

June 2008 Summer Newsletter

Scale Captain's Chat

Greetings Everyone,

Well here we are again and it's June already! Where does the time go? I understand that we have lots to fill the newsletter so I will keep my section short.

Firstly I can confirm that after the closing date for membership renewals we have a paid up membership of 108 (including partners and junior members); the current waiting list stands at 5.

I am pleased to confirm that the Annual Highcliffe Exhibition raised a record £808 for the RNLI! Many thanks to all who attended.

On Saturday 10th May we held our first "Navy Day" at the lake and it was well attended with everything from HMS Hood to a humble minesweeper, the weather was perfect for sailing the scale warships, we had the harbour set up and several white ensigns flying. It is intended to make this an annual event and we may extend invites to a couple of local clubs as well. My thanks to Ray and Carol Hellicar for their help. There are some photos later in this Newsletter.



The Scale Captain presents the Steering Competition first prize to himself
[well done David! Ed.]

The Richard Graham Steering competition was held on Sunday 1st June with one of John Frost's challenging courses, perfect weather and a good number of entrants (see report/photos in this newsletter) .My thanks go to John Frost and Peter Soffe for their assistance. A very enjoyable morning was had by both entrants and spectators.

The Marwell Zoo Exhibition date has been changed to 21/22 June, we have several members interested in attending, if you wish to go please let me know ASAP so I can arrange the family entrance tickets for you.

I am sorry to tell you that The Waterside Model Day and The Eastleigh Rotary Model World Exhibitions I mentioned in my last Captain's Chat will not now be going ahead, however please note that we will be having club displays at both Calshot and Lymington Lifeboat days (see Diary section below). Please come along and support the club. Contact me if you would like to come and I will let you have details (01425 618900). Also don't forget the 30th Anniversary Day on Sunday 13th July at the lake.

Finally a comment with regard to Fast Boat Sailing; a proposal was put forward at the AGM that " Fast Boats be sailed on a Separate Day". The motion was rejected on the grounds that it would split the club, however a new fast boat area and new rules have been agreed and implemented (see article later in this newsletter) please adhere to them. New marker posts have been installed to help designate the transit line and remember, "Power gives way to Sail".

That's all for now folks. Have a great summer.

David

Dates for your diary

Club Events

21st - 22nd June (note new dates): Club participation, Marwell Model Boat Safari, Marwell Zoo.

13th July: Club 30th Anniversary Day at Setley Pond

20th July: Club Exhibition Stand, Calshot Lifeboat Day at the Calshot Lifeboat station

3rd August.: Club Exhibition Stand, Lymington Lifeboat day at the Lymington Lifeboat Station.

31st August: Steering Competition for the Solent Cup.

13th December: Christmas Lunch/Party. (see Mike Hammonds article below)

Other exhibitions during 2008

25th – 27th July International Festival Of the Sea; Portsmouth Historic Dockyard: incorporates Model Boat Exhibition (http://www.festivalofthesea.co.uk/wo_model_boats.aspx).

20th/21st Sept (dates to be confirmed). Model warship Week-end; Portsmouth Historic Dockyard (internet address to come!).

5th October Beale Park Modelling Show (2) (http://www.bealepark.co.uk/events_item.php?id=111).

News: Results of the Richard Graham Steering competition

The Richard Graham Steering competition on 1st June was won by David McNair-Taylor and his tug with a clear round. There were 15 entrants, the results for the first 5 places are shown in the Table; we will spare the blushes of some of the other competitors!

Place	Name	Faults	min.sec
1	David M-T.	0	2.57
2	Luke Griggs	2	2.22
3	Don Scott	2	4.11
4	Bob Eaton	2	6.03
5	Nick Leaper	2	6.13



John tells Brian which buoy to hit next. The cattle are thinking of competing next time.



Passengers complain of spilt G&T's on Don's Aurora; P&O admit to no responsibility.



David's Yorkshireman heads for victory



Dramatic moments awaiting the results!

Editorial: New Scale Section Web Site!

As those of you who view the club picture gallery on the internet will have realised, things have changed! Without warning, Photobox made significant changes to their site which meant that what I had previously set up no longer worked like it did.

