



# April/May 2009 Spring Newsletter

N.B. Navy Day, this Sunday, May 10th, 0930am start

## Scale Captain's Chat

# Hello Everybody,

We had a slow start to the year due to bad weather and a frozen lake, however we are now back on track and the attendances are improving every week.

In March we held our annual exhibition in The Methodist Hall Highcliffe and were joined by members of Poole MBC. We had an excellent day with over 70 fine models of all types on display. The day raised £750 for the RNLI.

The AGM was held on 15<sup>th</sup> April and two new committee members elected to bring the management situation back up to strength. It was disappointing to see such a low attendance! The current membership looks like exceeding 110 again this year and we have a small waiting list of prospective new members.

We have a splendid new addition to the harbour layout built for us by Peter Soffe and the facility is for all to enjoy, it adds a lot to model boat handling and sailing skills. A little help putting it out and away again would be appreciated. It takes me time to get it all into my car and down to the lake, if I get a little help it will give me more time to sail my boats. Thank you in anticipation.



The Scale Captain hard at work installing the many Harbour components (see comment left).

We are looking forward to our second Navy Day which will be held on Sunday 10th May at Setley Pond starting at 9.30 am. Just a fun day to show off the "Grey Funnel Line", bring along those warships for us all to see. Please be aware that some of these models take considerable time to build so if you are sailing fast boats on that Sunday please keep them well clear at the far end of the lake.

We have finalised our programme for 2009 (see "Dates for Your Diary"), below. A reminder that any membership subscriptions not paid at end of April will have lapsed and the vacancy may have been offered to someone on the waiting list.

Some of you may be aware that our Treasurer is currently recovering from a operation and we wish her a speedy recovery and hope to see her back at the lakeside soon.

I have just received a delivery of club garments would anybody waiting for items please contact me.

I also have a dozen SWMBC South West Model Boating Year Books available at  $\pounds 1$  each , please let me know of you would like one , first come first served basis .

## David

## Dates for your diary 2009 Club Events

Date), Setley Pond.

Richard Graham Trophy, Setley Pond.

hosted by Ray and Carol Hellicar (see reply slip Lunch, South Lawn Hotel, Lymington Road, at end of this newsletter).

12th July 2009 (Sunday) Club Exhibition, Calshot Lifeboat Station Open Day, Calshot (they hope to have a new pool for us to use!).

10th May (Sunday): Navy Day (Confirmed 2nd August 2009 (Sunday) Club Exhibition at Lymington Lifeboat Open Day, Lymington.

7th June (Sunday): Steering Competition for 23rd August (Sunday): Steering Competition for the Solent Cup, Setley Pond.

12th June (Friday) Social evening and BBQ 12th December 2009 (Saturday) Christmas Milford-on-Sea, Hampshire SO41 0RF.

## Editorial: Spring has Sprung!

After the ice on the pond, and even some snow, during January and February, March finally saw a change in the weather. However, with the grass still struggling to grow, the New Forest ponies were enjoying some sweet but prickly meals!

As David has mentioned, the Highcliffe exhibition was again a success with very good attendance, both from members exhibiting, and the public visiting. There is certainly lots of interest in the models, which brings me to the Web Site.

For those of you who don't use the Internet, please make sure that you read the article in this newsletter about the Web Site because it is written for you! We continue to have around two hundred people visiting the web site each day from countries all over the world... and they are interested in your boats. To give them more information we have started to feature members' comments on their models. We would love to include your comments and the article below says how we would do that. So who would be interested in your comments? With so many people accessing the site there might well be someone wanting to build a similar model to yours. Recently



we've had queries from France, the Netherlands and Spain (as well as the UK). Please read the article below and then send me your comments!

Peter Taylor, Your Editor.

#### News

## **Setley Quays**

Thanks to Peter Soffe, Deputy Harbour Master, Setley Harbour has two brand new quays. (see the Scale Captain's Chat Section above).

