

The monthly club
newsletter for
Bournemouth &
District Society of
Model Engineers

Secretary: Dave Finn
Tel: (01202) 474599



Chairman's Thoughts

Well what can you say about our Late Autumn Running BBQ? A bit of a damp squib, but for all those brave souls that turned up a quite pleasant wet afternoon was had chatting and eating warm sausage rolls and cakes, all washed down with tea. I am sorry for the ones who turned up late and had to put up with either a roll filled with warm onions or a slice of cheese. Thanks again to all who helped on a wet Sunday.

On my travels last week I decided that as I had a little time to spare I would try and find MJ Engineering as I wanted a length of $\frac{3}{16}$ " copper pipe. I turned off the M3 as per the map I had down loaded from my computer, finally found the road and up and down I went looking for their premises, but with no joy. Tried ringing their phone number only to be answered by a machine, so I gave up. Driving back to Bournemouth I remembered a club member saying that you can buy odds and ends still at the Ringwood Town & Country Museum. So why not I give it a try? On arriving I was told to go upstairs and ask for Mike, who then took me to what was the old MJ shop. I was given a list of items that they stock. They are trading as **Museum Engineering Workshops, Tel. 07836 764384**. They open Monday to Friday and if you phone an order

through you can collect it from the Museum counter at the weekend. So, if you are ever stuck for the odd bolt or bit of silver steel they may be able to help. We got chatting and he showed me their new conference room and asked if we would like to put on an exhibition there next year, so we need to come up with a date and get an event booked, I think all those who went last year enjoyed themselves.

Well folks, I hope that the Committee is running things on your behalf OK. It would be nice to have some feed back occasionally. Looking back on this year, we have carried out a few projects together and everybody has mucked in well. We are a club with members who have many varied skills and these are offered and used to the best of our abilities. With our rather laid back approach most things seem to get done quickly and we all have an enjoyable time - well that's how I see it.

The new station platform should be going ahead in the next few weeks, subject to the weather and the builder.

By the way, don't forget that November's meeting is **LADIES** night, so all us gents will be busy making and serving the tea and coffee and finally washing up, so bring your rubber gloves.

David Martin

Editor's Ramblings

After last month's Newsletter had been posted I had a flash of inspiration. Why not resurrect and develop a feature that appeared in the Society's Newsletters long before it got the *Kings Park News* title. So, I am going to try to develop 'The Technical Page'.

Older members will remember the sheets that appeared - usually copied from magazines - describing how to use Tool Makers' Buttons, Rivets, Tool Makers' Clamps, etc. The new Technical Page will not just be copied from other sources - it will be generated by our own members. At least that's what I hope will happen.

To start the page off Ron Bettell has agreed to provide the material for an article on how he made the dome for his 5" gauge *Evening Star*.

Now Ron never does anything by halves and this will be the sixth dome he has made - I told him that I am expecting to see six *Evening Stars* with the domes in place! Please let me know what you think of the first Technical Page.

I had a complaint, from the lady member with the accent over the e in her name, that the smaller type I used for John Hoyle's *Profile* was difficult to read. I will try not to go that small again.

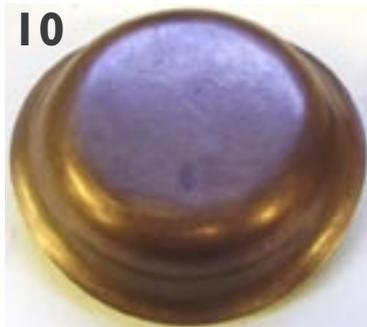
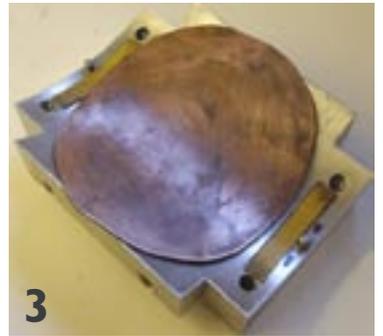
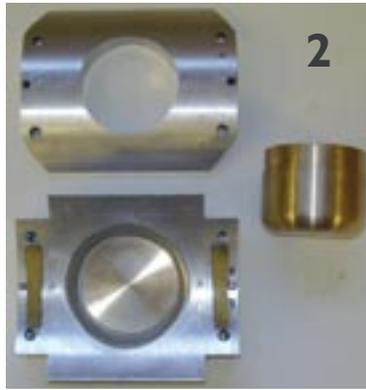
Please note that the Copy Date for the December issue of the Newsletter is Tuesday 5th December.