This prompted me to look into the possibility of a Scale Section web site. The Club Committee were in favour, so soon we shall have: "<http://srcmbc.org.uk>". We are presently developing and testing the site and hope to "go public" in early July. It will have news about the club, how to get to the pond, Club Rules, etc. and an index to the photographs on PhotoBox.. Those of you who are on email will get a message when it is ready. But those of you who do not use the internet - don't worry, this newsletter will continue to come through your letter box, just as before.



Your Editor doing his famed Garden Gnome impersonation act.

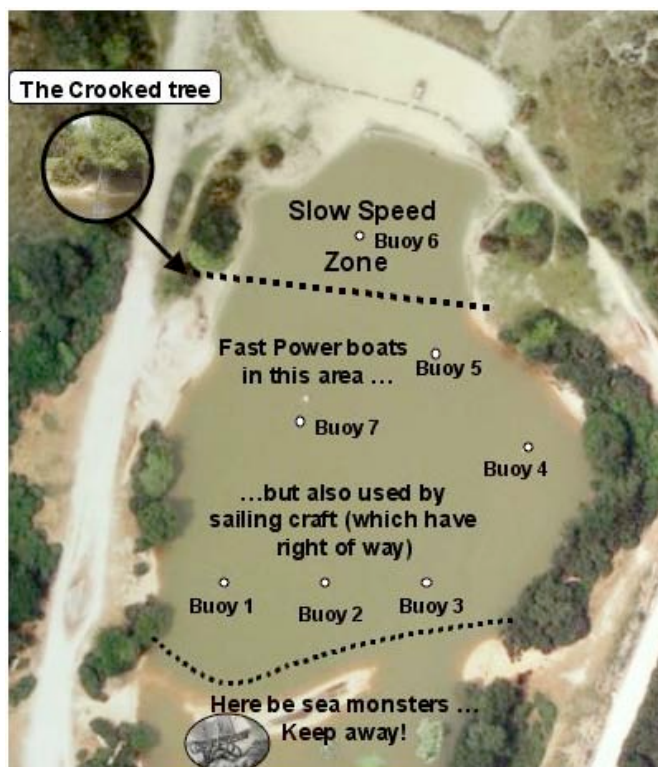
In the mean time, if you want to access the photos on Photobox, go to "photobox.co.uk", choose "Community" in the top, horizontal menu, choose "Public Albums" from the drop down menu, then scroll to "Sailing and Ships". Look for the albums starting "SRCMBC". They are scattered amongst all the other albums! I will bring the albums up to date once I have the web site on line.

And that Gnome photograph... earlier this year we had a storm surge on the River Itchen which flooded parts of the road where I live. In the midst of a violent hailstorm (hence the blurred image) I was directing cars away from the flooded area of the road since they were flooding houses with their wakes. For those viewing in black and white, the suit is bright orange, and I hasten to add with regards to my profile, it's insulated with thick neoprene!

Peter Taylor, Your Editor.

New Navigation Rules!

At the recent AGM there was a motion put forward "To prevent fast boat sailing on club days and move them to a separate day due to damage being caused to slower boats". The motion was rejected by the membership on the agreement that a designated area is made for slow sailing and to allow fast boat transit at slow speed. The fast boat area is beyond a line between the left hand headland and the third (crooked) tree by the beach on the right hand side (see image opposite). There is now a yellow post on the shore at each end of the line. You are asked to operate all fast boats beyond this line and at all times prevent collision with sailing craft, who also use this area at the top end of the lake, by slowing down as required. Failure to comply may result in further action being taken so your co-operation is much appreciated.



Christmas Lunch arrangements

After a disappointing response to the Ballot in the Spring Newsletter, it would seem that only a small proportion of Members are interested in attending a "Social Function" prior to the Christmas period. Those that did respond overwhelmingly preferred to return to the "South Lawn Hotel", and so that venue has now been booked for a party of about 50 people.

The 2008 Christmas Lunch will take place in the Conference Suite at the "South Lawn Hotel" on Saturday 13th December, arriving at 12.30pm to sit down at 1.00pm. The menu will be similar to last year, with a choice of three dishes including the traditional Roast Turkey, and Christmas Pudding. Drinks and Wine at the table will not be included but will be available to those that require them at their own expense at the Bar. The anticipated cost will be £17.50 per head, and we will, of course, have the Raffle for charity.

This year we will revert to the old system where there will be a tear-off application form in the autumn Newsletter so that those wishing to attend can fill in names, choice of menu, and attach a cheque for payment in full in advance.

Once again I will try and arrange a seating plan to meet most peoples wishes!

Bon Apertite, *Mike Hammond.*

News

Well known club member Don Scott was recently featured on the pages of the Daily Echo with his new model of the Ventura, here is a clipping, well done Don!:



They also shot a Video News item: <http://www.dailyecho.co.uk/video/video/index.var.26778.0.0.php>). I have a "Quicktime"¹ version of this file which I'll make available when the club web site (see Editorial) goes live. *Editor*

¹ Quicktime is available on Windows and Apple Mac computers.

Hints and Tips

(DON'T) PARALLEL BATTERIES !

I have met several people now, who in attempting to increase a boat's running duration, have paralleled two batteries on the basis that, for example, two 2200 mAh 7.2V packs should be equivalent to one 4400mAh 7.2V pack, and were dismayed to find that they got very hot.

I think most people's common sense would dictate against paralleling a 9.6V pack with a 7.2V pack but it is still a problem with two nominal 7.2V packs – note I use the word “nominal”. In fact the voltages of each pack will be slightly different - representing manufacturing variations, battery condition, cell imbalance and slightly different states of charge. When you connect them in parallel, the higher voltage one of the pair will attempt to “charge” the lower voltage one with only the very low internal resistances of the two batteries to limit the current. This is the same internal resistance that scarcely makes the battery voltage drop when you take 30A out of it! So an extremely high charging current results and both batteries get cooked.

Lets illustrate this with a few numbers. Assume one charged 7.2V pack reads 8.3V and the other reads 8.1V and that the internal resistance of each pack is 0.005 Ohm (that's 5 milliohms – comparable with the typical resistance of a good speed controller). So if we parallel the batteries we have a voltage difference of $8.3V - 8.1V = 0.2V$ impressed across $2 \times 0.005 \text{ ohm}$ and Ohm's Law tells us that 20A will flow between them! Remember they will get warm when charged at a tenth of this rate. Doubtless, all of us will have heard about *someone* who has actually got away with doing this without ill effect, but what makes you think *you* should be so lucky? (It may be that they put the paralleled pair under immediate discharge and ran them pretty flat without stopping)

So, what to do? Well, if you have an **Electronize** speed controller the answer is easy – to double the running duration of one battery, connect a second one in SERIES with it.

WARNING This only applies if the doubled battery voltage remains within the 24V rating of the Electronize ESC !!!!!

How it works is like this:- for example, to supply a motor with 3.6V, an ESC would switch a 7.2V battery on and off very rapidly (anything from 50 times a second to several thousand times a second) so that the battery was on for half the time and off for half the time – so the motor would see, *on average*, half of the 7.2V – i.e. the 3.6V required. Now if you use two batteries in series, and want 3.6V on the motor, then the ESC will turn the batteries on for a quarter of the time and off for three quarters of the time and a quarter of 14.4V is, surprise surprise, 3.6v! Clearly if doubling the battery voltage results in the batteries only being on for half the time to supply the same motor voltage then their duration is doubled².

IMPORTANT NOTE: Of course, this solution has the potential to run the motor at twice the normal operating speed (which may or may not be disastrous depending on the boat set up) but you may guard against that by setting the Electronize ESC's “speed range” adjuster pot to half its previous value.

However, if you have a **Mtroniks** Viper type ESC, it may not be so easy. They are only rated for 12V (8 cells actually, so that means a nominal 9.6V battery) so unless you are running on 4 cells at present, forget it. That is not to say I haven't recently seen a set up where a Viper was running on 12 cells. OK, the power FETs inside it may, in themselves, be rated for 40 to 60V, but the manufacturer's voltage/cell limit is undoubtedly based on you not

² note for nit-pickers - yes I know this is not strictly true as the switching losses are higher, but lets not over-complicate the issue!

cooking the unit with a stalled motor – the higher the voltage the worse the situation and the Vipers have a very small heatsink. I noted that the reverse had already failed on that particular unit – and I'm willing to bet the failed direction used to be “forward”. Also, I am not sufficiently familiar with the Viper set-up to know whether it can be programmed to reduce the effective speed range.

But if your ESC is voltage limited and you *really must* double your running duration (I'm neglecting the obvious idea of taking a break at half time to swap between two batteries!) there is still a solution, though far less than perfect. Common the battery negative leads and feed each battery positive to the load via a diode. The diodes will block any reverse (i.e. “charging”) current into whichever is the lowest voltage battery and ensure that they both “share” the load throughout their discharge. This would be true for 3, 4 or as many batteries as you wish to “pseudo-parallel”. It would also work for two mismatched battery cell counts, but the boat would then operate so as to exhaust the higher voltage pack first before automatically cutting in to the lower voltage pack – and incidentally holding the first discharged battery at that lower level so a gross mismatch of cell count is not recommended.

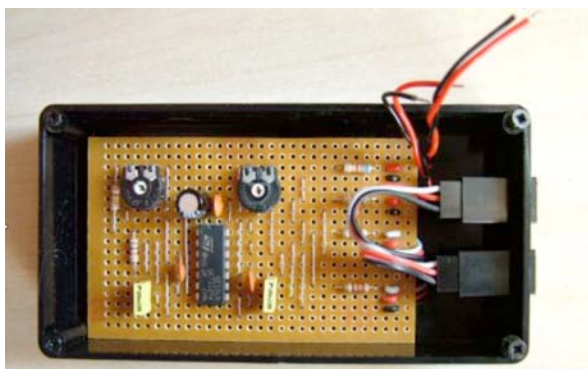
The price to be paid for this is that each diode will drop a small voltage so some of your battery energy will be wasted as heat (which you also have to get rid of) so whilst your duration will be increased it won't be doubled. The voltage drop of a normal silicon diode has two components - about 0.7V *regardless of the current* plus a further resistive drop dependent on the diode's rating. The best diodes to use are Schottky types where the fundamental drop is about 0.3V as opposed to 0.7V. A 30A rated Schottky diode will drop, all told, about 0.7V at 30A – but that's 21 watts wasted so in this example a BIG heatsink would be required. But for a modest tugboat, taking just a couple of amps, this technique might be workable.

Those who wish to explore this possibility further are invited to contact me and I can suggest parts, estimate voltage losses and heat dissipation (i.e. the required heatsink size) for your supplied operating current, and draw up a wiring diagram. [afbond@gmail.com]

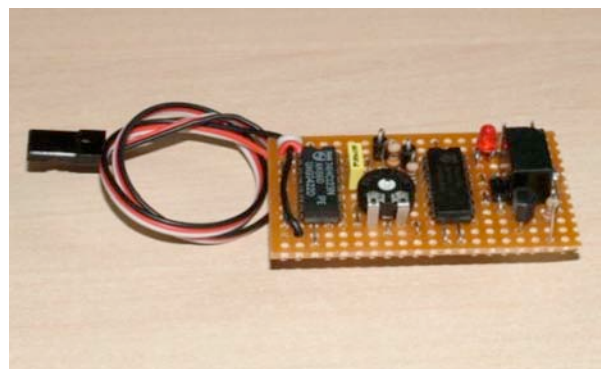
THE NEW WEBSITE

I have now built a number of electronic projects that may be of interest to club members and together with this article (and more are planned) I've decided to take advantage of the new club web site ("<http://srcmbc.org.uk>", see the Editorial above) so that the information is immediately accessible to many of you, rather than releasing it in dribs and drabs every three months in the newsletter. [Alan's projects will be featured in the "Hints and Tips" section of the site. Ed.]

Here are just two examples:



Servo Tester



R/C Switch

Happy soldering! *Alan Bond*

Griffin Hovercraft.

The hovercraft that I was building and I wrote about in the Spring Newsletter is now complete.

Weighing in at 8lbs 7.25 ounces it was flight tested at Setley recently and worked better than I expected, lifting well. Having said that, I had to replace the propeller with one with a thicker chord. Forward speed was a little slower than expected but a motor change rectified that. Reverse will always be slow, mainly because of the propeller pitch and the position within the duct, but it served its purpose and was at an acceptable level. The twin rudders were more effective than I expected. I was anticipating having to add a 3rd rudder which fortunately I will not now have to do. During the flight I set her down on the pond to test if water would leak into the skirt or the electronics bay. The result was fantastic, no water entered the craft, thankfully.



Running time was also much better than expected. I knew that both motors could run continuously for 9 minutes but would start to show the battery was getting low after 8.5 minutes. I intended to bring her in after 8 minutes but Alan Bond was doing a video of her for me. In the excitement I forgot to set my timer, so thinking she must have run for 6 minutes I brought her in to do some checks. She died as soon as she hit land! It was only then that Alan told me that he had nearly 10 minutes of video. Later in the day I had 2 more successful flights although there was a problem with what I thought was radio interference. However, it turned out that removing the gyro I'd fitted rectified that.

On the second session at the pond a couple of weeks later, things were not so good. After the first flight the craft got sluggish and she was producing a bow wave, indicating that she was not going over the hump, that is starting to ride on the air cushion. This turned out to be due to too much pressure in the skirt which forced the back corners to part company with the bottom of the hull. This led to several hours work taking the skirt off and re-fitting it. I also removed the baffle plate at the bottom of the hull so as to get more air in the plenum and less in the skirt bag. Strangely enough after doing that, no water entered the skirt or soaked into the hull frame as the air pressure was so great.



Another thing I tested was the recovery boat I built just to recover the hovercraft should it stop mid pond. This is the fun boat which looks like Del Boys van, it has become known by several members as Plonker. I stopped the hovercraft out in the pond as if it had broken down. I then sent Plonker out to recover it by pushing it ashore using the large buffers on the front. The system worked perfectly. I am now thinking of adding a large magnet to the back of the Plonker and also putting a metal strip inside the skirt bag at the front. This

way I should have the option to be able to tow the hovercraft back.

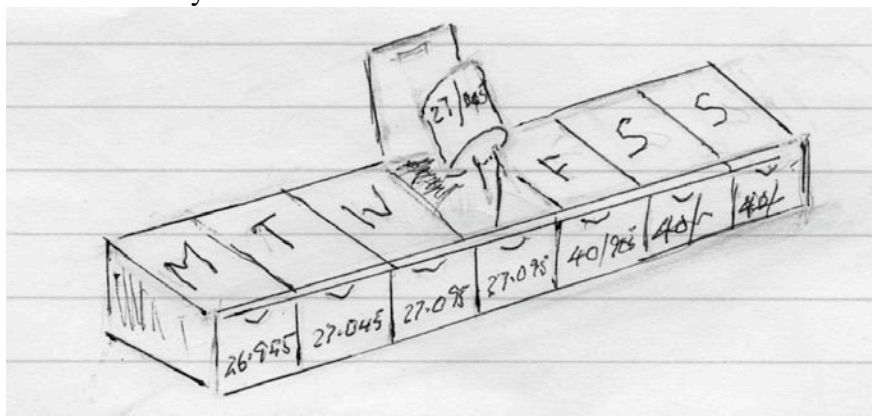
I have been asked what I am going to do next. Firstly I am going to rebuild the rear part of the Griffin cabin as I would like a larger air intake as well as two side intakes. After that I may well build a model of a US Army hovercraft. I was also thinking of building another Griffin using different materials and possibly having twin pusher motors.

Pete Bryant

Peter's tips...

(1) Crystal Protection

Radio crystals are delicate and they crack if badly handled. For maximum protection store each pair in a seven-day pill container, with a little foam or tissue between them. Find these useful plastic containers at your local chemist.



(2) Positioning hard-to-reach nuts



Wrap a strip of masking tape around your index finger with the sticky side facing out. A nut or washer that's stuck to the tape is easy to position.

Peter Oram

Adverts

FOR SALE: TUG

Kingston Mouldings hull. Scratch built; superstructure: Salvageman. 39 inches long, 8 inch beam.

Geared motor: M-tronik speed control, lights. 12 volt drive battery. Tows very well; very manouverable: £235.

2 channel 27 mhz radio available, £25

Tel. (Ringwood) 01425-470699



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1. Vic Smeed design Vivacity. Old boat completely rebuilt with Smith's motor, Electronize 30 amp ESC and ready to go. Overall length 54".



2. 1/8 scale Fairey Swordsman. Scratch built model with 2 motors and Electronize 30 amp ESC, again ready to go. Overall length 49".



Phil Flint would like around £225 for each or would do both for £400.: ( flints@onetel.net )



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David McNair Taylor has been contacted by a lady from Highcliffe who wants to sell her late husband's sailing boat, it is about 4 feet in length with a good set of sails, radio, batteries, charger and stand. She would like to get in region of £100 for the lot. If interested, contact David

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I am looking to sell a Dumas kit of the 1947 16' Chris Craft Utility . I know we paid nearly £160 so I am looking for at least £120 for it. I have some other static models for sale: they are Artesania kits of Le Renard, Harvey, and Swift plus an Amati Bluenose and a Mamoli Lexington . Contact: Peter Gargan ([Garganpeter@aol.com](mailto:Garganpeter@aol.com))

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## Letters Section

### A VIEW FROM THE STANDS.

Once again it was a real pleasure to find so many Members with such a variety of superb craft attending the March Highcliffe Exhibition. As an observer I thought that the quality and detail of individual exhibits was of an exceptional high standard. Innovation at its best!

Congratulations to the Organisers and Club Officers for the record breaking total Donation for the R.N.L.I. of £ 808.35p. That should be worth recognition by the Service and a suitable award for pushing the boat(s) out — by say a visit to the H.Q. in POOLE.

The question of the Venue for the next Club Christmas Luncheon bash has once again been raised by Mike. Most Members gave their approval to attending at South Lawns Hotel, Milford for the 3rd year running. This time however yet another change of ownership has increased costs slightly and reduced the standard of cuisine. Also membership has put pressure on booking tables to cope with the requests which doesn't necessarily encourage non-attendance by "regulars" at the Pond. Cost? - above the average. How about a return match at the White Buck, Burley, if the tables were properly arranged this time? A Pub lunch or a Fish-and-Chip take away is not really an ANNUAL event, is it? Skittles? - naah!

Thank you for the statement of fact under the Club's Insurance Policy -it covers most subject matters except Third Party liability and responsibility. Other craft such as Space Vehicles or Dirigibles are not mentioned (hah!) but should you have a jet-propelled amphibian it is a bit dodgy perhaps (hmmn) or Green Frogs on surf boards, (Peter Oram?)? How about R/C Military Tanks (non/EU) and landing craft then?

*Ponderer* (without port folio)

*[name & address supplied]*

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## Contact details

If your address, email, or other membership details change please ensure to contact:

Lorna Soffe, 1 Stoneleigh Avenue, Hordle, Lymington, Hampshire, SO41 0GS.

Email: [membership@srcmbc.co.uk](mailto:membership@srcmbc.co.uk) . Phone: 01425 615305

For the newsletter: please send your favourite hints and tips, adverts, or other contributions to:

Peter Taylor, 84 Priory Road, St Denys, Southampton, SO17 2HS

Email: [info@srcmbc.org.uk](mailto:info@srcmbc.org.uk) . Phone: 023 80554670 (you will get my answering machine; say who you are and I'll either answer if I'm there, or get back to you!)

For any other queries contact:

David McNair-Taylor, 18 Wilton Gardens, New Milton., Hampshire, BH25 5UT

Email: [scalecaptain@srcmbc.org.uk](mailto:scalecaptain@srcmbc.org.uk) . Phone: 01425 618900

**Cut off date for entry in the next issue is : 31st August 2008**

*But don't wait till then, send it to me now*, and especially give me more time if you are submitting on paper or want me to do the "art" work!

## Navy Day at the Pond



## Finally: Those were the days

To celebrate the clubs' 30th Anniversary, some photos of the club's early days. Compared to now the car park seems a little over-grown(!) and the local wild life was different. Some of the members look younger too, can you recognise them all?





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## The Colour Supplement

As always, copying costs mean we can only reproduce one page in colour for those receiving the newsletter by post. No room for all the photos I'm afraid, but here's a sample:

