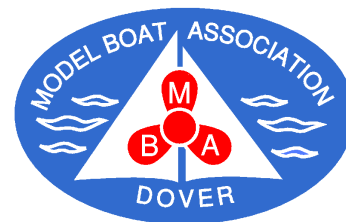


Kearsney Kapsers

The MBA Dover Newsletter



Issue 8, Summer 2002

Welcome ,

Summer is here upon us and we are well into the modelling calendar. The regattas held at Kearsney appear to be as popular as ever, we have some new members having a go at the courses as well as the regular old stalwarts. This season though we are missing one of our more successful 'boat drivers', John Evans. He has discovered another 'pastime' but I suspect he will return to model boating at some time in the future. There could now be room for another budding champion to make themselves known and take over from where John left off.

We had a splendid start to the regatta season on April 21st with a beautiful sunny day, a report can be found later in this issue.

On Wed 1st May, we held our Annual General Meeting.

Peggy Maunsell, who has been our Treasurer since 1996 and Charles Male our Scale Secretary, had both indicated that they would not be standing this time for re-election. All the other committee members were happy to continue and were duly elected. Terry Brown who has been helping Charles over the last few months in the position of Scale Secretary, has now officially taken up this post.

Mrs Carolyn Tripp has been elected as our new Treasurer. We thank these members for taking on these very important jobs within the club and welcome them.



Ken Frisby's tribute to HM The Queen's Golden Jubilee.

Picture by Jim Gray

Our thanks go to Peggy and Charles for the sterling work that they have done over the years, as mentioned before, Peggy has been our Treasurer since 1996, perhaps she can now enjoy her world cruises unhindered.

Charles stepped in to help out a year ago, perhaps he can also relax now and enjoy his diving. We will of course still see them around as they have only retired from their positions within the club..

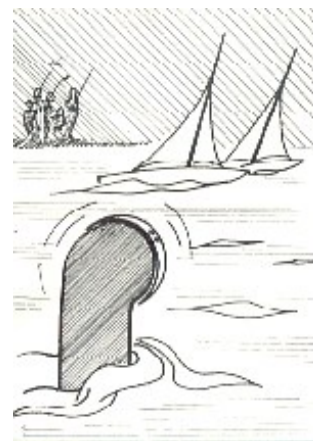
Terry has already brought some new ideas with him, he decided to perk up the tug towing competitions by introducing different ways of negotiating the course, it makes life more difficult for the operators and more fun for the people watching. This of course is Jubilee year and we as a club put on a special event to mark this historic 50 years reign.

We asked members to dress up their models in a patriotic way, and true to form our Ken Frisby rose to the occasion.

The picture above shows his model as displayed at the event, well done Ken!

I will be back in the late Autumn with the next KK until then, happy Boating.

Alan.....



You should never dive into murky waters!

ABBEY OBSERVATIONS.



Just to explain for those who might not understand, this was a group picture taken at one of our regattas which contained so many characters that I could not resist putting the caption's on it.

Alan Knott had a problem with his receiver battery on the dredger 'Fairway', it was missing!

Derek Tippet was checking with the local "reporter" who writes a column in the River news, that his details were correct. Derek features regularly in the local papers with his 'fleet'.

I couldn't resist mentioning Pat who hounds us all for raffle tickets - but does a good job.

Tony and Andy are always trying to squeeze that last drop of power from the motors on their fast patrol boats.

Watch out if my cameras about!

And, seeing that this is a humorous page, I Thought you all might like this one,

This is a transcript of an ACTUAL radio conversation of a US naval ship and the Canadian Authorities off the coast of Newfoundland in October 1995.

Radio conversation released by the Chief of Naval Operations 10/10/95

Americans: Please divert your course 15 degrees to the north to avoid a collision.

Canadians: Recommend you divert your course 15 degrees to the south to avoid a collision.

Americans: This is a captain of a US Navy ship. I say again divert your course.

Canadians: No. I say again, divert your course.

Americans: THIS IS THE AIRCRAFT CARRIER USS LINCOLN. THE SECOND LARGEST SHIP IN THE UNITED STATES ATLANTIC FLEET. WE ARE ACCOMPANIED BY THREE DESTROYERS, THREE CRUISERS AND NUMEROUS SUPPORT VESSELS. I DEMAND YOU CHANGE YOUR COURSE 15 DEGREES TO THE NORTH, THAT'S ONE FIVE DEGREES NORTH, OR COUNTERMEASURES WILL BE TAKEN TO ENSURE THE SAFETY OF THIS SHIP.