Following a query from one of our members, there is a rumour that there is a cafe on one of the quays which serves breakfast. But only if you help the Scale Captain install the quays before they stop serving!



## Report on 2009 AGM

The 2009 AGM was held on 15th April at the Cricket Pavilion in Vaggs Lane, Hordle at 7.30pm. Apologies were received from 11 members and approx 15 members attended, (a very poor turn out for a club with over 100 members).

The minutes of the last AGM were read and approved, there were no matters arising.

The Captain welcomed members to the meeting and reported that 2008 had been an excellent year with The First Navy Day being a success, but it will be held on Sunday 10th May this year as some members expressed a wish to attend but could not make a Saturday. The Captain thanked Ray and Carol Hellicar for their assistance in setting up for the day.

The Exhibitions at Highcliffe, Calshot Lifeboat Day and Lymington Lifeboat Day had gone well although the attendance from members at Calshot had been very poor. The Highcliffe show was well attended with over 70 boats on display and we raised over £700 for the RNLI.

The Xmas Lunch had been excellent in the South Lawn Hotel function room and the Captain expressed his thanks to Lorna and Andrew Soffe for all their work in making it such a great event. We have booked again for 2009.

The captain thanked Peter Taylor for all his work on the Web site and the Newsletters. Peter Soffe was thanked for his new harbour units. The Auditor also received a vote of thanks.

In the absence of the Treasurer the Captain gave the Financial Report which showed the club to be in a good financial position and there was no need to raise subscriptions at this time. The Treasurer was thanked by the members for her excellent work.

<u>Election of Officers and Committee</u>. The Captain, Peter Soffe, Lorna Soffe, Andy Davis, John Frost and Peter Oram were re-elected and two new committee members Ken Dyer and Arthur Shannon were elected.

The 2009 event calendar was approved by the members.

Ray and Carol Hellicar have volunteered their garden for an evening BBQ on 12th June.

The Captain was going to try and get local Press Interest in reporting on the Navy Day on 10<sup>th</sup> May.

<u>AOB.</u> John frost expressed concern at the amount of time that the captain spent setting up the harbour and taking it down again on a Sunday morning for all members to enjoy but it was felt that members did not realise the time involved and did not show any attempt to assist, the captain was often not getting much time to sail his own boats. It was formally agreed that the club would obtain a second pair of waders and members are to be asked to help as required especially at the end of the mornings sessions.

The members were to be asked to reply to give some idea of those that would attend the BBQ in Bure Haven Drive, Mudeford (see the Reply Slip at the end of this Newsletter).

#### Comments for the Club Web Site

**For those members who do not use the Internet...** the Club Web Site consists not only of "Information for Members" and "Hints and Tips" articles (which we also aim to provide to you through this Newsletter), but also many galleries of photographs and movies, of member's boats in use at Setley Pond.

To make the photo and movie galleries more interesting I'm asking all members to volunteer comments on their featured boats (if you are not on the Internet and want to know which of your boats are shown please phone me (see "Contact Details" below). All I'm asking for is a paragraph or two (or more if you wish) of comments. The sort of thing you could address might be one or more of...

Why did I choose this boat model, what was the original, did I have a connection with it?

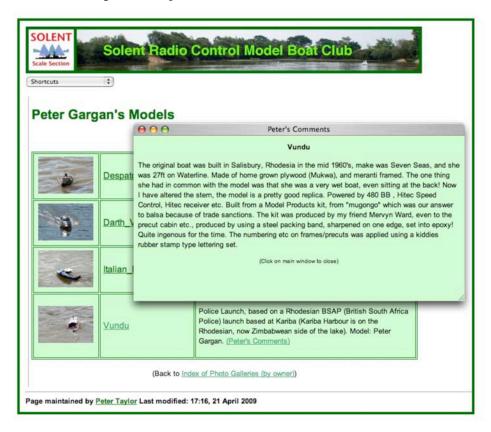
How did I make it? Kit, scratch, etc.; Any special features? What were the problems?

Any special features? Where is it now? What would I do differently next time?

