



SURREY RADIO CONTACT CLUB

MARCH 2002 — No: 714

CLUB NET 29.111 MHz Sunday 9:30am
CLUB NET 144.325 MHz Friday 8:30pm
CLUB NET 145.500 MHz and Down Thursday 7.00pm

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

Hon. Sec. Ray Howells G4FFY
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MONTHLY MEETINGS 1ST AND 3RD MONDAYS 7.45 FOR 8pm
AT THE T.S. TERRA NOVA, 34 THE WALDRONS, SOUTH CROYDON

"A" MEETING 4th Mar 2002 SPRING SURPLUS EQUIPMENT SALE
"B" MEETING 18th Mar 2002 FIX-IT, ADVICE, CHIN-WAG, CLUB STATION + "MOVE-IT-ON"

Chairman	GOPAR	David How	020-8761 2954
Vice-Chairman	G3ZPB	Peter Burton	01737-551413
Treasurer, Liaison & Equipment	G4DDY	Maurice Fagg	020-8669 1480
Secretary, Membership & Communications	G4FFY	Ray Howells	020-8644 7589
VHF Co-ordinator	G8TB	Bernard Wynn	020-8660 7517
Publicity & HF Co-ordinator	G4WAY	Roger Holyoake	020-8689 7089
Members	G4XAT	Gareth Evans	020-8462 2837
	G3RJW	Graham Marshall	020-8669 8722
Co-opted	M1MRS	Robert Shepperley	020-8640 5166

Dear Members

Hello and welcome to the March 2002 newsletter. For this month's "A" meeting on Monday 4th March we are holding our usual Spring Surplus Equipment Sale and don't forget the popular "Fix-it" and "Move-It On" meeting on Monday 18th March.

Due to booking problems the Club Dinner is now a week later on Saturday 23rd March – Oops but it is now confirmed!

More about these below but firstly:

ANNUAL GENERAL MEETING

I HEREBY GIVE NOTICE that the Annual General Meeting of the SRCC will be held on Monday 8th April 2002 at the clubroom 7.30 for 8.00pm. Following our usual practice this notice is over a month ahead, but this is to comply with club rules. It allows time if there are any proposed alterations to the rules, or to give you an opportunity to raise any points at the AGM, the committee would like notice of important ones.

We also ask for nominations for committee, with such nominations (and acceptances) to be received by the committee prior to the opening of the AGM.

With the next newsletter I will include the minutes of the last AGM, the full agenda and also another nomination slip for a new committee and also for a Secretary (nominated separately).

**NEXT "A" MEETING: Monday 4th Mar 02
SPRING SURPLUS EQUIPMENT SALE**

We hope there will be a good turnout for this **Spring Sale**, when members can bring along items for sale and also items to be donated to the club. It is very helpful, as in the past, for sellers to be in the clubroom well before 8 o'clock, and no boxes of "rubbish" please. All members and visitors they have brought along must sign the attendance book and all must be conversant with the rules.

Note that the club accepts no responsibility for goods sold at this private sale, and the purchasers buy on the understanding that they are capable of determining the usability, fitness for purpose and SAFETY of goods obtained. The following also applies:

1. Only SRCC members are permitted to sell.
2. All items not donated must be marked with the name or call sign of vendor, brief description and details of any reserve price.
3. Bids should be in steps of 5p up to £1 and 25p thereafter.
4. Visitors are welcome but must be introduced by a member who is responsible for informing them of the rules.
5. All members and VISITORS must sign the attendance book.
6. Sellers will not be paid until all buyers have settled up.
7. The club levies 15% on all transactions.
8. Please try and arrive early to allow start by 8 o'clock.
9. **PLEASE KEEP THE DOORWAY CLEAR FOR FIRE PRECAUTIONS.**
10. SMOKERS are requested to keep to the rear of the room.

NEXT "B" MEETING: Monday 18th Mar 2002

FIX-IT and "MOVE-IT-ON" Evening

The "B" meeting on Monday 18th Mar will be the regular "Fix-It" and advice evening with the extra twist. If you have a radio item 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.