Canadians: This is a Lighthouse. Your call -

Oh! What a big B... you are ! You all know the size of my Seehund so how about this model of the Bismark. Same Navy different scale, even this big, the battleship should be twice it's size!
The venue is *Childe Beale Wildlife Park*, Pangbourne Berks.

This is not the first encounter the Seehund has with this monster, some years ago as it was being displayed and majestically sailed close alongside the public, I decided to dive under it and appear on the other side.

This was the one and only time that my faithful model has failed to surface, the reasons are complicated and long but I had to be rescued by the lad's in the rescue dinghy. This was also a piece of good luck as the water at Beale is extremely deep in the middle and after a heart stopping few minutes she re-appeared to sail again!

And No! I am not admitting to the Nut of the Month award, this happened several years ago and it was witnessed by more than one club member!



Editor's Rest

This picture of Alan Poole, asleep in his car, after a hard day writing the Newsletter, was taken by a club member and submitted for publication in the Newsletter .

Well done Alan another Newsletter hits the press, keep up the good work.

Don't forget your not the only one around with a camera, the members are watching you!

Alan Hounsell - Secretary

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Secretary; Alan Hounsell - ☎ 01303 242540 , Email: secretary@mba-dover.org.uk

Treasurer; Carolyn Tripp - ☎ 01303 252203, Email: treasurer@mba-dover.org.uk

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Newsletter Editor; Alan Poole - ☎ 01304 852917, Email: editor@mba-dover.org.uk

Committee Members; Ken Greenland & Roger Shields

The Dover Tugs Part 2

As I mentioned in last issue we have been constructing large scale models of the Dover Tugs Dauntless and Doughty. In the last issue I described how the project was started and mentioned the construction techniques and the drive units being made by Roger. Here are some photos which I hope will show how things are progressing, the hull is now almost finished and one unit has been successfully tested



The two pictures left and right show the hull in the very early stages of construction. The planks are 1/8th ply on frames of 1/4 in MDF



The planking continues leaving the bow and stern to be filled with foam. This is then carved and filled to blend in to the planks. The picture above also clearly shows the vertical plating above the knuckle (painted grey)



These two pictures show the keel laminated and shaped on the nearly completed hull.

The Dover Tugs continued,

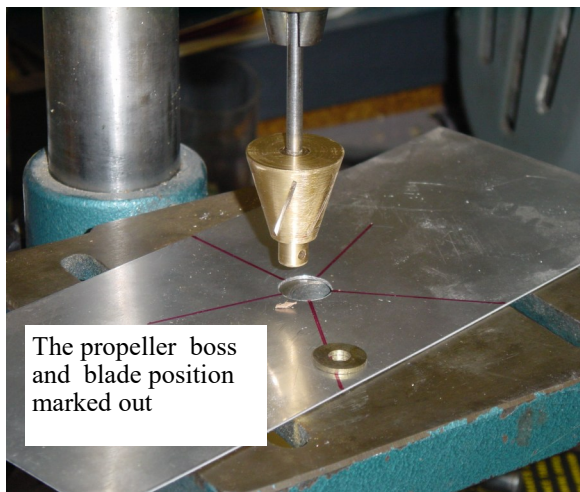


So here we have the master ready for moulding, all rubbed down and sprayed with a primer filler, this makes a beautiful smooth finish almost like plastic. The 'shadow' (cut from melamine coated MDF) is placed on the centreline and is used to mould up against to.

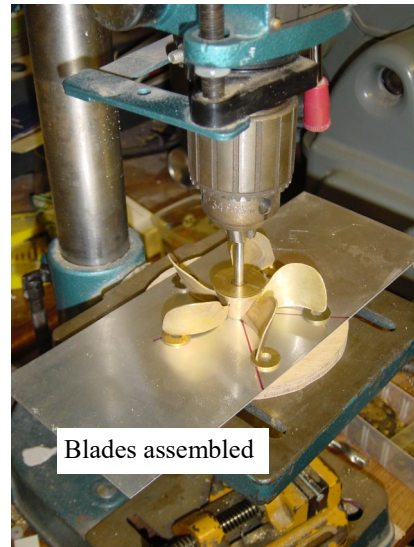
The

Drive Units

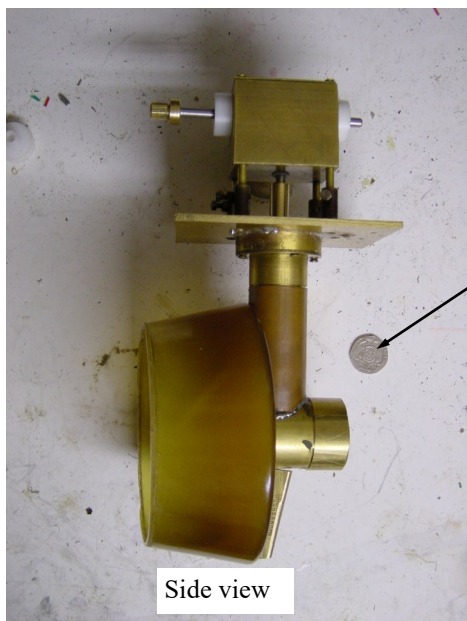
The following series of photo's show the progress made by Roger Shields on the drive units. There are commercial units available from the 'Robbe' company but the scale is wrong and they tend to strip the plastic gears. Our units are very large, the Kort nozzle is 5ins Dia. They are also quite heavy which means that the hull needs reinforcing in the area where they are fitted.



The propeller boss and blade position marked out



Blades assembled



Side view

Twenty pence piece shows the size of these units



Front view

These four pictures give some indication of the amount of work that is needed to make these units

REGATTA REPORTS

What goes into organising a regatta? Well after sitting down and working out some times and dates for the season, a regatta date is finalised. About two weeks before this date, your sub-committee get together and try to work out what sort of event we think is required, do we go ahead with the well tried and tested format or does the new scale secretary have other ideas? When this is sorted then all the equipment needs to be checked for serviceability, perhaps an item needs repairing or some parts want replacing. A start time is decided upon and the membership informed. Alan H our secretary usually informs radio Neptune who include it in their list of local happenings, Alan then gets on his computer and knocks out a flyer that is posted on the notice board at the Abbey. Occasionally other items like rules for the competition, need to be printed along with all the membership packs and paperwork that we use on the day.

He also makes sure that there is sufficient petrol for the generator if that is required.

On the day, usually at about 8.30, We all gather at the Abbey and start to load up the trolley, this first load is taken down to the water where the fence is erected and the tables put out. A second load is transported down with the tent and this is put up while the trolley returns one more time to collect the remaining items.

The boat is launched and the course is laid out and by this time the tea is usually made. After all the models have been placed on the tables, the entrants are booked in and the regatta can then start. All this happens in reverse when it's time to go home!

21st April 2002, Club Regatta.

The morning started off with beautiful sunshine and this continued right through the day. There was a very good turnout for our first regatta of the season. Some results of the winters building were on show on and off the water. There was a very nice steam drifter on show built by Clifford Hope, this one called Peggy. All of a sudden we have two of these model types in the club, we reported on the Pilot vessel version built by Roy Jackaman last time, (*see the for sale section*) this version is of the basic steam drifter. Caldercraft now market this kit. Cliffords model is powered by a Maxon 24volt electric motor and is his first model boat, although he has flown model gliders before, he informed me.

Don Westwood brought along his smart model of the Model Slipway, Range Safety Launch. Naturally there was a lot of interest in this model as there are several of them operating out of Dover. (*they have now been replaced with smaller craft. May 2002, Ed*) Alan Knott, who was a crewman aboard the real boat took particular interest in it. He had on show a nice unusual model of a dredger. The model named 'Fairway', had a working crane on the blunt end which he could control from his radio, (*after he connected the receiver batt. Ed.*) There is also a dummy load in the hopper that adds to the atmosphere and charm.

Derek Tippet has built a rather nicely proportioned tug, which he used to good

(Continued on page 7)

(Continued from page 6)

effect in the tug towing section of the regatta, gaining a second place. This model has been modified from a hull that Derek had 'in stock' All the super-structure is scratch built and the twin screws are supplied with Kort nozzles for better manoeuvrability.

After speaking to most people, the general feeling was that we all had a good first regatta.

Illuminated event 8th May

I understand that only two people turned up for this event, maybe we should re think this early show, the nights are drawing out and it does not get dark until fairly late in May. The October event was however well supported, and enjoyed.

Golden Jubilee Model Boat Display

A good amount of members and friends from other clubs supported this one off Queens Jubilee show. The weather was also kind with no rain and some sunshine to round off the day.

We did not have any competitions as such, just a couple of rounds of boat snooker that had prizes for the best lady, gent and junior. The rest of the day was free sailing providing the frequency was available.

There was an allocated spot reserved for submarines but as the other models were not excluded from running, this proved to be a little dangerous with near misses occurring. Steve Webb ran his famous (well it did feature in the TV series Modelmania and he has got his Blue Peter badge), Type VII U-Boat. Maybe it was our unpredictable water that made him experience some funny happenings with the U-Boat refusing to dive in it's normal faultless way, but in any case he managed to bend his periscope on something lurking under the water.

We also welcomed members from Ramsgate Vikings and Maidstone Cygnets clubs. They brought along some interesting craft. One that operated on land and water! There was however a rather disturbing happening when a ladies handbag was taken from the compound. We do all try to be vigilant and look out for unauthorised people inside our area, that is the reason why we operate our visitor badge system and this has been a success up until now, however, a lesson needs to be learned, we must not leave valuables unattended.

Club Regatta 26th May.

The regattas are happening very frequently at this time of the year, it was only a fortnight since we held the last meeting. This time however we did not enjoy the decent weather and we took a decision to cancel the event at mid-day. This is always a problem, the rain had been torrential since very early on and there was no sign of a let up so we reluctantly packed up.

The Yachts had only managed one race and we had only ran one competitor on the tug towing course-(Derek). Just to prove how bad it was, I have included a picture of Ron Cross repairing his yacht after the wind had blown it over and snapped the mast off. *Now that's dedication ed!*



Left.... **Mr Ron Cross**

If you look carefully, you can see the rain coming down in stair rods !



Above... **Dave Cowlin** with the paddle tug **FORCEFUL**, adjusting ballast before it's maiden voyage on 26th May, ably assisted by Roger.

Club Regatta June 9th

Not a great turnout for this the third club regatta of the season, I guess everyone is winding down from the festivities of the previous week but we did put on this event and it didn't get spoilt by the rain although it did try make us wet once. Terry could not attend so we set up what we thought was a reasonable course and ran a tug towing and steering competition. Considering the amount of members present, we had a good number attempting the courses which was encouraging.

Whitfield School Fete 29th June.

This was an event that we agreed to support as some of our members had children attending this school. We only took along the small pool with the childrens tugboats. A problem with the filling of the pool with the required liquid resulted in a late start but all the kids enjoyed the efforts and we made a small sum of cash to be added to our funds.

Bybrook barn Weekend Ashford 30th June.

This is an event that we have supported now for three consecutive years. It was supposed to be a two day show but due to the late changing of the date, we committed ourselves to one day only, the Sunday. And what a Sunday, the final of the Football World Cup.

Understandably there were not a lot of people about, everywhere was quite.

The show was a success despite this with a pretty good attendance by members however there were some regular faces missing, I for one could not attend because of a new working shift pattern.

On a sadder note, Ken Greenland severely damaged his Maggie M Trawler when avoiding an accident on his way to the show.

FOR SALE AND WANTED

Owing to transportation difficulties **John Slee** has decided to sell a number of his models. These are mostly high quality models and as a result are not cheap but they are offered with many extras which almost add up to the asking price alone so they are a good buy! The first is a Danny Boy steam drifter fitted with a Hectoperm electric motor, She is 42ins long and finished to a high standard. There is no radio included with this model and the asking price is **£450.00** o.n.o.

A Caldercraft Imara tug is the next model on offer, this is also 42ins long and fitted with twin Decaperm motors and twin ESC's. A new 12volt battery is supplied but no radio. This model has all the usual Caldercraft fittings added including knives and forks on the galley table! Lighting is also fitted. John is asking **£500.00** o.n.o. for this one.

HMS Diamond is for sale at **£450.00**, this is 6ft long and has twin motors. She was a modern destroyer built after the war and is very impressive on the water.

Now some live steam boats, A Martin Howes and Bayliss **Sea Kadett**. Complete untouched kit, this is 52insx8ins, 12th scale steam launch and comes complete with a triple cylinder MHB steam plant. The asking price for this one is **£1300.00** o.n.o.

Another steam launch this time a complete boxed and untouched kit of the **Topaz** by Martin Howes and Bayliss, complete with steam plant is offered for **£900.00**.

A **Waspada** fast patrol boat complete with fittings and twin 12volt motors plus stainless steel shafts and prop shop props is offered for **£200.00**. This model requires finishing off, it is a fibre glass hull by Maritime Models, with wooden decks and superstructure.

The last model being sold by John is a **Maria Felling** tug, this just requires a few finishing touches to bring it to life, it is fitted with twin steam engines and a single boiler.

The boat is by Caldercraft and is the top of their range.

Live steam engines are certainly different and more sophisticated than the normal electric powered model and this is reflected in the asking price of **£1800.00**

John can be found on **01303 264356**

Roy Jackaman wishes to sell his "Britannia" Pilot boat, This is the Mountfleet Models version. If you saw the pictures of the model in the last issue you will appreciate the quality of this model. Roy is including a two channel radio complete and ready to run all for the asking price of **£300.00** O.N.O.

Mr Balkwill-White is offering two models for sale, A Revell Flower Class Corvette complete with two channel radio, batteries and ready to run for **£300.00** O.N.O

The second model is a 1/12th scale freelance Thames steamer, this is also complete with all radio, batteries, and ready to run. The asking price is **£150.00** O.N.O.

The telephone contact for these two models is 01843-850674.

Mr Ivan Ratcliffe has phoned to say that he has a large number of model magazines that he would like to offer to the club or any interested club member, just a small donation would be appreciated. Ivan is not very well at the moment so please contact the editor (me) for details.

It was felt at the last meeting on July 3rd, that it would be interesting for other members if a short report was written of this years WINGS AND WHEELS model SPECTACULAR that took part, as usual, at North Weald airfield on 29/30th JUNE.

Although there is very little for the model boat enthusiast in the way of displays there is one large portable pond there if you wish to use it. This is run by a small group of 5 or 6 traders and combined model boat clubs. But being in the main a model flying event there is a packed weekend of flying events throughout the whole weekend and these events are in 10 minute time slots by individuals showing their flying skills with their different models which are also of differing scales. And there is a continuous commentary given by Dave Bishop of DB Sound...and he doesn't stop talking all weekend!

But it's all interesting stuff he's on about, what the aircraft flying is, it's scale, weight, time it took to build, and what it cost to build. Apart from special airobatic planes there are a vast number of World War 2 scaled model aircraft.

The airobatics these chaps carry out with their models are equal to and better than the real craft do when you see them at air displays. Take three 8 foot wingspan model Hienkles (I think that's how it's spelt) climbing over one thousand feet then each one releasing a V1 doodle bug which in turn carries out airobatics and land on their own... Two 1/2 scale Sopworths, twin winged aircraft about 8 foot wingspan weighing 128 pounds taking off and performing incredible stunts the likes you have never seen before. A 10 foot winspan scratch made model of a Flying Fortress, it's bomb bays open in flight and actually drop bombs on the runway. The things these modellers do with their models is endless.. and breathtaking. No wonder the weekend event is called a "spectacular" it is!

Last year Pat and I went for the day and got caught up in huge traffic jam all because we got there too late.

This year we took our tent and camped the weekend, there is so much to see there.

Next year take your wife there for the weekend. If she's not too fussed about the flying events, she can walk up to the biggest saturday outdoor market you have ever seen, a Dell Latitude Laptop Computer £299, Toshiba SAT4100XCDT £449, not bad, again a regular event but a weekly event..but don't tell her that bit.

I have attended this event for three years and each time is better than the last. But this time I wanted to buy some AA NiMH batteries for the power packs for my almost new Fleet Omega transmitter which I have just acquired, upgrading from 600mA Nicad to 1200mA NiMH's.... 20 for £15 not bad hey!