...and anything else!

If possible, comments on paper should be typed or printed; if they are hand written please limit them to one or two paragraphs. Or if you are on the Internet, please email them to me as plain text, Microsoft Word .doc attachments, .pdf files, or more or less whatever you have. The illustration below shows an example of what the comments look like when accessed on the web. In this case someone has asked to see Peter Gargan's comments on his Police Launch, "Vundu".

As a bribe for those of you not on the web, I'm offering to provide a selection of photos of the boats that you comment on! I might also be persuaded to do the same for members who are on the web!



# Hints and Tips Peter's Toolbox

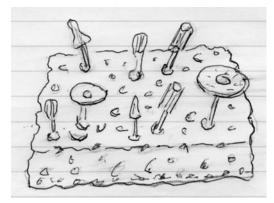
## **Sponge Dremel Tool Caddy**

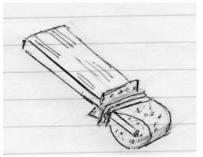
Stick all Dremel cutters into the holes of a carwash sponge. They'll be firmly held but easy to select.

#### Disposable Brush (1)

To make a less expensive disposable brush, "rubber-band" a piece of sponge foam to a scrap stick, and you'll have an excellent tool for varnishing a deck or swadding on below-deck epoxy.

# Peter Oram



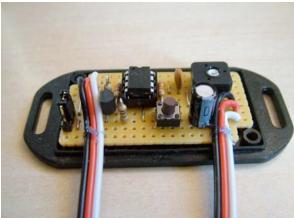


## **Hints and Tips**

#### Servo Controller For R/C Models

#### Overview





This module was developed for the control of servo operated guns and cranes mounted on the decks of model boats, but aircraft, military and robotics modellers etc. will doubtless find other applications for it.. It combines the functionality of an R/C switch, a servo-slower and a servo stretcher in a single unit not much larger than a standard servo.

The R/C switch function detects joystick positions either side of a centre deadband and sets the servo moving in the appropriate direction. Releasing the stick (to centre) at any time stops the movement and holds the servo position achieved. The end of travel limits for port and starboard can be individually set by the user.

Also, if the servo can cope with being (mechanically) over-driven, the usual +/- 45 degrees of available swing can be extended up to a full +/- 90 degrees, thereby avoiding having to gear up the servo shaft to achieve such an angle of rotation - this solution is also free of the backlash and jerkiness associated with gearing or chain drive. The traverse rate of the servo can be set to take from approximately 2 to 30 seconds from end-to-end (180 degree swing).

## **Programmable Interface Controllers (PICs)**

The high degree of functionality of this module is made possible by using chips called PICs (programmable interface controllers) -aka microcontrollers.

The particular variant of PIC I am using is called the 'PICAXE' which is programmed in BASIC. As well as being easy to understand and use, this particular dialect of BASIC has many specialised commands intended for radio control and robotics applications which renders it ideal for this project.

Arrangements are being made with Technobots<sup>1</sup> to supply all the specialised components required for this unit (including the option for supply of a pre-programmed PICAXE chip) as a complete 'kit'. The latter will include a 12 page full colour booklet with step by step photos illustrating the build sequence. The strip-board layout has been designed with the less experienced constructor in mind. To keep the unit as small as possible, a personal computer serial interface has not been included so the constructor must have his own means of uploading the published program into the the PIC chip, or buy a pre-programmed chip instead.

The circuit diagram and assembly drawings will also be made available for download from the Technobots web site, where the software (source code) may also be found in the .bas format (i.e. suitable to load directly into their free programming editor) for those wishing to program the chip themselves and/or tweak the code.

<sup>&</sup>lt;sup>1</sup> Technobots is a local (Totton) source of electronics suitable for RC applications; SRCMBC members get a 10% discount. http://www.technobots.co.uk/

#### How does it work?

At power up, the status of a removable jumper-link is checked. If it is inserted in the normal run position, the user defined limits of travel are retrieved from the PICAXE's non-volatile memory, the servo is commanded to centre position and the software enters the main loop. The setting of a potentiometer is then read and quantized into 10 possible values which determine the servo traverse rate required. The parameters used to define the chosen traverse rate are read from a 10 element lookup table. Next the pulse width of the input signal is measured. If it exceeds the preset values then movement direction flags are set accordingly. A large dead zone has been set such that joystick movements on the neighbouring channel are unlikely to trigger an accidental servo movement request. The servo then drives a small positional step in the direction determined by the appropriate flag, before returning to the main loop. Each time round the loop the input signal is checked and the servo either continues, stops or reverses as commanded. The servo is also checked to see if it has reached the end limit yet and if so it stops there until commanded to reverse.

The basic servo slowing action is achieved by only moving the servo position by 5 micro-second ( $\mu$ sec) increments once each time round the main loop, which itself runs at 50x per second. Thus to traverse from the standard 1 milli-second to 2 milli-second servo end positions would take 200 trips round the main loop - or 4 seconds. Longer periods are achieved by only nudging the servo every second, or third etc. time round the main loop and shorter periods are achieved by increasing the  $5\mu$ sec positional increments to  $10\mu$ sec or even  $20\mu$ sec.

The values for the positional increment and the number of trips round the main loop are held in the lookup table described above and are chosen to yield a relatively linear adjustment characteristic.

If the jumper-link is not found to be inserted in the normal run position at power up, then the software enters the setup procedure. The receiver input is ignored and the potentiometer now controls the servo position directly, allowing the user to set the clockwise limit of travel. When the desired position has been set, pressing a pushbutton stores this position in the PIC's non-volatile memory and then assigns the potentiometer to control the servo to set the anticlockwise limit of travel. Again, pressing the pushbutton stores this position in the PIC's non-volatile memory and the program then drops into the main loop, where now at any time, the potentiometer adjusts the servo's traverse rate.

#### **Set-up and Installation**

Initial testing of, and familiarisation with, the unit can be performed on the bench using a spare servo and a servo tester. If the latter is not available a transmitter and receiver can equally well be used. If the unit is to be fitted in a box for protection from moisture and accidental shorting, then it must be set up driving the servo prior to putting the lid on!

The set-up mode can only be entered following a power-up with the jumper-link in the set-up position. During the set-up mode the unit ignores the receiver input and is controlled entirely by the potentiometer and push-button switch.

The set-up procedure is as follows. Set the potentiometer fully clockwise, put the jumper-link in the set-up position and then power-up the unit. Now adjust the potentiometer to set the desired limit of clockwise rotation. Care must be taken when exceeding 45 degrees of travel from the centre position that the servo is not driven into its mechanical end stop for any significant period of time as its motor will be stalled and it, or its driver circuitry may overheat, with potentially fatal results. The amount of over-travel available varies with different models of servo, so again care should be taken if moving the (previously set-up) unit to a different model.

Once the clockwise rotation limit is set, press the pushbutton. This locks that position into the unit's memory and then assigns the potentiometer to adjust the anticlockwise rotation limit. *The same caveat applies to settings in the over-travel region.* When the anticlockwise rotation limit has been set, press the pushbutton again. This locks the anticlockwise position into the unit's memory and then drops the program into the main loop and the servo movement will now respond to the receiver input. At this point, don't forget to remove the jumper-link and park it in the normal run position, otherwise next time you use the unit you will enter set-up mode.

The potentiometer is now operational at all times for adjusting the rate of traverse of the servo and may be set whilst the servo is moving to choose a 'realistic' speed for your gun/crane etc.

#### **Final Comments**

For those club members who feel unable to attempt the precision assembly and soldering or chip programming, I might be conned into making a unit for you at cost, for some assistance in return with glamorizing the temporary cardboard decking and superstructures for which my models are famed, or maybe I could be tempted by some article from your junk-box.

Non club members will be able to buy a ready built and tested unit from Technobots.

