

... a model club not just for boats



The rise of the Phoenix

NEWSLETTER
SUMMER 2011

Notes from your Editor

Here we are again at the longest day of the year and I don't know about you, but my to do list is as long as it was this time last year!

Don't forget our Open day on **17th July** and the working party at the lake Saturday **13th August** for a general hut tidy-up

The Lake Gang have been busy laying slabs on the bank, well done chaps. No names as I am bound to leave someone out (I wasn't there) and I'm sure the Wardown regulars know who they are... The plan is for the Parks department to try and find more materials as town pavements are replaced with tarmac.

You should already be aware of the date change of the Stevenage Family Day. It is now Sunday **23rd July** (from the 9th) following the Council taking advice from the police. There is a Sonisphere Festival, or pop concert as I would call it, at Knebworth House from the 8th to the 10th and the roads around Stevenage are expected to be grid locked. In addition, part of the Fairlands Valley is used as the car park for the event and therefore not an ideal place for families to be walking around. So stay away, unless you are going to Knebworth of course, in which case I wish you good luck!

The Themed Sailing Sundays have started, taking place on the second Sunday of each month. Of course other models can still sail on these days, it's just a way of getting a fleet display on the water for the park visitors (and ourselves) to enjoy.

Some historical documents have recently come to light, courtesy of Roy Davies, who was then our press secretary. We had a quick look while sheltering from the rain at Stevenage Open Day.

We found that our club was established in September 1991, but using the lake at Stanborough Park, Welwyn Garden City, sharing with the local Club. Luton Borough Council gave permission to use the lake in Wardown Park in December 1991 and the first Open Regatta was in March 1992 – they were a tough breed in them days!

With 2012 approaching, the timing is perfect. Your committee will be organising an Open day or two to celebrate the Clubs 20th year, though not in March! (Oh, I don't know – it could be our first night sail of 2012!!). Our thoughts at present are to celebrate after Easter, get the usual bad holiday weather out of the way first.

I have now used up all my reserve magazine articles, so I need all you scribes and snappers (photography types) in the Club to email/post/hand me pieces that I can use in the next edition...

Programme for Themed Sailing Days

To be held on the 2nd Sunday of each month

Week 1 – Tugs, Supply & Working boats

Week 2 – Warships, MTB's & Launches

Week 3 – Sailing boats

Week 4 – Fast Launches & Club 500's

Week 5 – Fishing Boats

Week 6 – Cargo, Liners Puffers etc

September dates for your Diary

Black Park - 4th September

AGM - 8th September

Night Sail - 15th September

St Albans - 17th & 18th September

The Rise of Phoenix by Terry and Tony Martin

Our story 'The Rise of Phoenix' begins on a Saturday in October 2008. This was our penultimate Bring and Buy sale at the Sea Scouts hut in Bowling Green Lane, the largest vessel for sale by far was a 6ft 8inch Three Island Tramp Steamer which had the name 'Jamells'. People showed interest in this model but no firm offers were made, as it did need a lot of work doing to it. After some discussion by members of the committee, Dave Abbott purchased the model for the princely sum of £50 as a club project.

With space limited in the storage hut, Terry Martin (my dad) offered to house the vessel in his garage, where restoration could take place. It soon became apparent that more work was needed than first thought after a thorough check on the hull. 'Jamells' was originally designed as a straight runner that was to be powered by a flat 4 cylinder steam engine. This had never been fitted and in fact had been sold separately.



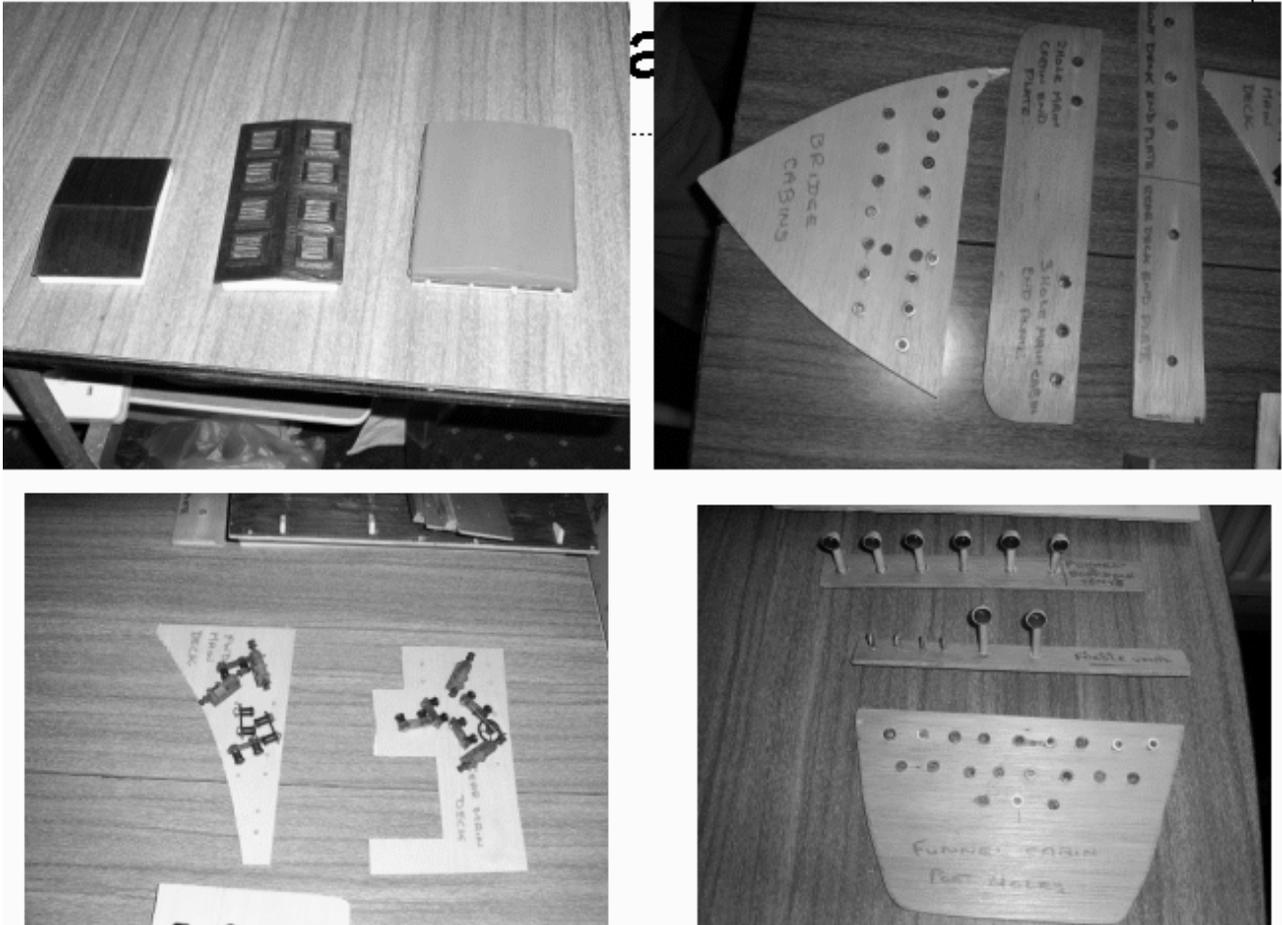
The decks on the fore and aft hold, had to be removed and with this done the whole of the internal structure could now be seen. Things did not look good! The wood planked hull had shrunk and split in places and several of her hull frames in the front were disintegrating. If you shone a torch in to the hull with the main lights off, you could see light spilling out in all directions looking like a Christmas tree! So tank testing was definitely out of the question.

To start with, a layer of resin was painted onto the inside of the hull to help support the damaged parts, next the exterior was stripped using nitro more. Ply supports were then fitted either side of the old frames and bonded in with fibre glass and matting. Thankfully at this point Dave (Aggie) and Rob Seath offered their help. Rob is in the body repair business so was able to get the large amount of fibre glass and matting we needed at a reasonable price.

Between the four of us, the hull was lined with matting with special attention being given to the new strengthening supports, which were back filled with resin to form a more solid structure and another layer of fibre glass was applied. Aggie and I then fitted a bulkhead in the stern of the boat. Terry fitted a motor mount block and a battery tray support. These items were then all fibre glassed in. The new support frames were then capped off with p38 filler. The whole of the interior of the hull was then given a coat of grey gloss paint.



The work then began on the exterior of the hull, after some filling work was complete and the exterior sanded well and 3 coats of red oxide were applied.



While the hull was under going rework, all the ship's fittings were stripped off and catalogued to remember where they were originally fitted. A number of members volunteered to help with the restoration.

- Chris Jackson: - Hatch covers
- Dave Shazarni: - Vents
- Pete Carman: - Lifeboats
- Dave Abbott: - The Bridge Section.

As the boat was originally designed to be a straight runner we had to find somewhere to mount a servo to operate the rudder. It was decided to mount the servo in the rear deck as it was too cramped for it to fit in below and removing the deck from the stern would cause even more work.

Tom Chapman donated a high torque servo and Pete Carman gave us a 40 Meg system and speed controller. Dave Hitchcock also built us a new structure to fit over the rudder linkage and servo.

Back below the waterline things were still moving on with Aggie donating a large motor and Brian Thompson and Graham Crisp giving us some batteries. When the prop and shaft were stripped out the shaft was far too long.

This was cut down but was found to be made of very soft metal. We had decided on a pulley drive like Somersby, so Aggie made us up, two pulley belts and a bearing support that was secured through the new bulkhead. Dad put together a motor mount out of brass, with this assembled a battery box was built to take the two batteries. Two straps were also fixed to the supports to help with ease of lifting it in and out of the water.

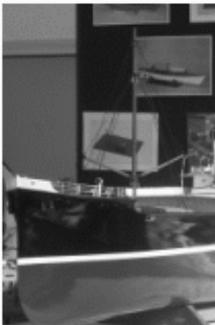
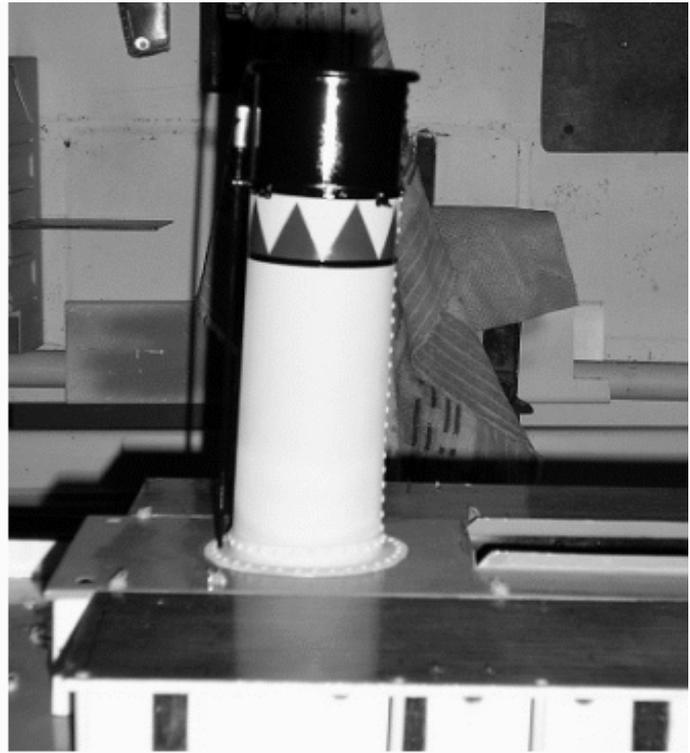
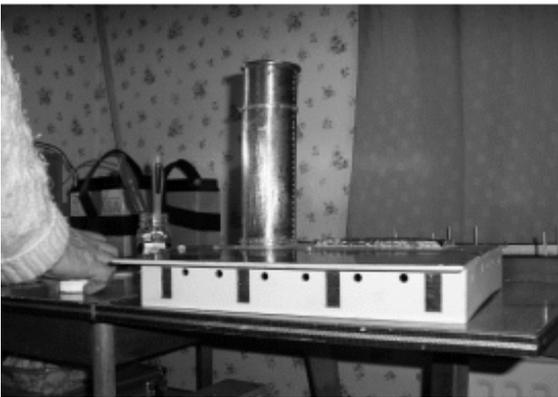
Back on the outside the fore and aft decks were relined and varnished.