There was a stand there called OVERLANDER.... they specialise in rechargeable batteries for everything and they make up packs to order too. They also give out a very interesting 6 page catalogue containing valuable information on the care, maintenance and charging of NiCads and NiMH batteries. In my next article I'll deal with these aspects of our hobby. Till then - safe sailing.—Charles Male

I found this handy little conversion chart on the back of the 'Evergreen' plastic sheet cover,

SCALE CONVERSION CHART

ACTUAL SIZE		N 1:160	HO 1:187	1:72	S 1:64	O 1:48	1:35	1:25
Inches	Nearest Fraction	SCALE INCHES						
.010	1/100	1 1/2	7/8	3/4	5/8	1/2	3/8	1/4
.015	1/64	2 3/8	1 1/4	1 1/8	1	3/4	1/2	3/8
.020	1/50	3 1/4	1 3/4	1 1/2	1 1/4	1	3/4	1/2
.025	1/40	4	2 1/8	1 7/8	1 5/8	1 1/4	7/8	5/8
.030	1/32	4 3/4	2 5/8	2 1/8	1 7/8	1 1/2	1	3/4
.040	1/25	6 3/8	3 1/2	2 7/8	2 1/2	1 7/8	1 3/8	1
.050	3/64	8	4 3/8	3 5/8	3 1/4	2 3/8	1 3/4	1 1/4
.060	1/16	9 5/8	5 1/4	4 3/8	3 7/8	2 7/8	2 1/8	1 1/2
.080	5/64	12 3/4	7	5 3/4	5 1/8	3 7/8	2 3/4	2
.100	3/32	16	8 3/4	7 1/4	6 3/8	4 3/4	3 1/2	2 1/2
.125	1/8	20	10 7/8	9	8	6	4 3/8	3 1/8
.188	3/16	30	16 3/8	13 1/2	12	9	6 5/8	4 3/4
.250	1/4	40	21 3/4	16	16	12	8 3/4	6 1/4

Getting Back to Basics

The Basic 2 channel Radio

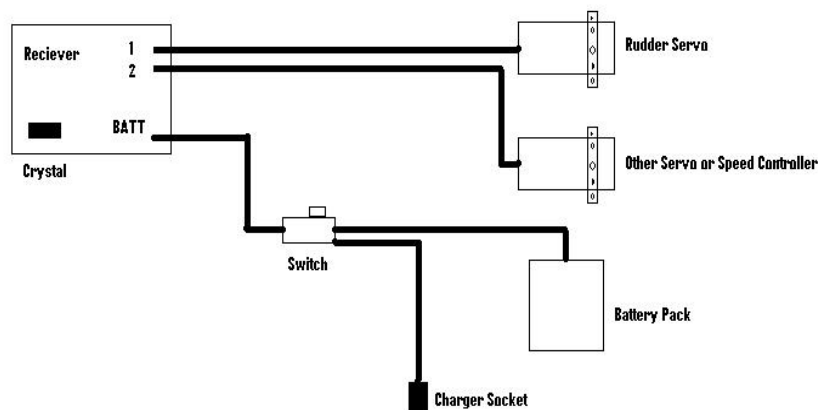
The most basic of radio control systems available today comprise of a transmitter, receiver, a pair of crystals, two servos, a battery pack and a switch with small wiring harness. The servos are the simplest thing of all to connect, and simply plug in to the two channel sockets on the receiver. The rudder servo connects to channel 1 of the receiver, and the other servo to channel 2. All the plugs plug into the receiver the same way round. The plugs are normally polarised (i.e. you are normally only able to plug them in one way round) so if in trying to plug them in they feel like they won't go in, then don't be tempted to force them. The polarisation used is quite simple, in that two adjacent corners of the plug are chamfered off at about 30°. Using servo plugs from other manufacturers is normally possible, unless either the servo, or system is quite old. The early Futaba systems, did however have plugs with pins that protruded from the base of the plug, and if you try to use one of these old style servos with modern equipment then the easiest thing to do is to replace the plug with a modern one.

Futaba managed to go their own way again until recently by using a plug with a tongue on the side of it.

However these tongues are simple to cut off, and if your system uses the chamfered corners, then it's a simple case of filing them down, but be sure to chamfer the right corners!

After plugging the servos, the next thing is the switch with its harness. The harness comprises of three leads leading from the switch. One from one side, and two from the other. The single lead with it's male plug (similar to a servo plug) plugs into the BATT connector of receiver. The other two leads in the harness are for connecting the battery pack and the charger when we want to charge up the battery.

The female connector of the two is used for connecting to the battery pack, and the other connector should be tucked away somewhere dry ready to use with the charger. The switch is wired up in such away, that when the receiver is turned on, the charging lead of the harness is isolated, so that the charge light on the charger goes out, if its connected up. This is to make you aware of the fact that your trying to charge up the batteries while the switch is in it's on position. Next are the crystals. These are marked Tx & Rx and are plugged into the transmitter and receiver respectively. (I have know some 27Mhz systems work perfectly well with the wrong way round, but the frequency that you would then be working on is unknown, and is more than likely to be outside of the radio control frequency band. This means that it's then illegal to use).



The Basic Two Channel Radio System

Testing the System

Any system, old or new should be tested before finally fitting to a model. The best way to do this is to charge up the batteries, then make sure you disconnect the chargers before testing it. Just turning the chargers off is no good, as the charging leads for the batteries become a very affective aerial for picking up interference. Keeping the transmitter aerial down, turn on the transmitter first, then the receiver.

If all is well then the servos should give a satisfying wiggle, and be in approximately their centre position.

If they're off centre then use the trim controls on the transmitter to centre them. If you see a judder coming from the servos, and the transmitter is resting on the bench, then pick it up and see if they quieten down.

The reason for the judder is that by holding the transmitter, you are actually becoming part of the balanced aerial system. You're supplying the earth path of the transmitter aerial array.

With the aerial still down, you should be able to walk quite some distance away (about 100m) from the receiver, but still maintain complete control of the servos by using the joysticks. If not then check that the receiver aerial is as stretched out as you can get it, and not bundled up in tight knot.

Before the receiver leaves the factory, the aerial wire is one of the last things attacked. The receiver is then tuned into that piece wire. The length and material that the aerial wire is made from is very important, and so the aerial wire shouldn't be tampered with, otherwise the receiver will become prone to interference.

If the system doesn't work at all then either the transmitter or receiver isn't getting a power supply or you might have picked up a mixed pair of crystals by mistake. The crystals are easy to check, but if they are new, and didn't come with the system, then it could be they are the wrong ones for your system. Try another set of crystals that you know are correct. Crystals for Futaba systems won't work in HiTec systems; neither will FM crystals in an AM set, nor vice versa. Battery packs can be checked with either a multimeter or 6-volt bulb. Other things to check are if the connectors are in the right way round, and also that they haven't got wet at sometime and turned green. The negative side of the connector are very prone to this. If it's still not working and the switch is in both good mechanical and electrical order, then either the transmitter or receiver is faulty. Try swapping either of them for a known good one.

27Mhz

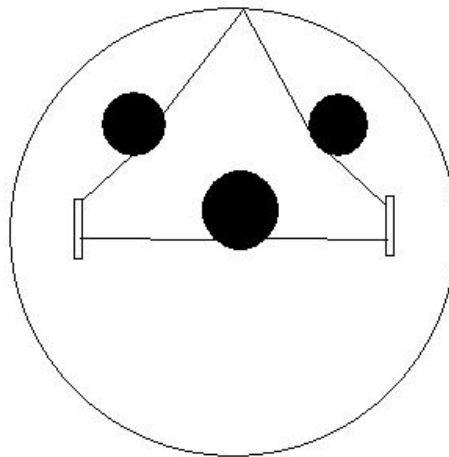
Sometime ago modellers were restricted to just the use of 27Mhz. Unfortunately the number of frequencies was relatively limited, and CBers soon found that they could encroach on to the frequency band. The other big thing about radio waves is that the lower the frequency, the further they travel, and the higher a frequency, the more line of sight it becomes. A relatively low frequency such as 27Mhz will tend to bounce around obstacles without losing too much of its energy. When the Sun experiences a period of high sunspot activity (which happens on an eleven year cycle), then the affect on the earth is a thickening of the Ionosphere. This thickening, then gives a low frequency radio signal something to bounce off. As the signals radiated from a transmitter travel in a straight line, the signal carries on over the horizon and bounces off the Ionosphere, returning back to earth, and bounces back up again (known as SKIP). Depending how much energy is lost on each bounce, this can happen many many times before the signal is so weak it can't be picked up, but could circle the globe more than once.

With all this in mind, if you are using a 27Mhz radio control system somewhere in the UK, and a couple of people in the USA start chatting on the same frequency, then you may well start picking up interference if there is a lot of sun spot activity. So shifting to 40Mhz is well worth the effort.

Radio and Interference

If you turn on a domestic radio while a thunderstorm is rumbling around, then you may well hear the crackling as lightning hits Kens shed in Barham. The crackling is the sudden discharge of electro-magnetic energy that swamps the radio frequency spectrum. It hasn't got a set frequency, and so you could term it as having a VERY VERY wide bandwidth.

The first radio transmitters used sparks to transmit their signals over the airwaves (something which is outlawed now). Therefore a good source of interference, particular in a radio controlled boat, is anything that can produce a spark or a discharge of static electricity. Motor brushes are the favourite as they are held against the rotating commutator of a motor. The commutator of a motor, is in effect just a series of switches in an endless line. Each segment of the commutator is connected to a coil of wire on the rotor of the motor with two opposite segments supplying at least one coil. When the brushes start to make contact with these segments a tiny spark is produced and the coil becomes energised. The energised coil then becomes an electromagnet which interacts with the fixed magnets of the motors stator. The interaction of the magnetic fields causes the motor to turn. Eventually the brushes come to the end of that coils segments, and the coil is de-energised, and it's magnetic field collapses, the brushes then start to come into contact with the next coils segments. And so the motor carries on turning. When the magnetic field on a coil collapses, the electrical energy produced is huge, and so sparking takes place between the commutator segments and brushes and high energy pulses are produced. These pulses and sparks, produces a wide band of interference, and the wires leading from the motor become very effective aerials in a confined space. Hence the reason for keeping motor wiring and radio wiring as far apart as is possible. Should radio or motor wiring have to cross paths then if possible it should be done as near as possible at right angles to avoid mutual inductance. Motors are normaly in metal cases, and so the effects from the brushes sparking is reduced. However the energy pulses produced by the coils magnetic field collapsing are hardly effected by a metal case. In electronics there are components called capacitors. A capacitor in layman's terms, could be thought of as a small battery, able to store a small amount of electrical energy for a short period of time. As the electrical pulses coming from the motor need to be got rid of, we can use capacitors to smooth them out. When a pulse occurs, the capacity stores up the energy, and then releases it's energy after the pulse has ended. Thus we have both reduced the magnitude of the pulse, and also lowered it's frequency by making the pulse length longer.



A motor Fitted with Capacitors

Pulses of energy produced by connecting

brush and the case of the motor.

The size of the capacitors should be in the order of 0.22µfd between the brushes, and 0.1µfd between each brush and the case.

duced in the motor case,

capacitors between each

brush and the case of the motor.

This above is a reprint of the notes handed out by Terry at the July Wednesday meeting when he gave us a talk on basic model control systems and also a very informative explanation of real tug towing techniques. (ed)

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LATE NEWS

Not a lot of late news this time in fact I think that we are all up to date, The season is progressing and the regatta season will shortly come to a close, the next issue will be around about November time, and then it will soon be Christmas!

Secretary's Jottings

Model Boat Display, Dover Regatta 2002 Dover Seafront Saturday & Sunday 10th / 11th August

The MBA Dover have supported the above event for a number of years, providing displays of model boats both on the club's portable pond and on static display. In response to a request from the organizers, this year the MBA Dover will, again, be putting on a two-day display.

This event can only be successful with your help, please come along and support your club. Help us, to put on a display to remember. Bring along as many boats as you like, book sailing slots throughout the day and use the club compound as a base to see the other attractions.

For your information I have enclosed a copy of the full Dover Regatta events program together with a location map and full itinerary of club activities. Don't miss HMS Tracker and the historic tugs.

If you are prepared to help on either day with setting up / breaking down equipment etc, please let me know on 01303 242540.

New Members;

I would like to take this opportunity to welcome the following new members and wish them many hours of happy sailing with us at Kearsney Abbey.

Mr Gregory Child

Miss Debbie Addison

Mr Ken Booker

Miss Daisy Child

Miss Clair Addison

Master Bobby Martin-Short

Master Stewart Wells

Mrs Elaine Addison

Mr Michael Martin-Short

Mr Mike Weaver

Mr Ronald Addison

The overall club membership currently stands at 136 members (111 Adults, 24 Juniors & 1 Honorary).

Alan Hounsell
Secretary - MBA Dover