



# SURREY RADIO CONTACT CLUB

**JUNE 2006** — No: 765

**CLUB NET** 1.905 MHz **Sunday 9:30am**  
**CLUB Natter Channel:** 144.215 MHz **Daily 8:30pm**

**CLUB Internet WEB Site:**  
<http://www.g3src.org.uk>

Hon. Sec. Ray Howells G4FFY  
9 Aultone Way  
SUTTON  
Surrey SM1 3LD  
(020) 8644 7589  
E-Mail: [secretary@g3src.org.uk](mailto:secretary@g3src.org.uk)

## MONTHLY MEETINGS 1<sup>ST</sup> AND 3<sup>RD</sup> MONDAYS 7.45 FOR 8pm

Normally AT THE T.S. TERRA NOVA, 34 THE WALDRONS, SOUTH CROYDON, CR0 4AZ

\*\*\*\*\*

**"A" MEETING** 5<sup>th</sup> Jun 2006 **SUMMER BARBEQUE at Peter's G3ZPB (Pound Cottage)**

**"B" MEETING** 19<sup>th</sup> Jun 2006 **FIX-IT, ADVICE, CHIN-WAG, CLUB STATION + "MOVE-IT-ON"**

Chairman & Club Meetings	G4FDN Pat McGuinness	020-8643 0491
Vice-Chairman	G4WAY Roger Holyoake	020-8689 7089
Treasurer, Liaison & Equipment	G4DDY Maurice Fagg	020-8669 1480
Secretary, Membership & Communications	G4FFY Ray Howells	020-8644 7589
VHF Co-ordinator (Co-Opted)	G8IYS John Simkins	020-8657 0454
Publicity & HF Co-ordinator	M1MRS Robert Shepperley	020-8687 0811
Technical Topics	G4XAT Gareth Evans	020-8462 2837
Members	G3RJW Graham Marshall	020-8647 1186
	2EQUYP Peter Sutton	07974 296045

### Dear Members & Friends

Hello and welcome to the Jun 2006 newsletter which I am composing Wednesday night/Thursday morning!! I've just had a second Bone Scan at the Royal Marsden and saw my consultant a few days later. The Hormone injection (Zoladex) which is stopping the production of Testosterone is working and my latest PSA test result was immeasurable. I shall be on these injections for 3-years and my third Hormone Injection last Friday was the first of the 12-week lasting dose. This Bone scan and the earlier MRI scan, were both clear. However, Radio Therapy will be carried out to "sterilise" my Prostate bed area and a slot has been booked next January 2007.

For this month, the "A" meeting is on Monday June 5<sup>th</sup> due and is our annual Summer Barbeque Evening at Peter's G3ZPB and Wendy's QTH – not Terra Nova. The other meetings this month are the regular "Fix-It" and "Move-It On" Meeting on Monday June 19<sup>th</sup>, and a VHF NFD Group meeting on Monday June 12<sup>th</sup> up on site then at John's G8IYS. More details on these are given below:

### NEXT "A" MEETING: Monday 5<sup>th</sup> Jun 2006 SUMMER BARBEQUE @ PETER'S G3ZPB

This year we are indebted to Peter & Wendy Burton who will be hosting the annual SRCC Barbecue at their home of Pound Cottage, 202 Coulsdon Road, Old Coulsdon. The date is next Monday 5<sup>th</sup> Jun 2006, time 7.30 for 8pm.

To find their home when going south along the Coulsdon Road (B2030) from Stoats Nest Road, it is on the right hand side and the first house after the new estate past Stoneyfield Road, with a bowling club almost opposite.

PLEASE NOTE this meeting is not held at our usual venue of Terra Nova.

Members should bring their own meat (sausages, chops, hamburgers, fish etc), as Peter and Wendy will provide the salad, bread and soft drinks. So that they can provide sufficient quantities it would be appreciated if those of you planning to come to contact them in advance (Tel: 01737-551413 or E-Mail: [peter.burton@orange.net](mailto:peter.burton@orange.net)).

Two Barbies will be supplied by Peter who, together with Graham G3RJW, will be the "chief" cooks. If you require alcohol please bring your own.

This is planned as a FAMILY AFFAIR so bring the XYL and the little ones! Entertainment will be laid on like Table Tennis or Pool or Snooker. In the past years this has been an excellent evening... it also gives the XYLs a chance to get together and swap news.

Please let Peter & Wendy know that you are coming (01737-551413). "We go" whatever the weather. Can you also bring chairs to ensure you have something to sit on!!

### NEXT "B" MEETING: Monday 19<sup>th</sup> Jun 2006 FIX-IT, Advice, Chin-Wag & "MOVE-IT-ON"

The "B" meeting on Monday 19<sup>th</sup> June is the regular "Fix-It" and advice evening with the extra twist. If you have a radio item or anything else that you just wish to clear out then bring it along - you never know it may be just what another member is looking for!

The Fix-It section has proved very interesting and successful so please bring along that item that has been giving you grief - the collective heads at the meeting usually come up with something.

**LAST "A" MEETING: Monday 8<sup>th</sup> May  
2006 PROJECT CONSTRUCTION EVENING -  
Sprat Counter**



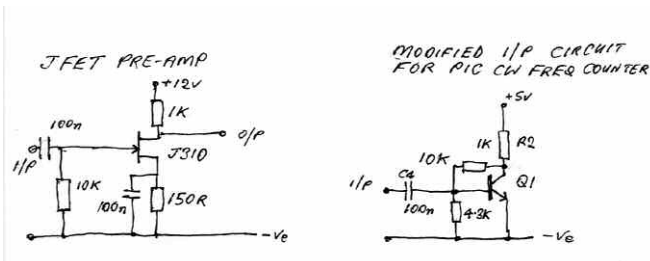
This was another excellent evening organised by Gareth G4XAT and as you can see from the photos of the assembled crowd including Mikiko (who it was nice to see), construction is alive and well in SRCC. Some 8 kits were made up on the night following the excellent instructions that Gareth had prepared and all worked. Some members have developed some modifications, more about this later in the Newsletter.

Thanks Gareth for an excellent evening and all the hard work behind the scenes to develop the kits, etc.

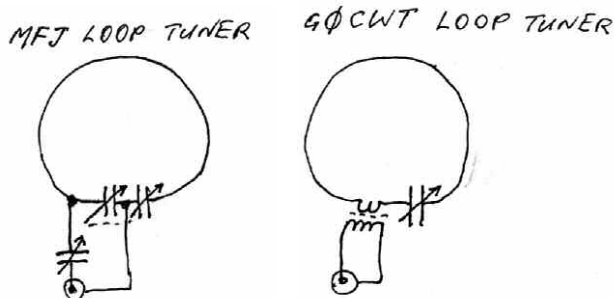
**CHAIRMAN'S BLOG - Jun 2006**



"I was one of the eager participants at the construction evening for the PIC based CW frequency counter arranged by Gareth, G4XAT. In fact I bought two kits though only one has been assembled so far. To more fully determine its capabilities I felt that it needed to be able to handle lower level signals so I knocked together an outboard pre-amp using a JFET which increased the sensitivity to around 30 to 50mV. Checking the voltages on the onboard bipolar input transistor also led me to believe that the simple collector-base feedback bias arrangement wasn't optimum, so I changed this to a more typical potential divider arrangement.



Following on from last month, when I gave details of the vacuum variable capacitor I had obtained to form the basis for tuning an intermediate sized loop (1/4 to 1/16<sup>th</sup> wavelength), I decided to have a look at the arrangement used in the range of intermediate loop tuners made by MFJ. Luckily they have some quite good pictures on their web site so I was able to work out the circuit used. They use two capacitors, one a split stator in series with the loop (about 150pF), and another capacitor in series with the feed from the transmitter. On balance, I prefer the GOCWT design as it allows for the galvanic isolation, and that a wire or tube of the loop through a toroid can form the secondary, and the primary low voltage side can have switched turns to give various impedance ratios.



Another bargain purchase from e-Bay this month was some IEC mains filter sockets with integral earth lead chokes. Most IEC socket filters just have chokes in the live/neutral. They are very good for replacing the i/p sockets on computer PSU's to decrease the noise that is put back on the mains wiring. I paid £1.50 each against £17 they are listed for in the Farnell catalogue.

To end with an offer of some 'freebies'. I was after recently a couple of integrated TTL/HCMOS oscillators in the 40-70MHz range to form the main clock for a fast 'Huff n' Puff VFO stabiliser. To cut a long story short I ended up buying a batch of seventy IQXO-23C 50MHz oscillators at a very low price per piece. Those at the last 'B' meeting or Committee meeting, who wanted them, were given free samples and data. I will have some more with me at following meetings should anyone want one. No doubt there are other possible applications such as 6m band edge marker and low power signal source, simple 50MHz CW transmitter (the oscillator has a 'keying' input) and no doubt Gareth can think of a few more.

Hope to see you all at the Club BBQ generously hosted by Peter, G3ZPB, and Wendy.

Regards,  
Pat, G4FDN"

## THE CALENDAR SECTION

### SRCC and Local Club Meeting Dates:

2 <sup>nd</sup> Jun	Crystal Palace: An Evening of Lecturettes on Homebuilding Radio Equipment @ All Saints Church Parish Rooms, Beulah Hill from 7:30pm. Bob G30OU 01737 552170 (Meet monthly on 1 <sup>st</sup> Friday) <a href="http://members.aol.com/rfcburns">http://members.aol.com/rfcburns</a>
5 <sup>th</sup> Jun	<b>Summer BBQ at QTH of Peter G3ZPB</b>
9 <sup>th</sup> Jun	W&DARS – Desert Island Radio 2006 Project Constructing @ Martin Way Methodist Church, Buckleigh Avenue, MERTON PARK SW20 9JZ – 7.30 for 8pm 2 <sup>nd</sup> & last Friday's Details: Jim M0CON on 020-8874 7456 <a href="http://www.gx3wim.org.uk/">http://www.gx3wim.org.uk/</a>
12 <sup>th</sup> Jun	<b>VHF NFD Meeting</b> on Site from 19:30hrs, afterwards QTH of John G8IYS
12 <sup>th</sup> Jun	CATS: Test and Measurement of Members' Equipment – Meetings normally held @ St. Swithun's Church Hall, Grovelands Rd, Purley 8pm 2 <sup>nd</sup> Monday's. Contact Andy Jackson G8JAC on 020-8651 2727 <a href="mailto:g8jac@btinternet.com">g8jac@btinternet.com</a>
14 <sup>th</sup> Jun	Crawley ARC – Loop Antenna Update, Mike Underhill G3LHZ @ Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley – 7.30pm. Sec: Keith G8KZZ on 01403 257788 <a href="http://www.carc.org.uk">www.carc.org.uk</a>
15 <sup>th</sup> Jun	Sutton & Cheam RS – Chris Taylor of Martin Lynch, TBC. Meetings @ Vice Presidents Lounge, Sutton United Football Club, Gander Green Lane, Sutton – 7.30 for 8pm. Sec: John G0BWV 020-8644 9945 <a href="http://www.scrs.org.uk">www.scrs.org.uk</a>
19 <sup>th</sup> Jun	<b>Fix-It, Advice, Chin-Wag, Move-It-On</b>
20 <sup>th</sup> Jun	Bromley & District – 6m Sporadic-E on-air practical and Lecture - Meetings normally on 3 <sup>rd</sup> Tuesday's @ Victory Social Club, Kechill Gardens, Hayes – 7.30 for 8. Paul M3PGW <a href="mailto:bdars@greenwand.net">bdars@greenwand.net</a> or <a href="http://www.bdars.org.uk">www.bdars.org.uk</a>
27 <sup>th</sup> Jun	Dorking & District Radio Society – normally meet on 4 <sup>th</sup> Tuesdays @ Friends Meeting House, Butterhill South Street, Dorking – opp. Spotted Dog. Details: Walter Blanchard, G3JKV on 01306 884359 <a href="mailto:wb@g3jkv.co.uk">wb@g3jkv.co.uk</a>
28 <sup>th</sup> Jun	Mitcham & District ARS (Meetings normally last Wednesday of each month) @ ATC Headquarters, Commonside West, Mitcham. Sec: Mike Knott G0WCR 020-8764 4716
28 <sup>th</sup> Jun	Crawley ARC – Dayton 2006, The 55 <sup>th</sup> Hamvention, what it was like being there @ Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley – 7.30pm. Sec: Keith G8KZZ on 01403 257788 <a href="http://www.carc.org.uk">www.carc.org.uk</a>
30 <sup>th</sup> Jun	W&DARS – Construction Evening @ Martin Way Methodist Church, Buckleigh Avenue, MERTON PARK SW20 9JZ – 7.30 for 8pm 2 <sup>nd</sup> & last Friday's Details: Jim M0CON on 020-8874 7456 <a href="http://www.gx3wim.org.uk/">http://www.gx3wim.org.uk/</a>
1 <sup>st</sup> /2 <sup>nd</sup> Jul	<b>VHF NFD Weekend</b>
3 <sup>rd</sup> Jul	<b>Construction Contest</b>
7 <sup>th</sup> Aug	<b>GB3OK with Tony G1HIG -</b> <a href="http://www.gb3ok.com/">http://www.gb3ok.com/</a>
4 <sup>th</sup> Sep	<b>Surrey Raynet - Brian G3OYU and Nigel G1XBV -</b> <a href="http://www.surreyraynet.net/">http://www.surreyraynet.net/</a>
2 <sup>nd</sup> Oct	<b>Autumn Surplus Equipment Sale</b>
6 <sup>th</sup> Nov	TBA
4 <sup>th</sup> Dec	<b>Home Brew Radio – Hans Summers G0UPL -</b> <a href="http://www.hanssummers.com/">http://www.hanssummers.com/</a>

SRCC Meetings indicated in **BOLD** with venue of Terra Nova unless otherwise stated.

### Rally Calendar, etc:

18 <sup>th</sup> Jun 06	Newbury & District Amateur Radio Society <b>Boot Sale</b> - <a href="http://www.nadars.org.uk/">http://www.nadars.org.uk/</a> from 9.00
16 <sup>th</sup> Jul 06	<b>McMichael Rally, Reading AFC, Sonning, RG4 6ST</b> - <a href="http://go.to/mcmichaelrally">http://go.to/mcmichaelrally</a> from 9.30
13 <sup>th</sup> Aug 06	<b>Flight Refuelling ARS Rally, Wimbourne, Dorset</b> - <a href="http://www.frars.org.uk/">http://www.frars.org.uk/</a>
8 <sup>th</sup> /9 <sup>th</sup> Sep 06	<b>Leicester Amateur Radio Show, Donnington Park</b> - <a href="http://www.lars.org.uk/">http://www.lars.org.uk/</a> from 9.30
12 <sup>th</sup> Nov 06	<b>West London Radio and Electronics Autumn Show</b> – Kempton Park <a href="http://www.radiofairs.co.uk">www.radiofairs.co.uk</a>
19 <sup>th</sup> Nov 06	<b>CATS Bazaar</b>

### From Our Hayes, Kent Correspondent



Well the construction evening nearly surpassed our previous best, with a total of 14 kits being sold or allocated on the night. Of those 8 were built and 8 worked, as promised. Somewhat short of the 18 odd hands that went up at the AGM, but there are still kits available should you wish to avail yourself of one - phone or email your request £3 each collected, £4 posted. Members

have already been modifying them, with the addition of an audio stage to boost output (the circuit was originally designed to feed the audio stage of a radio) and modifications to the input transistor bias level to improve sensitivity. In true amateur spirit, keep 'em coming!

I've had a busy time too, with the successful completion of two projects involving surface mounted devices. It does not seem that long ago that I equipped my workshop with a set of preferred value  $\frac{1}{4}$  watt resistors (about 1988 I think!!). Well, I'm doing the same again only this time with surface mounted ones! Rapid Electronics sell them in lots of 100 for about 80 pence and I needed quite a number of different values to complete the 1GHz RF power meter project I'm working on. It was worth it though, this is a neat piece of kit! Its capabilities are astounding...Input power range: -60 to +30dBm (1 mW to 1 Watt). For full details have a peek at <http://www.webx.dk/oz2cpu/radios/miliwatt.htm> where an English version is published. I also have the original Elektor Electronics article and when built, it worked first time. There was a bit of chasing around to do though. Firstly, the PCB is a bit tricky so I bought one via the internet from The PCBSHOP (<http://www.thepcbshop.com/>) who are the 'authorised' supplier of Elektor PCB designs. If I recall it was 14 euros, but it saved me several hours. The Analog Devices logarithmic power detector which forms the front end of this design was available as a free sample (I got 2) which included free delivery! The only tricky bit seems to be that they need a VAT registration number regardless of what you pay (or not). When I needed some of their 'G' chips (which I had to pay for) I used the school details, (as they were for school...) and since then it's been easy. Ahh, the complexities of Euro-finance!!

The SM parts are tiny, (0805) and really needed a magnifier to see although I managed with high light levels and a SM assembly jig. If any club members what to replicate this project (LCD readout, the input can be padded to read 100KW!!) the I am happy to supply the sm resistors and capacitors and to lend the SM jig or even to help build it at a B meeting. The PIC that (almost inevitably) does the measuring and display can also be programmed for you - the code is available free on the Elektor website (<http://www.elektor-electronics.co.uk/>). The second device is a speech processor for the FT-817, found out about whilst perusing some of the many internet sites about this radio. The details are here <http://www.eham.net/articles/13182> and it may be ordered on-line here <http://shop.medoro.org/?inter=1>. It took about 10-14 days to arrive but was a signed-for airmail packet, so no problems with it getting lost. It costs about £11.50 delivered, took about an hour to build and fit and it does what it says on the 'tin'.

Listen to the Sunday morning net and judge it for yourself. I also bought this neat little kit, mainly to give son Joshua and a couple of his friends some experience of soldering sm devices. It's a 10 watts for 1 minute, 5 watts for 3 minutes, QRP dummy load. See <http://www.norcalgrp.org/ncdummyload.htm> where there is a link to the manual. This cost \$10 but what price experience?? I have thought about fitting it in an oil-filled copper tube, has anyone got a small amount of non-toxic transformer oil??

After fighting a losing financial/patience battle with my car it has been replaced by an even older one!! After reviewing our family needs and looking around lots (e-Bay and Autotrader) I eventually found a 1992 Scorpio Estate. Nothing special in that except this one is a one owner, 82,000 example that has been garaged and cherished all its life. The interior is identical to the Cosworth 24v it replaces but it is roomier (although of identical length) and has roof-rails (for a roof rack). It is 'only' the 2 litre but apart from missing the substantial 'Cosworth Whoosh' when the 'go' pedal is pressed it is somewhat more economical, delivering up to 35 mpg on the motorway. Its age predates strict emission regulations and the need for a 'cat' (although it has one at the moment) and everything works, including the absolutely 'as-new' leather interior. The cost...a mere £995! Luxury need not cost an arm and a leg and I am thinking that it must be worth considering an LPG kit now that duty is confirmed as 40 p less per litre than petrol. Although modern diesels are getting very good, they still (a) smell, (b) rattle (c) cost a fortune when the key components go wrong. The 'old' Scorpio has been sent to my school workshop where it will over the course of time receive a nice big V8 and become a part-time toy/development test bed for home-made fuel injection (<http://www.megasquirt.info/>) and exhaust gas monitoring (<http://www.techedge.com.au/>).

And you thought the internet would kill Amateur Radio?? I don't think soooo!!!

Gareth G4XAT"

## VHF NFD 2006

Following the meeting held Monday 10<sup>th</sup> April 2006, and subsequent discussions, the farmer has agreed for us to use the field on the Botley Hill side of the gated lane off Croydon Road (which is what Limsfield Road becomes near this point). We are seeking permission for an on-site meeting on Monday 12<sup>th</sup> June at 19:30hrs. Guidance on the best access route for vehicles has also been requested.

Please advise John of your intention to attend either on 020-8657 0454 or [johns@connectnet.org.uk](mailto:johns@connectnet.org.uk) Those of you who were at the last meeting should have by now received John's write-up.

## Mass Amateur Satellite Launch – 28<sup>th</sup> June

13 Amateur Satellites will be launched at 19:39:11 UTC on the 28th June 2006 on a DNEPR-1LV rocket from the Kazakhstan Baikonur Cosmodrome in what will be the largest ever deployment of Amateur Satellites.

The satellites will be put into a 500 by 566 km orbit with an inclination of 97 degrees. Each satellite is a 10cm cube weighing just 1kg into which is packed the battery, transmitter and the various experiments.

Twelve of the satellites have downlinks in the Amateur Satellite Service allocation between 435 and 438 MHz and one will operate on 145.950 MHz so they'll be lots of signals to listen out for after launch.

Further information on the Dnepr Launch 1 can be seen at: <http://littlab.atl.calpoly.edu/>

One of the CubeSats to be launched is known as SEEDS. Built by students at the Nihon-University it contains a CW beacon, Digi-Talker and other experiments. After launch it will operate a CW beacon on 437.485 MHz using the callsign JQ1YGU. The Digi-Talker experiment will be activated later. The builders say they look forward to receiving reports and data from the satellite from Amateur operators and SWL's all over the world.

For further information on SEEDS see

[http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds\\_e.html](http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_e.html)

If you fancy building your own CubeSat check out <http://www.cubesatkit.com/>

If you want to know more about the fascinating world of Amateur Satellite communications why not attend the AMSAT-UK International Space Colloquium which runs from the 28<sup>th</sup> to 30<sup>th</sup> July at the University of Surrey in Guildford, details at

<http://www.uk.amsat.org/Colloquium/>

AMSAT-UK produces a newsletter Oscar News packed full of Amateur Satellite information.

For membership details contact the secretary Jim Heck G3WGM

Tel: +44 (0)1258 453959

Email: [g3wgm@amsat.org](mailto:g3wgm@amsat.org)

Website: <http://www.uk.amsat.org/>

Online Satellite Pass Predictions:

<http://www.amsat.org/amsat-new/tools/predict/>

## Members News

### Hazel Headland (XYL of John G3BFP)

*Roger G4WAY and I went to the family cremation service at Croydon Crematorium on Wednesday morning 10<sup>th</sup> May, and then I and many other SRCC members went to the Thanksgiving service at The Old Coulsdon Congregational Church in the afternoon. The Service was lead by Rev. Malcolm Newman, Minister. Some of the members then met up at The Fox, including G3RJW & Dawn, MOBIN, G4RWW, G8TB & Blanca & Victor, G3GHI & Ali, and G0PAR*

*It was Hazel's wish that donations, if desired, be made to The Old Coulsdon Centre (for the Retired), Grange Park, Old Coulsdon CR5 1EH - <http://www.occfr.org/>*

### Graham G3RJW Proud Granddad

Graham G3RJW, whilst attending the Kempton Park Show with Peter 2E0UYP, received the good news that his daughter Fiona had given birth to Samuel, weighing in at 7lb 12oz. Mother and son are doing well and what made it special was that it was also Graham's birthday.

### Robert M1MRS & Mikiko - new E-mail Address

Robert & Mikiko are now on: [robertandm@hotmail.co.uk](mailto:robertandm@hotmail.co.uk)

## Club Nets

My request in the last Newsletter did not raise one response, however, it is worth nothing that the Club Net on Sunday mornings on 1.905MHz is still going strong. What has also started is a Club Natter net, currently between Graham G3RJW and Peter 2E0UYP. It starts from 8:30pm every night on 144.215MHz and will be the channel to get help, have a discussion or just a general natter – please join in, you will be more than welcome. I have now removed the other Nets from the Newsletter heading.

## SIGNING OFF:

I think that is it for this month - if I have missed anything I give my apologies and hopefully remember it next time. It's great to have two regular contributors – always welcome more.

So for our main meeting on Jun 5th it is the annual Summer BBQ at Peter's G3ZPB, please contact Peter G3ZPB if you are going – details at the beginning of this Newsletter. The "B" meeting is on Jun 19<sup>th</sup>, and on the previous Monday Jun 12<sup>th</sup> there is a meeting of the VHF NFD group starting up on site, contact John G8IYS for details.

73 and 88 *Ray G4FFY* Posted: 2<sup>nd</sup> Jun 2006