BASINGSTOKE MODEL BOAT CLUB

Newsletter

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Membership News

There have been no new members since the last newsletter. The current membership stands at 90, of which 2 are currently junior members.

New members are always most welcome – if you have a friend that may be interested in model boating or joining the club then please let them know all about us, or tell them to have a look at our website to see for themselves - **www.basingstokembc.co.uk**

Subscriptions for the Year 2026/27

The club's financial year runs from 1st April to the 31st March which means that subs for the next year financial year (2026/27) are due as from the 1st April 2026.

The club's bank provider, as from January, is now charging a £3.00 per month account maintenance fee. Fortunately as the club has accrued a healthy bank balance, Chris and I have decided that the fees will be kept at last year's level whilst maintaining the same level of benefits to club members.

Therefore club fees as from the 1st April 2026 will remain at **£6.00 for seniors** and **£2.00 for junior (those aged 8 to 14)** members. Please can I have your membership money at the earliest opportunity?

You can pay your membership **(£6.00Seniors/£2.00Juniors**) in the following ways:-

- By using online bank transfer to the club's account. Sort Code, **23-05-80**, Account number, **42978396**, Account Name, **Basingstoke Model Boat Club**. Please use your initial and surname as the reference so I am aware who has paid. Where possible I urge members to use this facility in preference to cash or cheque payments

  Note that the club banks' with **Metro Bank**. When paying by BACS be aware that Metro Bank has not yet signed up to the account name checking service and you may receive a warning from your bank that they cannot verify the account name. **Be assured that as long as you have entered the details above then your money will find its way to the club's account.**

- By cheque made payable to **Basingstoke Model Boat Club,** or cash either handed to me or sent to the following address:-

  Andy Clark
  25 Coniston Road
  Kempshott
  Basingstoke
  Hants
  RG22 5HT

- Hand your fees to our Chairman, Chris Cole at the lake side by putting it in an envelope with your name on the outside and he will pass it to me.

If you will not be renewing your membership please let me know so that I can keep records up to date.

2025 / 2026 Accounts

As it is near the end of the Club's financial year, I have to make you all aware of our financial position and how your money is spent. Below you will find a simplified version of the Club Account for this past year 2025/2026. If anyone wants to see the actual accounts, receipts, etc. please let me know and I will bring them to the pond for you to view and inspect.

Item	Income	Expenditure
Total Income from annual fees and donations	£533.00	
Address labels		£0.00
Website Fee (One Com)		£31.28
Printer cartridge for correspondence		£0.00
June Newsletter Printing Cost		£46.74
Badges and lanyards		£0.00
Sept Newsletter Printing Cost		£46.82
Dec Newsletter Printing Cost		£33.57
March Newsletter Printing Cost		£30.35
qty 50 2nd Class Stamps		£43.50
Second class stamps (75)		£65.25
large second class stamp (2)		£3.10
large second class stamp (2)		£3.10
Second class stamps (100)		£87.00
Second class stamps (70)		£60.90
PI Insurance		£77.70
qty 1000 envelopes		£0.00
Bank charges		£6.00
Total Outgoings		£535.31
Cheques to be presented to Bank	£0.00	
Cash paid/to be paid into Bank	£0.00	
Current Monies at Bank 7th March 2026	£1,918.70	

Dates for your 2026 Diary

The Basingstoke and District Model Engineering Society Spring Gala weekend will be held at the Viables Centre Harrow Way Basingstoke RG22 4BJ on the **11th and 12th of April** and the club once again has been asked to attend and provide a display of boats.

I received the following from the Model Engineering Society on their change of layout. *"We have created a traction engine track within the confines of the raised track. This is a safety measure stopping traction engines running in the car park amongst moving cars. As a result of the new track the patio area usually used by the Boat Club is now the 'station' for the traction engines. We would like to site the BMBC in the field next to the club's Tombola stand on one side and the ice cream van on the other, I hope that will be OK*".

Visit by **Model Hovercraft Association**, also on the **Sunday 12th April**.

Surface Warships Association, will be visiting us on the **3rd May**.

Popham Airfield Model Show will be held at the airfield (SO21 3BD) on the weekend of **9th and 10th May** and like the Spring Gala weekend we have been asked to provide a display of model boats.

Volunteers are requested for both the Viables and Popham shows to bring boats for display and help man the club's stand. We will also need the loan of a couple of gazebos for the Viables show.

Please contact either myself or our Chairman Chris if you are able to help.

The **Vintage Model Yacht Group** are planning to visit the lake on Sunday 31st May.

Midhurst Show report

The show was held on Sunday 8th February and once again the club put on an excellent display of model boats. At this point I have to thank in no particular order the following members (Barry Parsons, Alan Spooner, Reg Ress, Chris Phillips, Graham Woodhams, Chris Cole) who brought along boats to display and help man the club's stand. It was also good to see that a number of club members also attended the show as paying visitors. We had a display comprising 16 models which showcased the variety of models within the club as a whole.

Some general views from the show.

The show was spread over the centre's main hall, two side halls and another area near the café displaying 3D printing, crafting, model aircraft and a display of large Lego Technic models.

The main hall had a number of model railway displays of varying gauge and style ranging from N gauge up to O gauge live steam locos. In addition there were a number of other model boats clubs, RC Helicopters, War gamers, die cast military and civilian models. One of the side halls was dedicated to Meccano models, the other hall had model boats from the Springbok Club and a display of very large (and expensive) RC Trucks which were often to be seen in action around the centre.

The show was well attended by members of the paying public and after the show I received the following from the organisers who are already looking towards the 2026 exhibition.

Dear Exhibitor,

I would like to take this opportunity to thank all the exhibitors and club members who attended the 43rd Grange Modellers Exhibition this year. It has been another very successful event, just as busy as the previous year!! I think I got to speak with everyone at some point during the day, although if I missed you, it's a testament to just how busy the show was!

Although I will be on annual leave for the next two weeks recovering from this year's event, I must now look ahead to the planning of the 44th Annual Modellers Show on February 7th 2027. I know I have spoken with many of you already, but to ensure that I am as organised as possible, I would ask that if you didn't give me a 2027 booking form back on the day, you respond to me again even if we have already discussed your attendance. I have attached the booking form to this email, so just send this back to me as soon as possible to secure your place. As stated on these forms, we would be very grateful if anyone that can provide their own tables, could do so for future events, as we are limited on the amount we can provide as a centre and hire charges have formed an increasing part of the costing for the event over the past few years. Once again, many thanks for your support this year, and in the past, and I look forward to hearing back from you regarding next year's event!

The club will be attending the 2027 show as usual.

Steam Engine Sound Generator – by Chris Cole
The Plan: bringing it to the RC world!
Many folk have built some of the electronic assembly kits, produced by companies like Velleman, and often available through places like Maplin, when they had a presence in Basingstoke.

The sound generator kit has a printed circuit board, a load of different things, like resistors, capacitors, diodes, pushbuttons, transistors, and even an "integrated circuit chip." The assembly instructions were quite detailed, enough to allow the likes of me, to get it together and make noises. Now I will admit that the sound wasn't all that impressive, and the steam whistle was ghastly. But by spinning a variable resistor, the sound could be made to speed up and slow down.

Now this is where the questions started, as it seemed possible, or at least a challenge to make this work through RC gear. The board needed 9v to power it, and had its own speaker. To change the speed needed twisting the variable resistor. The whistle was sounded by a push button.

One suggestion was to strap it all to a servo and use that to twist the knobs, and push the buttons. Seems a bit clunky. I wanted something a bit more “hi-tech” and so looked into trying to find a modern replacement for the variable resistor that could be externally or electronically adjusted. I found that there are many “digital Potentiometers” available, of various ranges and operating voltages.

What to choose that would do the job? The “pot” in question operates in a 9V circuit, and has a range of 100kOhms. That is that with the knob turned one way it has 0V resistance, but fully the other way has 100kOhms, (1 hundred kilohms.. a lot of resistance!) The digipot selected was a DFR0520, MCP42100, from DFRobots, under their ref RB-DFR-790. It has 250 steps to achieve 0-100kΩ, from a 3-5.5V supply. They claimed that the supply and pot parts are optically isolated but should both run below 5.5V. I thought we could try and see if the pot side would allow a float within a 9V environment.

The “digipot” can be controlled by an Arduino process logic controller. So it looks as though we are sorted!
Now we need to find a way to replace a push button. It turns out that solid state relays exist and can do exactly that, and can be (wait for it..) Arduino controlled!! The ones I found are from Pololu, SPDT 30V, 11A rated, which should do the job.
To power the whole lot, we need 9V for the steam boards, and 5V for the digipots and Arduino. These can be again from Pololu, and are their S13V25F9 #4983 for 9V, and S13V20F5 #4085 for 5V.

Assembly
The original boards were attacked, by removing the speed change potentiometer, and soldering in place, 3 flying leads, that connected back to the digipot. Then 2 flying leads were soldered round the whistle push button, and these were connected back to the solid state relay.

The Arduino Nano was connected to the relevant pins of the digipot, the solid state relay, and to the energiser of the 9V power supply. The Arduino was connected back to the RC receiver, using 2 channels for the buzzer, and the rx throttle output y lead linked to each throttle/ESC signal. Separate small speakers meant that the sound was separate for each board, and as they would never be in phase, give a definite 2 engine sound. The Arduino was programmed with a modified version of one of Carl’s programmes originally for the OmniPlus units.

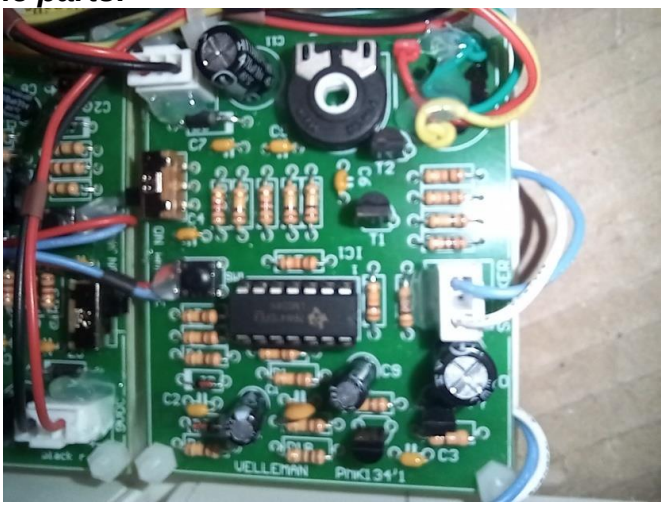
Initially all seemed OK, but well we were doing this to 2 sound boards at the same time, as Neil had twin screws on his tug, and that was where they were destined. And one of the boards sounded goodish, but the other had a very annoying hum or buzz. Poking the various components, managed surprisingly to stop the buzz, when

a large capacitor was moved. It turned out that the track on the board round the capacitor had lifted and broken. A loop wire bypassed the break, and all was “gooder” again.

Results

So with a bit of fiddling about, it is possible to bring the old circuits, that were essentially hands on manually controlled, can be modified to be RC controlled, and added to our boating projects. I have abbreviated a lot in this description, but if anyone wants to know more, or even replicate this, just get in touch.

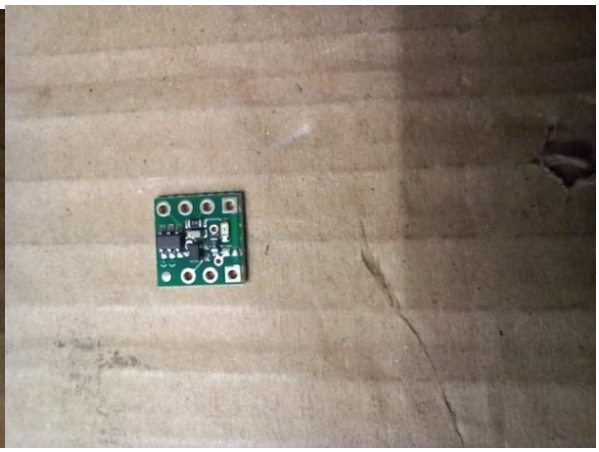
Some photos of the parts:-



Sound board with one pot replaced, yellow, red and green wires, and blue and red wires on the push button.

Dual digital potentiometer

Solid State Relay. Size is not much more than 20mm long!



9V power supply 5V power supply.

Thanks Chris, I'm sure that you'll have lots of interest in this.

More thinking about scale - by Dave Cleveland

In my previous discussion on scale, I looked at the scale aspects of models. Here I extend the discussion to the environment in which we sail our models. May I just say that there is rather less precision involved here than in the previous discussion.

Water

One can usually tell when model boats are used in films – the water is lumpy and moves too quickly. Bow waves and wakes are much less lifelike. I believe this is due to water molecules being the same everywhere in the known universe. To achieve scaled-down realism, I suspect that the water droplets need to be much smaller – maybe smaller according to the scale of the model: whether this is the linear or the volumetric scale, I'm not sure, but I do reckon that the latter is favourite here. To get realistic spray, for example, we would need it to drift about a lot more. Maybe it's more to do with surface tension? Changing the fundamentals of atomic structures in our lake is a challenge too far, and so we'll have to make do with imagination.

Then there's how our boats behave. If only we could stop them bobbing about so much more than real ones: they would look so much more realistic. Incidentally, the proper terminology for 'bobbing about' is heave, pitch, roll, sway, surge and yaw – they all happen when the water on our lake gets a little angry.

Which brings us on to waves. The seas' waves vary enormously in amplitude and length. On a calm day, there might be little ripples a few inches high with the occasional series of small waves from boats, then in a storm we'd have long and short waves several metres high, some breaking and some just rolling along. So how do our boats relate to the waves on our lake?

Well, a 1:50 scale model sailing in 2.5 cm high waves would be equivalent to the real version sailing in waves over a metre high. This assumes that the equivalent effect is according to the linear scale. I think this is reasonable based on a linear

measurement in the vertical as water comes up against the bow, but this might be too much of a simplification.

A 1:200 scale model in the same water would be like sailing in seas with waves up to 5 metres high – i.e. somewhat more uncomfortable! Unless the wind is very strong (20+ mph), I think that much of the wave action on our lake is due to our boats, especially when something big and fast takes to the water: enough to cause storm conditions for lesser craft. The 'lumpiness' mentioned above comes into play again.

If we could scale the water, our model passengers and crew would survive intact instead of suffering a right old beating up. When we include people in our models to make it all look more realistic, we have to anchor them to the deck etc. (i.e. unlike the passengers and crew on real boats who have the freedom to move around instead of being a prisoner to some assigned place for the duration of the voyage!).

And then there's the air

I wonder if sailing our models in the same air, i.e. same density and speed, as for full-size versions also adversely affects realism.

For example, does a given wind speed have a smaller or larger effect on a model as compared to its real counterpart? The inertia of a model is so much smaller, but so is the surface area on which the wind acts. I still have a feeling that the density and molecule size of air should be smaller for our models to behave truly to scale. Even in light-wind conditions, it seems that our model yachts rock around to the extent that the crew would last but a short time before requiring medical attention.

To hark back to the discussion on speed in my September '25 article, what's the relationship between a model yacht's performance in a particular wind speed and its real version? Model yachts do seem to react much more violently to changes in wind speed and direction: does that mean that the sails, though still made to the same scale as the rest of the model in terms of area, should somehow be less effective?

That raises the whole issue of power, whether via sails or an engine, and how we can calculate the true-to-scale power of a model. It's a complex subject and will be deferred to a later date…

I know, the anticipation is overwhelming, but please be patient: all (well at least some) of the mysteries will be revealed….

Many thanks Dave, glad that we don't have to alter atomic structures each time we launch our boats, certainly looking forward to the next instalment!!

Close

Well that's it for this issue, according to word count there are 3159 words in this edition plus a few pictures. Many thanks to Chris and Dave for their contributions.

Articles from members for newsletters are always very welcome so if you are restoring a model or undertaking a new build do share your experiences with the whole club.

Cheers
Andy

To save costs the Newsletter is printed in black and white so you miss some of the detail of the photos in colour, etc. – if you would like to see it in full colour I will as usual ask ***Carl****, our webmaster, to add a copy to our BMBC website.*