Dick Ganderton

The Technical Page - Ron Bettell Makes A Dome



Picture 9 by Ron Bettell.
All others by Dick Ganderton.



Ron Bettell needed to make the rather flat dome for his 5" Gauge *Evening Star*, so he made a press tool from scrap aluminium and brass that would enable him to press the dome out of 20 swg beryllium copper sheet.

The first stage was to work out the developed shape for the blank. Ron simply bent a couple of bits of brass wire on top of the drawing along both axes. Straightening the wire gave him the axes for the basic elliptical shape of the developed blank. A card pattern was made by folding the card into quarters and cutting out the shape with scissors. The card pattern was then used to mark out the beryllium copper sheet blank, which then needed to be annealed. **Picture 1.**

The process of forming the dome using Ron's press tool can be followed in **Pictures 2 - 7.**

Picture 8 shows the rough dome as it comes out of the press tool, **Picture 9** shows how Ron held it in the lathe to trim the outer edge to size. The brass male plunger from the press tool is held in the 3-jaw chuck and the dome pressed against it by a pad and rotating centre.

The finished dome can be seen in **Picture 10** and in place on the boiler of Ron's *Evening Star* in **Picture 11.**



B&DSME Diary Dates

15 th November	Monthly Meeting; Muscliff Community Centre. Ladies Night. Pam Smith 'Trekking for Macmillan Cancer Support'.
4 th December	Monthly Technical Discussion Meeting; 7.00 for 7.30 pm. 61 Springdale Road, Broadstone BH18 9BN.
17 th December	Santa Run; Littledown Miniature Railway. Santa will be in his Grotto to meet the children.
20 th December	Monthly Meeting; Muscliff Community Centre. Christmas Party.
24 th January 2007	Annual Dinner; Crooked Beams Restaurant. Note corrected date. Menu and Booking Forms in November.
17 th January 2007	Monthly Meeting; Muscliff Community Centre. Bits & Pieces Evening and Auction.

Boiler Making Sessions

How do you fancy building a boiler? Have you ever thought of making one and been put off by the magnitude of the task? Perhaps I have an answer to your concerns - why not join our Saturday boiler making sessions.

The plan is to build a new boiler for the Society's *Speedy* at Littledown on Saturdays. We already have a second boiler being made by Martin Cuff who will be building one for his dad's *Speedy*. Both Martin and I are novices at this sort of work, so will be taking advice from Mick Baker and Merlin Biddlecombe. The plan is to build a hearth that can be supported on the rails of the steaming bay and find a dustbin for the pickling solution. Between us we have sufficient heating equipment and gas bottles to provide a heating source. If this proves popular and other members take up the idea, the Society might well decide to provide the necessary gas and burners to remain available at Littledown.

These sessions are not intended to be lessons in boiler making, but to provide the right equipment and moral support. Even if you do not intend to make a boiler you are, of course, welcome to attend the sessions as a spectator.

For more information on how and when please feel free to contact me on (01202) 683701.

Brian Merrifield

Meetings For The More Technically Minded Members

Brian Merrifield thought that there could be several members of the Society who would like to meet once a month just to chat about model engineering matters without being fettered by the more formal Society monthly meetings.

With this in mind he organised an informal meeting at his house to see what the response would be. Those that turned up had an enjoyable evening, discussing a wide range of model engineering and related topics, drunk Brian's coffee and ate his chocolate digestives.

The evening was considered to have been a success and it was decided to hold regular discussion meetings on the first Monday of each month. Meetings will be in member's homes until numbers attending make this impractical. The next one is 4th December at Ron Bettell's, 61 Springdale Road, Broadstone BH18 9BN.

The Bollard

Shortly after we started to use the new track at Littledown I wrote a short piece in the Newsletter explaining the easy way to open the bollard controlling our access into the Park. With many new members having joined since then and a few instances of the bollard being unlocked and then locked incorrectly, it is time to restate what not to do.