SRCC DINNER: 23rd Mar 2002

Oops! - In finalising the dinner arrangements with the Windmill Pub, I have had to accept a week's delay in the event. {A well-known phrase comes to mind!}. We didn't confirm in time and another group has now booked the 16th. So please change the entry in your diaries to Saturday 23rd March, 7:30 for 8pm when we will have the use of the private function room, which makes it nice and convivial. Price is £15 a head, and if you are interested please let me know to reserve yourself and your partners' places. Ray G4FFY (020-8644 7589).

Last "A" Meeting Mon 4th Feb 2002

PicATune with Paul Berkeley M0CJX

Paul M0CJX returned to the Club on Monday 4th February to give us an excellent presentation and live demonstration of the Picatune - Automatic Aerial Matching Unit.

The Picatune Project uses a Programmable Integrated Circuit (PIC) to calculate and insert the required Inductors and Capacitors to match an aerial to 50 ohms over the HF bands. Paul built the unit then produced a number of kits for like minded constructors and he explained his experiences whilst involved with the Project including: Why Automatic, System Architecture, Application, Results, Reliability & Environmental issues, and Construction tips.

Paul also brought along a unit he had built, which allowed him to give practical demonstrations of the Picatune in operation.

From my notes of the evening I recorded the following. The Picatune was described in the Sep2000 to Jan2001 RadCom issues, written by Peter Rhodes. It's a remotely operated ATU, uses no external control cables, is simple to operate, up to 200W from 1.8 to 30MHz, uses "quiet" tuning (a few mW) and affords transmitter protection whilst tuning, has a built in dummy load and is of low cost.

A general principle is that the ATU should not be in the shack but by the aerial. This is where the Picatune comes to the rescue.

Paul put up some simple diagrams showing the basic configuration of the Picatune. I learnt that in the shack between the Rig and the Aerial feeder (RG213 /RG58 Coax) is the Control Unit, which allows the feeding of 12v towards the Picatune over the coax. In the Picatune a ferrite choke takes off the 12v to feed the relays and a regulator for the 5v rail.

In the control unit is a push button, this provides a momentary break in the 12v supply towards the Picatune for control. In return are a series of CW idents that are heard on the rig giving status and menu options. This is generated by a simple square wave source giving coverage over all the bands. The special frequency chosen achieves this by means of the harmonic relationship.

The "ATU" part is an "L-match" consisting of a multi-tapped coil, Relays, and homemade capacitors of every binary value from 1pF to 1024pF. The Picatune heart is the PIC programmed with Peter Rhodes secret algorithm giving some 32,000 combinations. Also onboard are a frequency counter and EEPROM to memorise band settings.

The Picatune is looking for the zero crossing on the reverse (VSWR) signal using just a few milliwatts from an input signal of 5 - 30W.

On switch-on, the Picatune responds with "HI DE PICATUNE AR K". A further control signal gives the Menu response "M U S I C" where M is Match Antenna, U is Utilities, S is Status, I is Inhibit PIC, and C is Configure Outputs.

Paul gave a live demonstration of the Picatune by matching a long-wire draped around the clubroom against a counterpoise. After only a few seconds of noisy relay clinking, a good match was found on 10MHz. He then did a match for 7MHz, and demonstrated the memory feature when returning to 10MHz an instant match was given.

Paul concluded his talk with some details of the Constructing aspects like the capacitors made out of brass strip and 2 layers of supermarket polythene bags. Care was required to ensure all burrs were removed else the polythene was bridged! I think the largest value capacitor need something like 17 layers!. Details of the PCB was given - Paul had 40 boards made to a military standard, were of fibre glass with 1oz copper and roller tinned allowing fast soldering. The main coil had its holes pre-drilled and it was wound in! Another construction aspect was that every component should be mechanically sound before soldering - nothing could or should move else risk the lifting of tracks.

The relays modifications was interesting with careful removal of the unused contacts to leave just two make sets giving a very small capacitance and high voltage capability.

Paul briefly describe his home aerial set-up, an Inverted-L of 66ft top, 20ft vertical at the far end with a Picatune at the bottom with RG213 feeder back to the upstairs shack. This keeps the "hot" end furthest away from the house. It has proved to be good on 28 and 24MHz with regular VK working.

The Picatune has 5 outputs allowing use of different aerials between ATU and aerials. It's total cost was around £60 with construction time of some 3 weeks apportioned logic board 2hrs, main board 10-15hrs, VSWR box 2-days, and the rest of the 3 weeks putting the C's together.

A non-metallic box is used, acrylic which is band sawed and glued. For outdoor use Paul described his wooden box and overhanging lid.

In closing, Paul expressed his enjoyment of this fascinating project and the challenge of its construction. We thank you Paul very much for an entertaining and absorbing presentation - it was well worth braving the horrible weather for.

VHF NFD 2002 - 6th-7th July 2002.

An Inquest and Planning meeting was held on Monday 25th Feb 2002 @ QTH of Peter G3ZPB (Pound Cottage). We have agreed to enter this year over the weekend of 6th-7th July 2002 up at our usual site near Warlingham. The contest runs from 3pm on Saturday to 3pm on the Sunday (BST) and the rules can be found in the Jan2002 RadCom on page 57.

The next meeting has been booked for Monday 15th April at Pound Cottage when we will decide how we enter. The rules only allow entries up to 4-bands so we have to decide which band to drop. The candidates are 4m, 6m, or 23cm. Part of the decision depends on personnel and equipment availability for which a plea is made here.

So here is your chance to get involved and we extend an invitation to all our readers, whether members of SRCC or other clubs, to provide assistance on the day. This can be of the form of simply helping to put stations up e.g. aerial erection; and/or operating a station; supplying equipment; etc.

Please contact Bernie G8TB for further details (020-8660 7517) – thanks.

THE CALENDAR SECTION

SRCC and Local Club Meeting Dates:

1 st Mar	Crystal Palace – Natter night/Club project @ All Saints Church Parish Rooms, Beulah Hill. 7:30 for 8pm. Bob G30OU 01737 552170 (Meetings 1 st and 3 rd Fridays) http://members.aol.com/rfcburns/
4 th Mar	Spring Surplus Equipment Sale
5 th Mar	Thames Valley ARTS – Annual General Meeting 8pm Library Reading Room, Giggs Hill, Thames Ditton - Trevor M0CDB 01372-457674
8 th Mar	W&DARS – Valve Museum Alan G8LSD @ St. Andrew's Church Hall, Herbert Road, Wimbledon – 7.30 for 8pm 2 nd & last Friday's Details: Jim G4WYJ 01737 356745 http://www.wadars.thersgb.net
11 th Mar	CATS – I-Link with Terry G4CDY – 8pm Contact: Andy G0KZT 01737-552139. Meetings @ St. Swithun's Church Hall, Grovelands Rd, Purley 8pm 2 nd Monday's coulsdon_ats@hotmail.com
15 th Mar	Crystal Palace – Weather Images from Satellites G3MCD @ All Saints Parish Rooms, Beulah Hill – 7:30 for 8pm. Further details from Sec: Bob G30OU 01737 552170 - RFCCburns@aol.com
19 th Mar	Bromley & District – Power Stations I have known – Peter G7UFQ (Meetings 3 rd Tuesday's) @ Victory Social Club, Kechill Gardens, Hayes – 7.30 for 8pm. Alan G0TLK 020-8777 0420 alangm4@clara.net
21 st Mar	Sutton & Cheam RS – 'The Remote Imaging Group' Keith M3MCD @ Vice Presidents Lounge, Sutton United Football Club, Gander Green Lane, Sutton – 7.30 for 8pm. Sec: John G0BWV 020-8644 9945 scrs@btinternet.com
18 th Mar	Fix-It, Advice, Chin-Wag, "Move-It-On"
23 rd Mar	SRCC Dinner @ Windmill Pub, Wallington – <i>Changed Date but this one is Confirmed!</i>
25 th Mar	Dorking & District Radio Society – Meetings 4 th Tuesday's @ Friends Meeting House, Butterhill South Street, