alignment assemblies for the new track. As with all us amateur welders Simon found the quality of his welding was getting much better as he worked along. Later in the day David T was cleaning up the welds with an angle grinder. David L spent some of his time cutting the brackets off the old anti-tip rails so the tube can be repurposed for the new track. At least while this Sunday was rather hot we did not have the excessive humidity that we endured for the running day

January had a fourth and fifth Saturday giving an extra week between running days. For the fourth Saturday John L returned the sleepers he had taken home for drilling with new holes and a new drilling jig. He spent the rest of the morning preparing more sleepers. The drilled sleepers were taken to the signal box deck where all the track panels had been stored. Mike D had taken care of painting the underside of the steel sleepers. James and young Harrison Murray set to work with battery drills fastening the plastic sleepers in place to the expansion joint assemblies and the track sections that still needed them. Work continued levelling and setting the piers in place and attending to the interfaces of the new to existing track.

Works Reports.

Elevated Track Renewal, Stage Two

The big task by the time you are reading this Newsletter was the replacement of the next section of the elevated track. On the Sunday following the January running day there was a good team on hand to demolish the old track from the end of the first track replacement behind the signal box to the end of the eastern retaining wall. The anti-tip rails were removed first and then the sleepers un-screwed to be re-cycled for the new track work. There were three barrow loads of sleepers! John H had arranged for a skip to be delivered and positioned at the unloader so the beams when lifted could be placed on a wagon for delivery to the skip. The early ones were run directly into the skip and the later ones were lifted in by John H with his loader. Posts were demolished with sledge hammers and the rubble moved to the skip as well. By the end of the day all the rubble that needed to be removed was in the skip. The new piers were in place waiting to be levelled, they were numbered so we knew what went where. The steel beams were placed in position as well.

There has been considerable other activity around the grounds including repairs to the compressor by Mick, sleeper renewal by Tony, Peter, Paul and Craig, and much work on the gardens and grass that has grown quickly and wildly in the wet and warm days we have experienced. Seat timbers have been replaced, signal maintenance has continued by Martin, mowers have been broken and fixed (thanks

Graham T had prepared morning tea for the work group and later took care of cooking the sausages and onions that were enjoyed for lunch. The working team included Andrew and Warwick A, Mike D, David L, John S, Mark G, David J,

Below: Ross & Toneya on the January running day. Right: The Rollin' On Site man's contraption that rolled our new elevated beams.



Elevated Track Rebuild—Stage 2

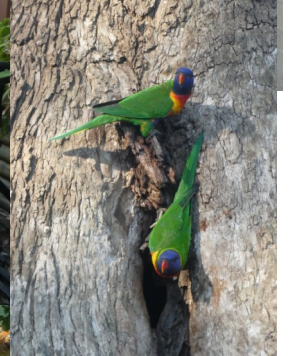
The work started on Sunday 16 January and hopefully by the time you read this it will be in service! It is certainly an all hands on rebuild to 75m of railway. The 40 old beams were removed in a matter of hours, the piers were broken off and by the time we packed up on the first day the piers were laid out and some channels placed. The following week saw all channel sections bolted up and levelling commenced. The following week completed the levelling and the first track was reinstalled. This was completed over the following weeks. A very BIG THANK YOU to all those members who took part. Only 275m to go!



Christmas an



and NYE Runs

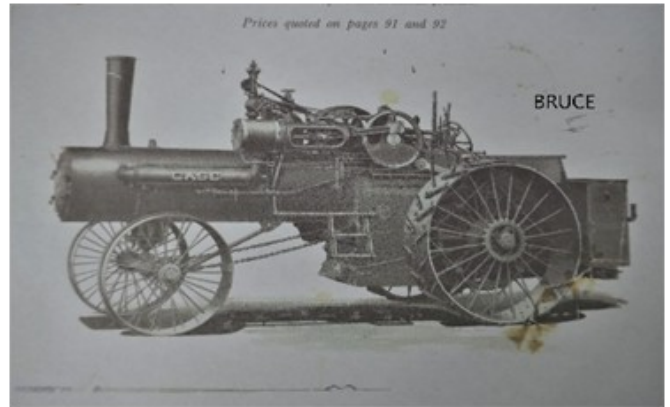


Chris Denton on Bruce's Bits

Part 3 – Bruce's Aorta – Engine Frame

With Bruce's cylinder sort of under control, it was now time to turn my attention to the connection between the cylinder and crankshaft. Case call it the Engine Frame.

Of all Bruce's bits and pieces this component gave me the most angst. On the original machines this is a complex cast component that ties the cylinder to the main crank-end bearing as shown in the attached photo (Photo 1). This means all the cylinder forces are taken by this element and the boiler only has to support the weight of the cylinder. Given its critical loading, it looks rather lithe on the original but it has to be strong and rigid. So how to make it? Casting is beyond my capability although the scary efforts of enthusiasts on U-tube make it look easy, if not positively dangerous. I am fairly good at woodworking so I could make up the form OK and with enough monetary incentive some commercial enterprise may have a go at it but that's not the way it went.



and cranked up the lathe. A large pile of shavings later I had the basic "tube" (and mount) shape turned and bored out. The cross slide is bolted to the cylinder using the end-cover bolts, hence the recessed locating screws to retain the cylinder cover mentioned previously in Part 2b. The OD of the cross slide "tube" was not big enough to match the cylinder flange so a ring was machined and silver soldered on.

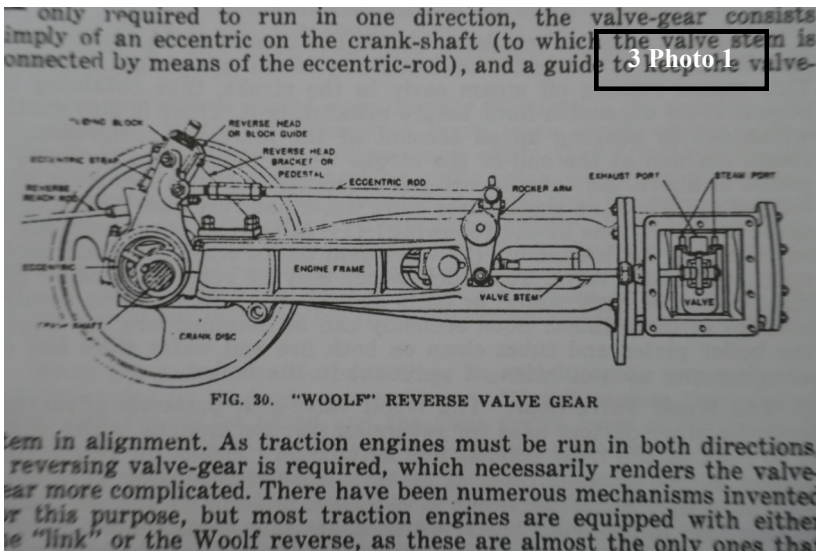
Then slots were milled in the cross slide to allow access to the cylinder gland and crosshead. The result is shown in the attached photo (Photo 2).

It is not clear exactly how the cylinder and boiler are connected other than by a bracket fixed to the boiler and attached to the cylinder. Even though Bruce's components are over-scale, there still seem little material to attach the bracket to the cylinder. Just another distraction to blissfully ignore until it becomes critical.

It was my intention to use CI for the remainder of the component on the assumption it could be silver soldered – but that notion was shot down when someone pointed out the silver soldering was not an option. The piece was already looking pretty massive so bolting was out, some fancy screw cutting may have worked but eventually I resorted to checking my machining stock and discards for suitable victims to silver solder together. I came across

an assortment of bits including a large diameter thick chunk of bronze off-cut with a big hole in the middle. With a considerable amount of contortion and some imagination, I figured I could (just) extract enough material to do the job but it may fall short on the aesthetics. As I was tired of paying good money for handsome pieces of material that I then proceeded to turn into scrap, I decided to go with what I had and take the visual hit. The result was a "Heath Robinson" collection of parts shown in the attached photo (Photo 3) that I prepared for silver soldering as per the attached photo (Photo 4).

This gave me the basic shape for the entire frame, including the cross slide with the valve gear pivot mount, and valve gear actuator mount (Woolfe type) and main crankshaft bearing mount on the spacer part. The assembled component required extensive machining. To assist alignment and mounting to the drill/mill table, I made up a BMS mandrel to fit the cross slide bore. It proved very handy although it remains to be seen how "aligned" it is. As the bottom half of the crankshaft bearing is integral with the frame there is limited scope to fiddle if its not square and true. It is a neat looking set-up but it could come back to bite me in time.



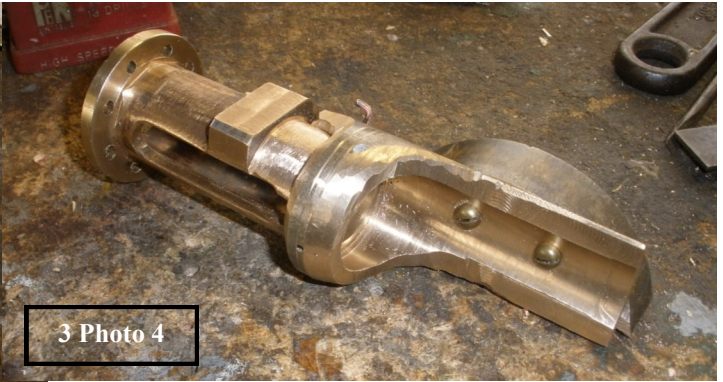
I decided to make it in a couple of pieces. What I call the cross slide "tube" (and valve gear pivot mount) was one part and the "spacer", including the crankshaft bearing and valve gear mounts, the other.

The cross slide "tube" seemed straightforward until I realised it had to have a boss mid length to mount the valve gear pivot. I knew there would be joining of parts but I did think to make this one of them so I procured a chunk of bronze bar sufficient to include this mount integral with the "tube"

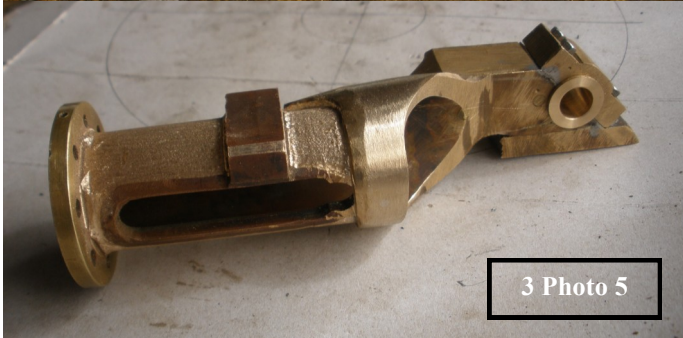




3 Photo 3



3 Photo 4



3 Photo 5

Something else to worry about later.

The final assembly is shown in the attached photo (Photo 5). I am reasonably happy with the result except that it is pretty massive. All in keeping with everything else to do with Bruce, I suppose.

It has been given the “sand-cast” finish with the Dremel as per other components.

Learning from this episode – Being tight with your money is not likely to optimise aesthetics.

Part 4a – Bruce’s Feet – Front Wheels

I am not a fan of repetitious work and Bruce’s wheels seemed to offer that prospect, especially the rear wheels. But they had to be done sooner or later so why not now. I started with the easiest ones, the front wheels.

I do not have a lot of actual dimensions to work with but the 1912 catalogue gave the width and OD of the front wheels (as if that was going to seal a sale?). I sourced some MS flat bar that was quite close to the correct width

but was a bit generous with the thickness. Close enough, as the thought of milling away a lot of metal was not appealing. I cut the bars to the correct length to give me the right diameter, and did the same with the material for the rear wheels. I was tempted to have a go at rolling the wheel rims (like the pun?) but decided to hand it over to a professional so I would get something round and did not end up with flat spots at the ends of the rolled bar. I explained my expectations in some detail to the professional roller. Lets just say that, in the end, I paid money and got flat ends! Nothing that a large hammer could not improve. I belted the rims into shape as best I could and welded them up.

I sourced some CI stock for the hubs and BMS round bar for the spokes. There are 32 spokes in each wheel with a locking nut on each at the hub. That meant fitting a lot of nuts in a relatively small space, so I used BA “one size smaller” nuts. Trying to match up available BMS stock to BA nuts resulted in spokes that were a bit oversize. Seems to be a recurrent theme with Bruce. Most pictures of Case tractors show slender flimsy-looking wheels. Mine aren’t!