If sufficient interest is displayed, the next logical step could be to implement a "fire" function for gun control applications. This could take the form of operating a relay for use by your own effects units or possibly a crude PICAXE generated machine gun sound that I have developed - but how to activate? Another channel?... maybe the digital Ch5 or Ch6?... or automatically at the extreme of traverse?... Over to you!

I look forward to discussing all or any of the above with you, at the pond-side, or by e-mail (afb@srcmbc.org.uk).

## Alan Bond

#### "Members" Adverts

#### **Customs and Excise Launch**

A 1920s Customs and Excise launch scratch built on a fibreglass 36" Kingston Moulding "Sun XXI" tug hull.



- will take 6v 10Ah or 6v 4Ah (supplied) battery, very low amp drain.
- 545 motor, 45mm brass prop. rudder servo.
- Requires radio and speed controller.

Price: £120 o.n.o.,

Very heavy so "Buyer Collects" (Brockenhurst);

Contact: Chris Chattaway, Email: cc@srcmbc.org.uk

#### A Collection of Rowed and Paddled Models by Michael J. Sheppard

**Mike's Comments:** "It is my intention to sell my existing fleet of rowed and paddled models at the end of this show season. The number of shows I shall attend will also be reduced from this season.

"WHY? It's that bug-bear of a complaint I call "Birthdays' Syndrome" As they progress, so I'm finding it more and more of a hassle to; keep-up-with-it-all. The organizational chore of charging,, cleaning,, sorting-out what has to be taken with me? Then the physical of loading and unloading.

"However I have a number of interesting new models in the planning or early build pipe-line; to keep me well occupied for sometime to come....

"...My thoughts on selling the existing fleet models now is to be able to pass-on all the nitty-gritty details of the internals while I still remember them.

"Here is a list of the models still available with basic details and prices. Prices being based on the original build costs. Deposits to secure particular models can be arranged. Now, regarding the models listed that have an Rx but no mention of a Tx. At present groups of models are operated by one Tx. If a Tx is still available for a particular model the new owner will be offered the Tx for an additional sum of £20.00. That seems fair." (photographs are on the last page of this newsletter)

- **1. Special Boat Squadron Canoe.** 4' long. Double paddler style. Traditional stringer on frames build. Covered top and bottom with self adhesive, woven fabric in dark grey. Electronize speed controller, servo, batteries and 40mhz RX with crystal, on a carry/ display stand with cord slings. **£150.00**
- **2. Mediterranean galley.** A bireme, 5' long 30" wide with 66 working oars in two banks. A big beast. It lives, bolted into a wheeled or carry frame. NOT THAT HEAVY. Needs a van or estate car for transport. Car ramps included. Glass hull wooden upper works. Two big battery packs (worth £80.00 each). Car wiper motor drives the mechanics through a set of chains and sprockets. Includes two live cannons with about 80 spare cartridges. Radio included is a custom made UHF 9 channel with a spare RX. Electronize speed controller, 6 servos. A real show stopper on the water. HATES WIND. **£630.00**
- **3.** "Gondola". 4' long. Show stopper finish. Black spray paint on balsa ply. The hull has a glass skin. And He sings via a 7x controlled MP3 with amplified sound system. Hidden rudder control. 40mhz 845 crystal. Built in batteries with charging point. Two stands, a display stand for indoor use, and a more robust one for outside. The model is housed in a fitted wooden carry/storage case with handles. **£400.00**

Contact: Michael J. Sheppard; Phone: 01437 760021; email: mjs@srcmbc.org.uk (Alternatively, Mike is planning to attend the Navy Day on 10th May with some of his models)

#### A note on members adverts:

This is a free service offered to SRCMBC Members for private (i.e. non-commercial) model boat related sales. The adverts are displayed on the Club web Site<sup>2</sup> and will be included in this newsletter if possible. Members using email can have a "myname@srcmbc.org.uk" email forwarding address set up for them (at no cost) to avoid attracting spam to their true address. Occasionally (as in this newsletter) we will also include adverts from non-members which we think may be of interest to members.

## **Contact details**

If your address, email, or other membership details change please make sure you contact: Lorna Soffe, 1 Stoneleigh Avenue, Hordle, Lymington, Hampshire, SO41 0GS. Email: 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 . 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 . Phone: 01425 618900

# Cut off date for entry in the next issue is: 14th July 2009

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!

## Colour supplement

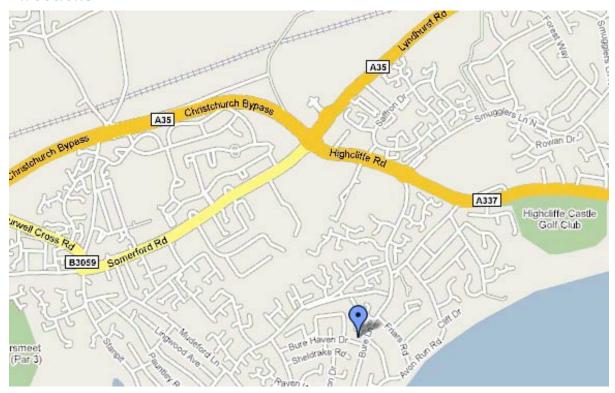
Sorry, once again, none this issue! In future we will only include colour pages in the printed newsletter when photos from, for example, a special event, makes the cost of reproduction worth while.

<sup>&</sup>lt;sup>2</sup> at www.srcmbc.org.uk/adverts.php

#### **Summer BBQ!**

Carol and Ray Hellicar have generously offered to host a Club BBQ starting 5.30pm on Friday 12th June in their garden at 3 Bure Haven Drive, Mudeford, Christchurch, Dorset, BH23 4BS. Food will be provided (around 6.30pm), please bring your own drinks! To allow them to organise the food, please let them know if you will be attending (and how many of you) by returning the reply slip at the bottom of this page, or phoning them on 01425 274426. Also please state any particular dietary needs (e.g. vegetarian). Please reply or phone by Monday 8th June.

#### **Directions**



On the A35 Christchurch Bypass/Lyndhurst Road, at the "Sainsbury's roundabout" take the A337 toward Highcliffe; at the next major roundabout turn right into "The Runway" which then becomes "Bure Lane". Having past the Sandpiper Inn on the left-hand side take the second turning right into "Bure Haven Drive" and the Hellicar's is the second Bungalow on the right.

⊱ <reply slip<="" th=""></reply>
Name: Telephone No.:
(Please tick)
☐ I shall look forward to attending the BBQ on Friday 12th June. I shall be accompanied by:
Any particular dietary needs:
Sorry, I can't attend but expect you will have a marvellous evening.
Please mail this Reply Slip to: Ray & Carol Hellicar, 3 Bure Haven Drive, Mudeford, Christchurch, Dorset, BH23 4BS to arrive by Monday 8th June. Alternatively, please phone them

on 01425 274426 before the same date.

## Stop Press!

These photos of Mike Sheppard's boats (with extra comments) arrived after the Newsletter had been completed. Clearer photos are on the club web site ( http://www.srcmbc.org.uk/adverts.php )



**SBS** Canoe (Special Boat Squadron) Is on cover of Model Boats Magazine, Feb '04 - build article inside.



**Galley** - Not heavy (11lbs 'ish) but needs two people. Carry pole splits for transit. On cover of 'Model Boats Magazine, May '08 - article inside.



**Gondola** - On its indoor show stand. He turns his head via a small servo in his chest. Depicted in Marine Modeller International, May '08.



**Gondola 1** - Special balanced keel (for on the water) can just be seen below hull.

#### **Errata**

In the "News Section" of the paper version of this newsletter, Peter Oram was credited with the new Harbour Quays. In fact the constructor and "Deputy Harbour Master" is, of course, Peter Soffe. Your editor, Peter Taylor, was obviously having a "senile moment"... possibly caused by an attack of too many "Peters". The mistake has been corrected in this online version!