The painting of the outer hull was now started. A masked line was taped in place to where we thought the waterline was and the rest of the hull covered, to prevent overspray. This was then sprayed white and once dry the hull was remasked by moving the protective coverings up and the upper part sprayed black. When uncovered, it left a white waterline mark. This was all done by using one of the club compressors. During the final coat of black, the garage seemed to be getting very dark and on opening the garage door we could see why! Clouds of black spray were billowing everywhere!!





The superstructure restoration was also coming together with the centre section and funnel stripped and repainted. We could not find any history of 'Jamells', but we were able to find some details on the Norse line, that ran from the port of London to India using Tramp Steamers, so her funnel was painted in those colours. More work was done on the cargo deck booms and rigging and reassembly started. The radio gear was installed along with the speed controller.

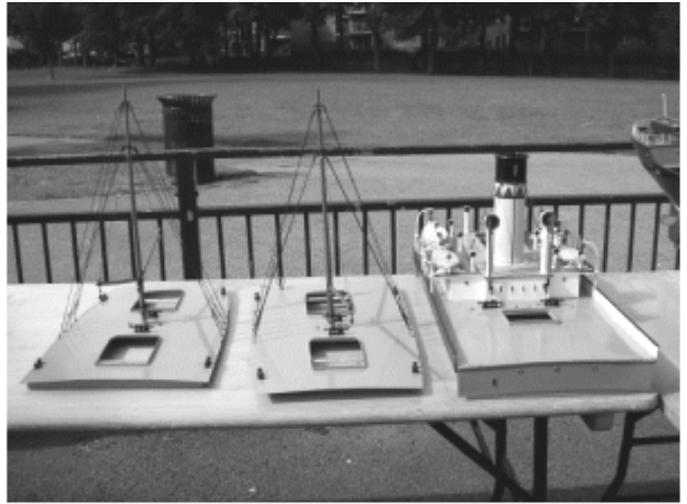


It was now time to tank test her and to work out how much ballast she would need. As you can guess, we couldn't use our usual tank test due to her size, so on one sunny Saturday, using our new test tank (a ten foot pool donated by my brother) we set to work. Using lots of big rocks and lumps of concrete placed carefully in the hull, we got the level right. Tests were carried out, on thrust and rudder throw, these went well. We found a limit had to be

made on the top speed, to stop the belts being thrown but other than that, all was well. We then set about with the very hands on work, of carefully unloading the rocks from each section and weighing it, so this could be converted to lead weights totalling 32 lb.



Her first test run was then made at Wardown Lake shortly afterwards, which went very well. There were still a few bits left to do to get her right.



A smoke generator would give Phoenix a more realistic look so Dad set about building one. After reading an article on the Web, he found out that certain water vaporisers that run on 24v AC would also run on a 24v DC. So one was purchased and fitted into a plastic container, which would hold the water and a fan added to the lid along with a chimney, made from plastic pipe mounted directly above. An R/C switching circuit was built by Tony Dalton, so that the smoker could be turned on and off using the handset. With this and the new bridge section now complete, some re-ballasting had to be done. On testing at the Stevenage Open day, it was discovered that there was a problem with the 40 Meg system, so the committee decided to invest in a new 2.4 GHz unit.

L.E.D lights were also incorporated. The mast lights were particularly special as they use modified TV Ariel plugs so they could be removed easily for transporting.

By this time, some eighteen months had gone by but as you can see the project was well worth the time. It also turns a lot of heads at every show that she has been exhibited at. Terry as project manager would like to thank all of you who helped and hope you all enjoy sailing her!

'DAGLING' Saved from the Ashes

By Chris Jackson

Background & History

On a September day in 2005 I was asked by Shutteworth's Chief Engineer Chris Morris to accompany him to RAF Henlow to collect a glider which was destined to become fodder for a 5th of November bonfire.

When we arrived we were directed to the back of a hanger and shown two piles of spruce ribs, spars and rigging wires and told this was a 'Dagling' primary trainer glider, (later research has shown that it is in fact two Elliots of Newbring [EON] type Elton T x 1 built in 1947).

This type of glider was designed in Europe during the 1930's and was extensively used by the Germans before and during the Second World War and known as the 'Schmgleiter SG-38', (school Glider No. 38).

On the English scene a set of drawings were sent to the London Gliding Club and passed on to RF Dagnall who offered to build the glider for them which was called a 'Dagling' of which a total of 28 were produced. Anyway that's the background and history lesson over, so on with the motley.



Picture taken at the London Gliding Club, Dunstable

Repair and Renovation

After floundering around for several weeks (1 day 2 weeks that is) with no set programme we were joined by Mr Peter Underwood a British Glider Association Inspector who has many years experience of both building and flying gliders. Peter soon organised our group, between 3 & 5 volunteers depending on who turned up and when

All the wood was inspected and metal fittings removed for shot blasting, repair and repainting. Most of the wood on the flying surfaces is 1/4 X 1/4 spruced framework with ply reinforcement and sheeting (built just like a traditional model). Apart from broken pieces, the big problem was the adhesive, which had broken down. The majority of joints were cleaned off and re-glued using modern two pack Aro-Dux glue.

It was decided that the finished glider would have a natural timber appearance rather than the silver paint covering that it had previously sported, this meant that the fuselage frame work had to be rubbed down, lightly stained and given two coats of satin varnish. After many weeks & days all was repaired and flying surfaces ready for covering.

The ribs, leading and trailing edges had several coats of adhesive applied, much the same as modellers use, Balsolok. Once done the covering material was laid over the area, pulled tight and held in place with clips and the areas previously treated with adhesive were reactivated with thinners, thus sticking the covering to the framework below. Once dry the fabric is lightly shrunk using an iron (just the same as Solatex).

This done, three coats of non shrinking dope, the last of these having a light buff coloured tint, were applied.

The rudder was finished off and sported a large German Swastika; requested by the Shuttleworth collection grandees to form part of the newly acquired Luftwaffe collection. (Peter Underwood has constructed a replacement rudder with an Elliot of New-burg logo as per the original). Things were looking good!



The metal fittings were re-fitted and new control wires made up as well as flying and landing wires, samples of which had to be tested at Cranfield. The Trustees of the Collection are very keen to hoist the EON Type 7 Eton Tx1 aloft. Several of the pilot's who fly the collection's aircraft, have had experience of the Tx1, one of whom, has had no less

than 28 flights, with a total time of 42 minutes. Also, one flight behind an Auster 6 aerotow up to 2000 feet and records having beaten the tow back to the ground. Unfortunately, none of the Shuttleworth aeroplanes can fly slow enough, so it seems that its first flight will be a tow, probably behind a land Rover.

Watch this space!!!

Gales forecast at Wicksteed Park

And they were correct. For the second year running it was batten down your hatches for a Model Mayhem bash at Wicksteed. No canvas was deposited into the pond this time but the crew had taken the precaution of "nailing" the legs down and removing the gazebo sides. Even so, when Kay and I arrived on the Sunday things were swaying around rather alarmingly.



Such a pity, as the conditions spoilt my sailing plans and probably others as well. Early in the day there was a sheltered corner that we could use on the lake but after lunch this had joined the rest of the bubbly lake. As you can see from the photographs of Peter C's sailing yacht, catch the wind and she flies. Wander away from shelter and see what happens!

It was a shame; I think I'd prefer rain to gales. Is it the bank holiday weather or just the location of the park?



Open day at the Stevenage Model Boat Club

Well, it had to happen, rain at Stevenage at their June Open Day. They have had a very good run, for as far as I can remember the weather has always been hot and calm, until 2011. The big mistake was to pick a date that would be shared with Stevenage Day, an event renowned for being held in the wet.

There was not much doing on the water and I am rather ashamed to say that not many of us even took our models out of our cars! However, with just three boats on the lake, Graham R attempted to emulate Tony (Sinkers) D's last years embarrassing moment, by sinking another SBC model. Violent use of the helm to avoid the moored rescue boat put him on a collision course with a small scale RAF launch. He just managed to steer around its stern.



Not enough room for everyone, under canvas.



Some took to the water – with help.



Under the gazebo, that is cheating Mr Secretary.



Come rain or shine, Lyn is with us

Another BIG thank you to the catering department, Lyn, for keeping spirits up with endless cups of tea and for Jill with scrumptious ginger cake.

Also, a "thank you" to those who helped with the break down of the gazebo's and getting rather wet in the process.

A new Transmitter for my Model Boat. aka Substituting a 2.4 GHz for 40 Meg

By John Morgan

Back in 2009, at the June Club evening, where I only had 10 minutes available for me and in my haste forgot some of the facts. The original idea of taking my new transmitter to a meeting was to ask for help in binding the transmitter to the receiver. In the event it was ready for a demo – this is how it happened.

A few years ago, Terry Martin pulled off a magnificent catch, as Christiaan Brunings headed for the bank; my 15 year old Sanwa transmitter was ailing. It was, at last, suffering from the effects of a heavy drop (face down) way back last century when the St Albans show included their large, mobile, pond. Latterly, before every sail I had had to remove the back to fix a broken grip or spring clip using plasticard and araldite.

Kay made the obvious comment - why not dust down and open my wallet and get a replacement? Yes, of course, but that would be easier said than done.

The problem was that by then I had left it too late, Sanwa had ceased production of the Conquest and their new 40 Meg transmitters had different servo connections. A repeat visit to the model shop in 2008 found the situation had become even worse, or so I was told. The new “technology on the block” was the 2.4 GHz and the shopkeeper told me that my Sanwa servos would not be compatible. The prospect of having to replace the servos that control my steam engine was daunting – back in 1993 it took many hours of experimenting to get the correct movement, especially for the reversing mechanism. So the patching with glue and fabricated parts continued.

At the previous club evening, Bob Vaughan gave an excellent and interesting talk on the 2.4 GHz system and following my question, seemed confident that it would in fact drive my existing servos... hmmm, room for thought. I might have to bite the bullet...

Then at the last Open day the rudder control “came away in my hand” – again -and I knew it was really time to bury the Sanwa. Back to the model shop. I asked the servo compatibility question again but this time got the answer I needed; though the position of the servo wires would have to be reversed. Our Bob was correct... Okay – “I’ll purchase a Spektrum DSX5E please”. “Sorry”, was the reply, “There are none in the country at present”... oh “bother”...or words to that effect...

A rummage in his back room produced a second hand one. I knew that I should have asked why it had been returned so soon (they are not *that* old?) but now having started, I wanted to finish and after an assurance from the shopkeeper that I could return it, I took a chance. Even though my servos would work after the rewire, there was a chance that the throw would differ and I would still have to change the mechanics. I couldn’t wait to give it a try, but it was not to be that easy.

The power supply leads were reversed without too much trouble, but then I found that my Sanwa plugs were too thick to fit side-by-side in the new receiver. I had to file 1mm off each plug, 5 in all including the battery plug, which took ages. The plugs are small, so I

spent much of the time just filing my fingers and I did not realise how hard the plastic would be – the task took forever. After six hours work, including rests to lick sore fingers, the receiver had been connected to all 4 servos and the battery.

Next – how to bind the two together, where's the manual. Reading the document I was dismayed to find that the text did not make any sense to me and that wiring "diagram", was just a photograph of an installation with wires crossing each other so it was impossible to see which is connected to what. Oh bother - again.

These were the instructions - replace the battery plug in the receiver with the binding plug – okay, done that – reading on, I now had to connect the power supply. HOW – I've just removed the battery lead and used the position for the binding lead!!! Reading further on, I was told that I might need three wires in the lead for the battery connection. But no hint as to why, where or how it was to be connected to the receiver.

Then a brainwave – I wonder if there is any information on the web about this. Yes, loads, as I was not alone in not understanding the "manual". Seems that with the Spektrum you can connect the battery lead to any position on the receiver. I was also told in detail how to do the binding, which thankfully worked.

Though not convinced that the servos have the same movement as before, it is (just) sufficient for the reverser to do its job and with minor adjustment to the linkages both steam and gas regulators also have enough movement. This was the state of play before the June club night.

As my talk progressed, many helpful suggestions were forthcoming from those listening – and many thanks for them. I could only get the fail-safe to work on the gas supply servo. Okay, the boiler would be saved – unfortunately with the steam regulator still open the boat would have sailed off into the sunset, out of control.

Apparently there is a hidden switch that would change this. I found this only just reachable after removing the back and a PCB board. However, this had two consequences. I now had to swap the connections to get the fail safe feature to the required servo and this, for some reason, changed the throw of those servos.

So, back to adjusting the linkages. It was however worth the trouble as a "no signal" will now close the regulator and stop the boat. The gas will have to look after itself, but provided I can regain control before the water runs out, all will be well.

Suggestions that all servos could be made to shutdown if the signal was lost proved to be unachievable; indeed the text in the manual does suggest this. However, this is still a much better situation than I had, with the old 40 Meg and of course, with no fail safe.

There is one annoying "feature" – when the system is first switched on, the gas valve closes for a second while the two have their "handshake", then reopens. I will just have to remember to turn on both systems before lighting up, the transmitter then can be turned off, leaving the receiver in limbo and frozen.

Having spent the time and trouble to change the transmitter and receiver my feeling is of relief, no more patching and making do. I can also sail with confidence venturing further from the bank, which I have been reluctant to leave for far too long. Also, there is no need

to accost fellow boaters for a peg that matches one of my crystals – I can sail at any time... and for all day!.

Terry M can now relax and not have to contemplate stopping my model from smashing itself into the side.... I hope!!

PS. I have several rare (?) Sanwa 40 Meg crystals – donations for the club shop should anyone want one... Also should electrical spares be wanted, just ask me – the mechanics, however, are shot.

Another Post Script. Even after an hour or two at the new controls, I had not got use to having the steam valve on the same stick as the rudder. Either stopped the engine while turning or altered course while increasing the steam supply.

So I decided to re-site a “pot” (variable resistor) from one of the unused sticks and place it on top of the transmitter, where the gas can be set and then left alone. In this respect, the Sanwa had the more superior design.

Once I found how the pot was held in place in its cradle, this was very easy. The Spektrum construction is very good, in fact far better and more robust, than the Sanwa. No, I’m not going to prove it by dropping this one!

So, I carefully drilled a new hole in the case, lengthened the wires (after noting which wire goes where!) and used the knob from the old transmitter, after its centre was drilled out, to the new diameter.

So, at last, I am happy. 21st century technology made to handle as perfectly as its 20th century predecessor. Pity that this modern digital stuff (and I include TV’s, recorders, cameras and RC etc in this) seem to lack the simpler and more thoughtful functionality of that they replace.

End of Magazine