The dreaded drilling of the holes in the rims was next. Each wobbly rim required 32 holes drilled and counter-sunk with the row on one side of the rim offset with the other side, and at approx. 4.5° off vertical. With my drilling track record the possibilities of messing something up were limitless. Eventually a jig was made and the holes were drilled. A few holes were a little bit “out” and I only broke one drill bit, so I call that a win. Fitting the tyre was the final step and even this was contentious. Some tyres appear flat and wide and others tall and chunky. I went for tall and chunky in keeping with the general theme of the wheels. They were bolted on so they are removable/replaceable if/when I wear them out - as if that’s a possibility. A completed rim is shown in the attached photo. (Photo 1)

Now for the hubs. I turned the hubs from CI stock without much problem but as already discussed they are a bit obese in all aspects. But hey, I had to fit 16 nuts adjacent to each other plus a small allowance for gripping them, on each flange. The centre was drilled and fitted with a bronze bush at each side for the axle. Drilling the spoke holes was to test my legendary piercing skills as they were close to each other, offset by half a pitch from one side to the other and off vertical by 4.5° to match the rims, AND true to size so that could be tapped. Accurately setting out the holes was probably the worst part. Eventually the holes were drilled more or less in the correct loca-



4A-Photo 1



4A-Photo 2

BMS caused by the pickling, mount spoke in 3-jaw chuck, dress tapered end with file, sit back and admire one spoke. Repeat 31 times for EACH wheel. Truly a labour OF love not a labour TO love. Of course I “batched” the operations to speed up the tasks but you get the drift that it was a pain in the butt. The sequence of machining stages for the rear wheel spokes is shown in the attached photo (Photo 3). The front wheel spokes are the same except for sizes and one less machining operation required before threading. Also attached are a number of photos showing various fabrication activities. (Photo 4, Photo 5, Photo 6)

From a dark recess at the back corner of my brain I got the idea that a lubrication point in the centre of the hub would be a nice touch. As the hub rotates a simple oil cup would not suffice so I decided to make small brass cups with a screw-down cap for each hub. I have to admit it was one of my more mis-

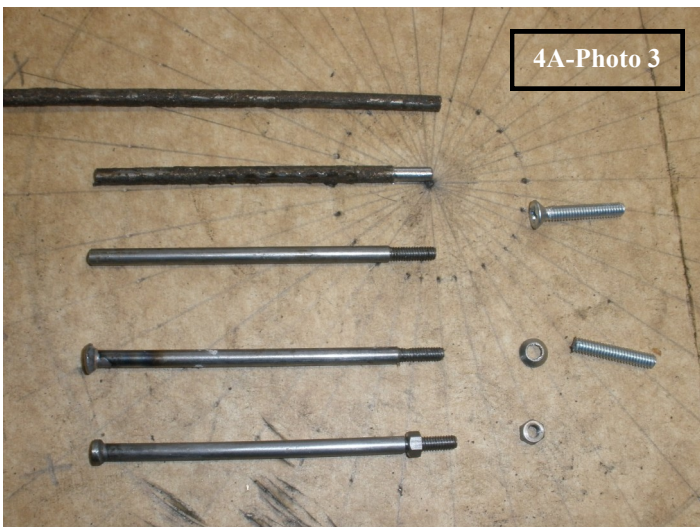
tions and tapped 6BA. No broken drills or taps – another win! A photo of a hub is attached (Photo 2).

The dreaded spokes awaited. I had plenty of 1/8” dia BMS and was going to need it. The spokes were approx. 60 mm long with a 6 BA threaded section at one end and a tapered section at the other. The rod was cut to length after calculating and measuring its required length a dozen times so I did not end up with a lot of too long or too short useless bits of rod. Then I threaded the end to the right length with a die. A much smarter person than me suggested a way of making the tapered end - take a steel countersunk 1/8” Phillips head set screw (approx. 1” long – not critical) and put it in the lathe’s 3-jaw chuck with the head facing out (i.e. grip the threads). Then drill through the head with a 1/8” drill until the head comes off and is captured on the drill bit. Take this tapered piece and silver-solder it onto the spoke. Sounds easy and it basically was. However, there was a lot of fiddly work involved. For ONE spoke the routine was;- Hacksaw to length, tidy-up cut ends with a grinder/file, mount in 3-jaw chuck, thread one end, remove, mount set screw in 3-jaw chuck, drill off head, dress head with a file, solder head on to spoke, pickle joint, clean up the rust from the

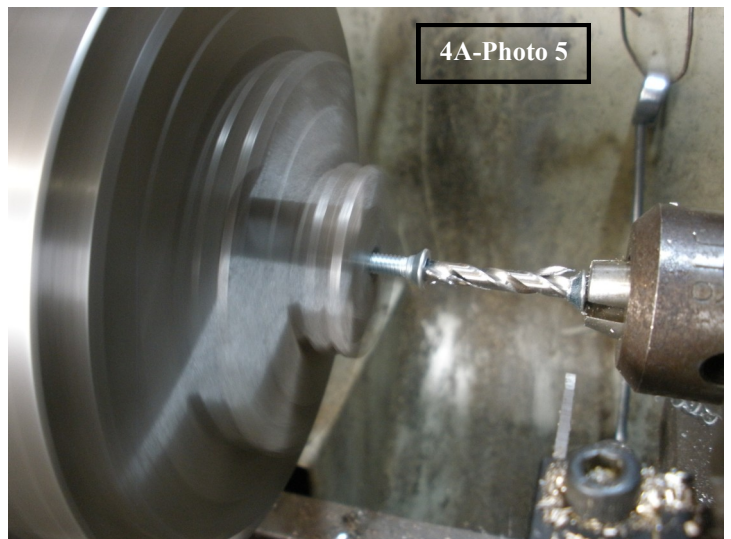


4A-Photo 4

guided adventures. I drilled and tapped the mounting holes in the hubs and after several attempts I did eventually make a cup for each wheel. It was a bit of an achievement given the dearth of material and tiny threads. The tragic end to this tale is that when the wheels are assembled the units will be virtually in-accessible because



4A-Photo 3



4A-Photo 5



4A-Photo 6



of the density of the spokes, so they are effectively useless! Now I have the dilemma of whether I repeat my folly with the rear wheels, for consistency, or be a bit more pragmatic and quietly leave them out. Do you think anyone will notice?
 Before you start counting, there are approx. 120 individual pieces in each wheel.
 Learning from this episode – 32 is currently not my favourite number – multiples of 32 even less so.



Election of our 2022 Board – Request for nominations

Our Annual General Meeting will be held in June. Our Rules require **all** Board Members to retire each year at the AGM. This permits **any** member to nominate for **any** board position for the incoming year. While the group of people willing to apply their energies to Society Management tends to remain fairly stable, we have been fortunate in recent years to have had the benefit of new Board Members in the role of Secretary and Director.

New Board Members provide an opportunity to expose the issues facing the Society to fresh ideas, and this is vital for longevity. We therefore encourage all interested members to put their names forward.

The Board comprises of 7 positions, with the present holder and their intention noted:

- President (Mick Murray – **vacating position**)
- Vice President (Evan Lister – renominating)
- Secretary (Mike Dumble – renominating)
- Treasurer (John Hurst – renominating)
- Director (Ross Bishop – renominating)
- Director (David Lee – renominating)
- Director (Neal Bates – renominating)

It should be noted Mick Murray is retiring from role of President, leaving one Board vacancy.

Please consider this opportunity to contribute to the future of the Society as a Board Member.

Nomination Forms are available in the clubhouse and can be provided by email on request. Please follow the instructions on the Nomination Form, which must be given to Mike Dumble by **Thursday 5th May**.

Return of the 4F!

It's the 4 December and Gary Esdaile hands over the 4F to Mike Dumble. A week later, on 11 December the boiler ticket had been reissued and it had its first run in 42 years!

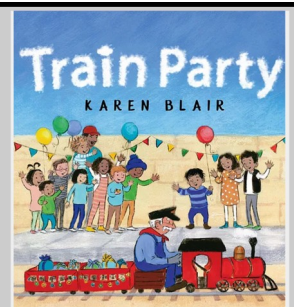
The 4F was built by Gary and his father Jack Esdaile and had its first steam test in 1976. It is a Don Young design which was serialised in *Model Engineer*. Mechanically it ran very sweetly!



Book Review

Train Party-Karen Blair

This one is a bit unusual. This is a beginning readers children's book about a picnic at a miniature railway. What makes it unusual is that it is Australian! The author and illustrator lives in Fremantle and I would say has had a visit to the Castledare Miniature Railway. While not mentioned by name, some of the scenes seem quite familiar and if that's not enough hints, the station name is Castlevue. If you have any 0 to 5 year olds, and want some early train indoctrination, this could be the one.



Members Past- Mike Tyson

Mike Tyson passed away on 20th December 2021.

Mike came to Australia from the Lakes District in the UK and joined CityRail as an Electrical Fitter. He spent some time in the 'Model Room' beneath Wynyard station where he worked on (amongst other things) the railway Easter show exhibits, including a 5 inch gauge ride on one, and large scale models including a Tangara and 81 Class for State Rail. These were crafted from plywood and provided good display items for the general public. He later became the Stores Manager.

Mike was a member of SLSLS from 1975 to 2013, a not insignificant period, and during that time was very active in the Society. He was Secretary 1977-78. He arranged the first signalling in use at SLSLS where the signaller sat at a rudimentary desk on the carriage shed roof (occasionally with a beach umbrella) before the signal box was built. The point motors were VW wiper motors, and he made a semaphore junction signal that operated using electromagnets for the station junction.

He arranged local terminations in plug couplers inside some galvanised pipe posts that he installed near the points. These were a great trip hazard and many cursed Mike as they tripped up on them.

He constructed a battery powered 46 class locomotive (1977) using converted Lucas generators as motors and arranged in a series/parallel/weak field arrangement. He was interested in the running of scale trains and organised several events which was probably better known for their lack of organisation (despite Mike's attempts to organise everyone) and time keeping! The infamous timetabled 'East West Express' (ironically this time arranged by Cec Gunning) is one Mike took part in. During this he became renowned for his 46 running wrong direction on the ele-

vated behind Terry Geraghty and the Mule hauling a significant load of weighbridge weights and completely vanishing from the railway on the bottom curve. Terry's riding car was derailed as Mike vanished and the carriages then pushed Terry off too. The carriages stayed on the track.

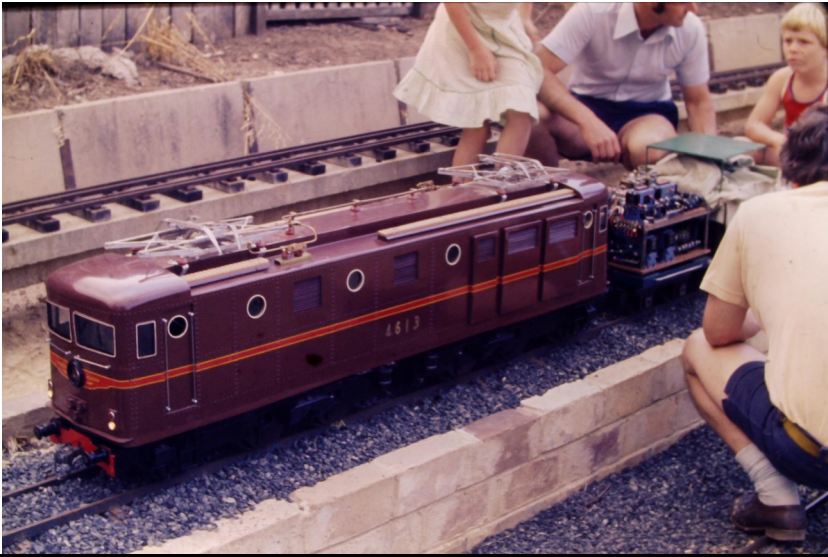


John Lyons remembers it well: I remember the East-West express, watched it depart the elevated station wrong way running and waited for it to return, after some time someone told us what had happened. I can remember at the time there was much discussion about draw bars. Mike had an aluminium one which fractured during the event and I often wondered if that had have been mild steel what may of happened! Fortunately no one was injured seriously.

Mike wrote about the electrical theory behind his 46 class design in our newsletters for July and October 1977. This included series - parallel operation and weak fields using converted Lucas generators. This two articles are still the gospel on 'proper' electric loco control.

Its 6 May 1978 and preparations are under way for the East West Express. Left, Mike and his 46 are already on the elevated facing the wrong way. Right we have Ron Larkin preparing his Atlantic next to Ray Lee's 59. To the left is Barry Tulloch's 38 (without its leading bogie, and adjacent is Maurie Haynes 30T. Photo: W Allison.





Left is Mike and his 5112. Photo J. Lyons. Above his 46 class. Photo W.Allison

Warwick recalls attending meetings at the Ryde Sea Scouts hall near Ryde Bridge and Mike being very vocal about various aspects of the Society and non progress on the signalling system. In later days he spent some time discussing wheel and track standards with Mike on numerous occasions.

Mike commenced a 50 class locomotive that was completed in 1996. He would often hand the footplate over to those of the younger members. Stuart Larkin recalled "Mike was a wonderful guy along with many other members, someone I looked up to as a young member attending the club. He was always very generous in allowing the younger generation to learn basic driving skills on the 46 class, based on photos we can't have been much older than 6 or 7 years at the throttle getting our first taste of driving on work days. I recall the timetabled running as being very different to any other regular events.

The timetables were set and something inevitably went wrong during the day resulting in some flying laps during the afternoon as

various drivers sought to recover time to the schedule. Running in reverse direction around the elevated, Dad's 35 took the flying lap literally and landed in the dirt alongside the elevated approaching the bottom curve forming a difficult yet memorable end to the day.

I also remember Jim Hyde similarly sending a loco off the end of the swing points on the elevated, due to the road being set incorrectly and not speeding on that occasion."

Mike was uncomfortable with the Society's focus on public running and subsequently joined the Hornsby Society in 1999. In that group he undertook much of the track construction (and reconstruction) and advocated SLSLS standards in that group (to the understandable annoyance of some) and published various articles in that societies newsletter as explanations.

Mike was responsible for the procurement of the Hornsby locomotive hoist/unloader and was often running his 50 class at the birthday and other runs..

Mike had been unwell from about 2015, and was 88 when he passed away. Valé Mike.

It's the Easter Convention, 17 April 1976. Mike is at the signalling panel (and on the phone) under the beach umbrella. To the left is Ken Tinkler. Below Paul Brotchie is driving a green 29 class. Bill Richards is standing behind the smoke and Barry Potter is following on his 50 class. Photo: W Allison.



Duty Roster.

- March:** David Thomas, Bernard Courtenay, Greg Croudace, Stuart Larkin, Shaun Sorensen, David Lee, Brad Wilkinson, Geoff Hague, Martin Dewhurst, Ken Baker, David Coulshed.
- April:** John Hurst, John Lyons, Matthew Lee, Jim Mulholland, Martin Yule, Warwick Allison, Tony Kidson, Nigel Woolley, Bill Perrin, Eddie Jones.
- May:** Ross Bishop/Neal Bates, Tony Eyre, Jo-Anne Topp, Ray Lee, Peter Wagner, Paul Taffa, John Tulloch, John Simpson, David Judex.
- June:** Mick Murray, Andrew Allison, Mark Gibbons, Wayne Fletcher, Graeme Kirkby, John Noller, Ian Tomlinson, Glen Scott, Chris Denton, Warwick Reinhardt.
- July:** Evan Lister, Simon Collier, Garry Buttel, Barry Millner, Scott Murray, Graham Tindale, Paul Brotchie, Mike Dumble, Deven Shirke, Craig Deacon.

Gate Roster and Track Superintendents: To be advised.



Above: David Thomas and 628, after some trial runs and still awaiting its dinner jacket!
Below: A visitor viewing the downhill action on our December running day.



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Track location is Anthony Rd, West Ryde adjacent to Betts St, behind West Ryde shops. 33° 48' 15.99" S; 151° 05' 12.78" E

Telephone: (02) 9874 8696. **Postal Address:** The Secretary, PO Box 453, West Ryde, NSW, 1685

Web Page Address: <http://www.slsls.asn.au>

Public Running Day is the **THIRD** Saturday in each month from 1.30pm. Entry is \$5 adults, \$2.50 children. Rides are \$2.50 each.

To ride on the trains, enclosed footwear must be worn.