Under no circumstances remove the padlock from the bollard! Just unlock the padlock, rotate it through about 90 degrees and slip the locking bar off the padlock and lower it to the ground away from the bollard. Do not remove the padlock from the bollard! Lift and lower the bollard away from the road. To lock, lift the bollard, then lift the locking bar, slip it over the padlock and snap the padlock shut. Do not remove the padlock from the bollard!

Dick Ganderton



Hilary's October Outing
(and she says I never take her anywhere)

The day started well. The night before, I had loaded the S15 into the old jalopy ready to head off bright and early, I headed in the general direction of Esher, at least that's what the computer generated road map instructions told me, and low an behold by 1100 hrs we were driving around the back streets of Malden, looking for the entrance to the Malden track. I'm sure I'd seen that telephone box at least three times as we cruised the streets.

Eventually I had to admit defeat and ask a person of the other gender for instructions. "No problem", she said, "just back there." I'd been past it twice!

We duly arrived and having parked, swiftly registered, had the boiler certificate perused and received the usual good natured banter - "you're a long way from home" - were issued with a meal ticket. Not being one to refuse food, I elected to book my steaming slot for the afternoon. A good move. I was given a guided tour of the site - by a Verwood resident, who only runs 7.25" locos - which has both raised and ground level 7.25" gauge, plus the normal 3.5" & 5" on the raised track.

The dinner gong sounded and the hoards descended. I was near the front! The kitchen was big enough to feed an army and the food was good enough to grace any table.

On the raised track during the day I saw some superb Locos, including several very nice 5" Britannias, Phil from Fareham with his Austrian overhead electric loco and a very nice LSWR T6 from Canterbury.

1400 hrs arrived and saw me in steam and raring to go. Now as you may have noticed, the S15 is a bit light on its feet, I wasn't aware that the track might be better suited to a rack loco or a mountain goat, so set of full of gusto up the side of the mountain. "You won't get up there" say's one chap, who seemed to know a bit just as I slithered around the bottom corner.

I did, but what an effort. I started off with 5.25" dia. wheels and finished with 4.75" after about one and a half hours,

More food, drop the fire, then tea. An army marches on its stomach you know.

A great day was coming to an end, the weather had been kind and it had been really nice to meet several visitors who had been to our Open Days in June, plus quite a few of the Malden members who, surprisingly, live quite locally to us.

It was a shame that I missed Peter Stedman who, I am told, was out in the main road directing traffic and looking for us on the previous day. Nice touch, sorry to have missed you. Here's to next year - maybe.

Dave Finn

FOR SALE

Complete Model Engineer's Workshop

Myford ML 10 Lathe

In excellent condition. Compound slide rest fitted with vernier dials; Leadscrew fitted with vernier dial; 4-tool turret head; 3 & 4 jaw chucks; Many attachments and Myford Owner's Manual.

Amolco Milling Machine

Fitted on 16" x 16" compound table; Large range of end mills, Morse taper shank reamers, drills, collets, etc.

Large selection of lathe tools; Machine vices; Slitting blades and mandrels; 4-piece wiggler & centre finder; Ball turning attachment; 34 cm height gauge; 6" Bench grinder; Various gauges, callipers, dividers, etc.

Selection of stock - Rounds, Flats, Threaded Rod, Hexagons, etc. in steel, brass, phosphor bronze, etc. Various manuals, books and drawings.

All for £ 575 - o.n.o.

Contact: Ron Watts, Bournemouth, (01202) 393125

FOR SALE

Myford Swivelling Vertical Slide
£50.

Phone Merlin on (01202) 855184.

Report From The Treasurer

As a result of the continuing success of our public running days, the Society is now in a healthy financial state.

All outstanding loans have now been repaid and I am pleased to state that the Society is debt free. Thank you to all those members who contributed four years ago to enable us to build the new track at Littledown.

Mike Mortimer

Luscombe Valley Happenings

The annual 'Luscombe Valley Humbug Day' for those who want to try to escape the Christmas Shopping nightmare will be held on Saturday 23rd December.

Other Events

The Model Engineer Exhibition 2006 is at Olympia 2, London. Dates are 29th to 31st December.





Ted was borne in East London close to Temple Mills – Stratford Locomotive Works and the biggest marshalling yard in Europe - and by the time he was four had been bombed out of his house three times. Children got used to playing out in the street until the sound of a siren announced the arrival of more doodlebugs flying overhead. At six years of age he and his brother, who is four years older, were evacuated to Leeds, which was deemed a safer area to live.

With the war over and still at school, he joined the Air Cadets for two or three years and enjoyed a few flights in Chipmunk and Avro Anson aircraft. After leaving secondary modern school in 1958 with no qualifications, a series of different jobs came and went in short order. By the time he enlisted in the armed forces at nineteen he had worked at seventeen jobs, mostly as a motor mechanic. Rather than be called for National Service he decided to enlist for three years in the RAF as an Aero Fireman. By the time his three years were up it would have been easy to find employment at any of the commercial airports as a fireman. However that was not to be, as other events were to take his life in a different direction. Only four months were spent overseas, first to Cyprus, then Jordan, but most of the time was spent at Coltishall, their home base. It was there, after returning from overseas in 1959, that he met a rather nice young lady. Soon after they met she was posted to Germany and they continued their courtship via letter and in January 1960 Nessa and Ted married. On leaving the RAF the newly weds settled in Kingston where they brought up their three children.

Back in civvies he found himself once again in the garage trade, but a next-door neighbour suggested that working in the heating trade could be a better bet for him and that is how an income was earned for next three to four years. The next job move came in 1968, this time as a civil servant with the National Physics Laboratory at Teddington, which is still a world-renowned centre for measurement and materials science. He started as a pipe fitter, fitting and repairing pipes for 350 psi air, gas, steam, medium temperature hot water, helium recovery, deionised water, vacuum, chilled water, nitrogen, and almost anything that goes through a pipe he fitted it, even on some of the experimental equipment,

Ted worked his way up to Shift Forman, then Shift Engineer and was finally made redundant in 1996. For two years he worked as a mini cab driver until retiring early and moving to Poole in 2001.

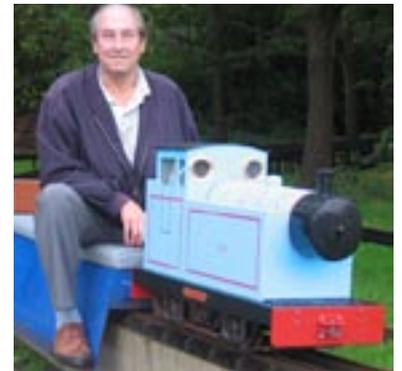
The seeds of an interest in model engineering were sown during a visit to a steam museum on the Isle of Wight, where he saw a small model of a traction engine. This started the idea that perhaps he could make a similar model and once back at home, he obtained a copy of MAP catalogue of plans. What took his eye was not a traction engine, but the Heilan Lassie and when his brother-in-law revealed that he had the issues of Model Engineer describing the building of it, the matter was decided. It took just eighteen months to complete, working in the garden shed at weekends and during evenings, while looking after the children when Nessa was at work. The shed was home made from old packing cases and disused sash windows from his and a neighbour's house. Aggregate for the concrete base was brought home in the back of the family car from work, where excavations for another building had produced nice clean material.

After moving to Poole, Ted decided to get his old loco working again, after some twenty years of storage. Before bringing the loco down for a boiler test, he pumped it up at home just to make sure none of the fittings were leaking. Sadly the boiler leaked from several places and it was decided the only answer would be to have a new one made. An order was placed with Cheddar Models and as their would be a long wait for its arrival, Ted decided to build a five-inch gauge model of a Galloping Goose locomotive, seen when on holiday in America in 1983. This odd looking loco is based on a road going petrol wagon, but the only details he possessed was a thirty-five millimetre colour slide taken at the time. Using what bits and pieces he had readily to hand, this small loco took shape employing a novel means of motive power in the form of a twelve-volt screwdriver. Drive to the rear wheels is via a shaft, driven from the standard chuck to a pair of bevel gears taken from a hand drill to the rear axle. Speed control is provided by the variable speed control fitted to the screwdriver. A hand wheel mounted on the rear of the model moves the trigger in and out via a threaded shaft. When I drove it soon after completion it relied solely on the original battery and could only manage two or three laps of Littledown. It trundled round very nicely with my grandson James and I, which is about its maximum load. Subsequently a large motorcycle sized battery has been installed inside the body and this provides extended running time.

Over the years Ted has tackled several interesting tasks and listed below are a few that came to mind during our conversation:

Made a crankshaft main bearing cap for an NSU car to replace one that had been damaged.

A 4-cylinder 550cc Honda motorcycle he owned suffered a distorted rear break drum, due to corrosion of the aluminium hub. He dismantled the rear wheel, turned out an iron brake drum liner and screw cut a left-hand thread inside the hub. Then found that a Morris 1000 car brake drum was a similar size, so he turned the outside diameter to size and screw cut a matching left hand thread and



screwed the two together with Loctite. The reason for a left-hand thread is when the brake was applied the tendency would be for it to tighten rather than unscrew, which seems a good idea to me.

Made a car radio and a home hi-fi system.

As a teenager he acquired plans for a launch called Daytona but he did not like the idea of forming the hull by scooping wood out of a large single piece of timber. His answer was to build it conventionally with ribs and planks.

Made an acoustic guitar, but never learnt to play it.

Before joining the RAF Ted rode in a number of motorcycle events, speedway, trials and scrambles.

He took up painting in oils, then in pastels, three of which were taken to Germany by his brother. They were of a Green Woodpecker, a Chinese Junk and a Bunch of Roses.

A friend introduced him to a man who raced powerboats and was experiencing difficulties with the running of his 24 HP engine. The question was, could he sort it out for the next day's race? The big problem was that the engine had to be run to get an idea of what was wrong and the only place they could do that was on the boat. So picture if you can this powerboat going up and down the Thames, with Ted hanging over the back of the boat trying to see what was happening with the engine. Things were bad enough with the engine only able to rev to 3500 RPM, but after some deft manipulating of the fuel priming pump, the missing power suddenly returned with a vengeance. The boat took off at 7000 RPM producing a three-foot bow wave that was higher than the sides of the boat and Ted was still hanging over the transom looking at this screaming two-stroke engine - nice.

Ted's current workshop is in the garage where he has a 3 1/2" Cromwell tool room lathe, complete with imperial and metric collets and a dividing attachment that fits on the cross slide. This lathe came in a dismantled state minus lead screw, which he made. The only other machinery is an 8" bench grinder, a 1/2" pillar drill and a Kennedy hacksaw machine that came part built.

My thanks to Ted for allowing me to write this and for a very pleasant chat in the Engine Shed at Littledown on a very wet Sunday afternoon.

Society History

Tony Cuff has been delving into the Society's extensive collection of *The Model Engineer* and turned up the piece, reproduced on the right, from the 19th June 1947 issue.

Of interest is the reference to the continuous multi-gauge track, 160 ft. long, catering for 2 1/2", 3 1/2" and 5" gauge locos. Some mental arithmetic comes up with a circle 51 ft. in diameter - less than half that of the end loops at Littledown!

To add further to the intrigue is another report on the Society's progress in *The Model Engineer Club Announcements* for 8th January 1948 - only six months later - stating that the 160 ft. had been completed and that it was hoped that an extension would be made in 1948. Just how the continuous track was going to be extended isn't mentioned.

The Society also had a workshop at their HQ in the Tarrazona Hotel where meetings were held every Tuesday. I wonder how big the workshop was and just what sort of equipment it had.

Club Announcements

Bournemouth and District Society of Model Engineers

On Sunday, March 16th, by the courtesy of Messrs. Airstead Ltd., members toured their extensive works at Christchurch, where the prototype of the new "Ambassador" passenger plane was seen under construction.

On March 25th, at headquarters, a talk was given by V. T. Collins, B.E.M., of Bournemouth Central Station Locomotive Depot. The subject: "Running Shed Management, Practical Repairs and Overhauls from Workshop to Workshop."

On April 22nd, at headquarters, Mr. Elliott, of Tuckton, gave a talk on the railways of New Zealand from their first railway to the present day.

Centre of interest at the present moment is the erection of the Society's multi-gauge track for 2 1/2-in., 3 1/2-in. and 5-in. gauge locomotives and passenger carrying, the first section is a continuous run of 160 ft. It is being erected in the grounds of the Southbourne Preparatory School for Boys, by kind permission of the Principal Mr. F. G. Morgan.

The Society, whose headquarters are in the basement of the Tarrazona Hotel, Wharnclyf Road, Boscombe, meet every Tuesday, 7 p.m.

Details from the Hon. Secretary: G. E. Frewer, "Arun," Elm Avenue, Christchurch.

Letter To The Editor

Dear Dick,

You asked for some letters, so here's one for you.

I have been advised that I would benefit from a Pacemaker. During the consultation it was mentioned that I should not have problems from domestic electrical appliances. On pointing out that I was a model engineer with a workshop of machine tools driven by electric motors the consultant was unable to give advice. This is not necessarily significant as I know nothing of medical matters and would not expect him to know about drill sizes for BSF threads, etc. However, it does beg the question of what influence motors on lathes and milling machines have on these devices. Is it significant, and what else may cause a problem, e.g. MIG and TIG welding, radio controlled models, the occasional 'belt' from an IC engine ignition system, etc.?

Comments from model engineers having experience with, or knowing someone else with my predicament would be most welcome.

Leonard Dowden



Littledown 16mm Track

Gordon Miles Reports on the progress of the new layout

Many members will, hopefully, recall that at our Grand Opening on 11 April 2004, Dave White and myself erected a small portable track inside the Society's compound on which we ran a selection of our 16mm steam locos. A fair amount of interest was shown, possibly because as we age, 5" Gauge steam locos get heavier; the outcome being the club Committee suggested a permanent 16mm could be considered.

A word about 16mm first. Most members cut their teeth on Hornby 0 Gauge and possibly took them out into the garden where they ran reasonably well bearing in mind the uneven ground. The track being built here, whilst still being 0 Gauge and will accommodate engines to that scale, should be known as SM-32 or simply referred to as Sixteen Mill on account of the rail and sleepers being scaled to 16mm to 1ft. SM-32 relates to Sixteen Millimetre scale and the 32 to the gauge of the track i.e. 2ft in real life - Ffestiniog, Welsh Highland, and Darjeeling, to name but a few. The track will be as flat as we can get it and will have 6ft minimum radius curves to accommodate standard 0 Gauge trains.

The track will be supported on a base made from 18mm thick marine ply base, covered with roofing felt, which in turn will be cantilevered from the existing fence with additional support from post, set to the front edge. As the top return loop will approach ground level it is proposed that this should be permanent and implanted with suitable conifers and other scale plants. The bottom loop will be portable so as not to interfere with larger scale locos being attending to in the steaming bays. A dedicated steaming bay and marshalling yard has been allowed for, running off the lower loop.

Security could be a problem; the portable sections will be stored in the Engine Shed whilst the permanent track will be covered with a locked-on ply or aluminium cover.

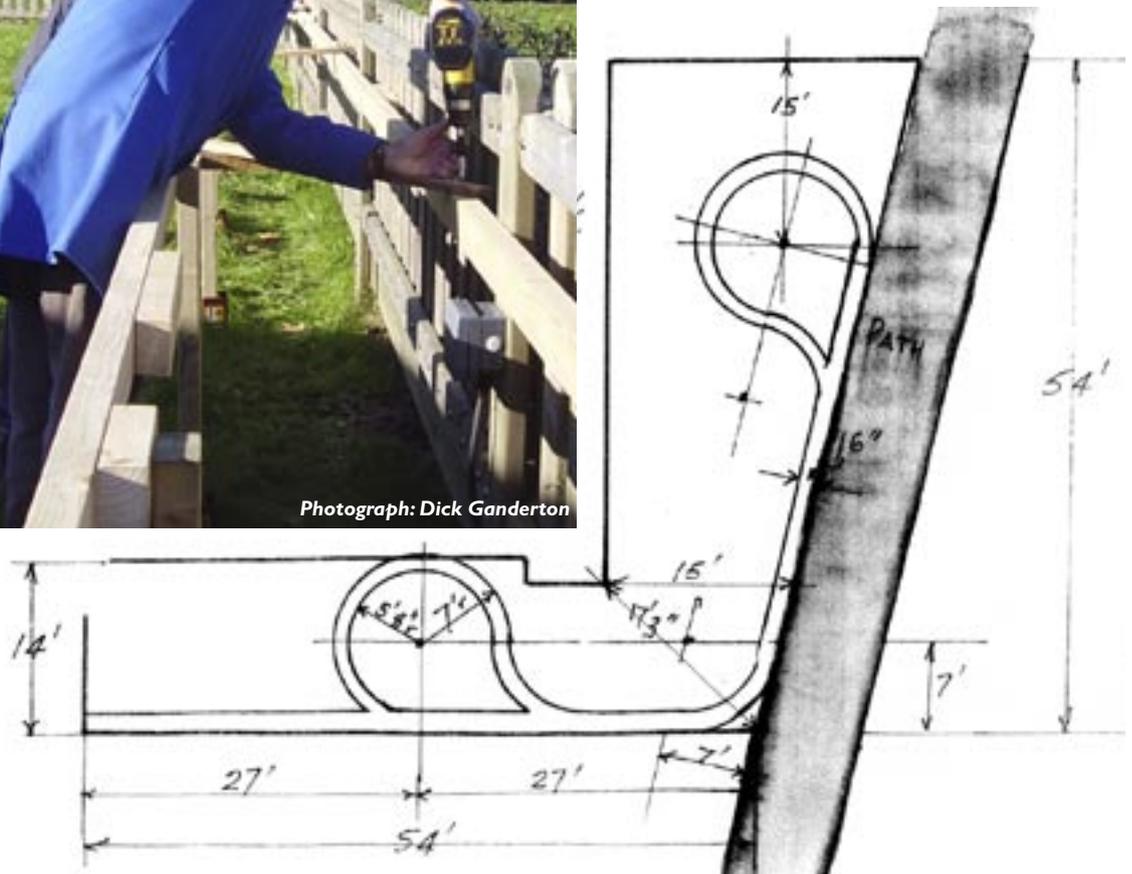
The design and construction has allowed for the future addition of a third rail to permit 45mm gauge stock to be run and for line side buildings, stations, etc. If any member would like more information or better still offer his or her help then please contact Dave White or Gordon Miles.

16mm Track



Photograph: Dick Ganderton

Gordon Miles and Dave White (behind), put their backs into the construction of the framework for the new 16mm layout at Littledown, a plan of which is shown below.





Bournemouth & District Society of Model Engineers

Annual Dinner

24th January 2007 7.00 for 7.30pm

4 Courses £17.00

S1 Chilled Melon & Fruit Plate

Fanned Melon, fresh seasonal Fruit and Berries,
presented with a Mango and Raspberry puree

S2 Salmon & Prawn Timbale

Plump Atlantic Prawns and flakes of Fresh Salmon bound with Lemon Mayonnaise
and topped with crisp leaves

S3 Cream of Mushroom Soup

Served with crisp croutons

ooOoo

M1 Filo Salmon

Fresh Salmon Fillet, wrapped in Baby Spinach, Cream Cheese and a layer of light Filo Pastry,
finished with a Wine White Sauce

M2 Braised Steak

Tender Prime Beef Steak, slowly cooked with Pearl Onions and Button Mushrooms
in a rich Red Wine Sauce

M3 Butterfly Chicken Breast

Succulent breast of Chicken topped with Smoked Bacon and Stilton Cheese

M4 Grilled Gammon Steak

Gammon steak grilled and topped with a pineapple slice

All main courses are served with freshly prepared Vegetables and Potatoes of the day

ooOoo

Choose from Chef's selection of Home-Made Desserts

ooOoo

Freshly Brewed Filter Coffee & Chocolate Mints

(Vegetarian option upon request)

Please send your menu selections together with your name and cheque, payable to B&DSME, to: Dick Ganderton, 'Graskop', 76, Dewlands Road, Verwood, Dorset BH31 6PN, by Wednesday 17th January 2007.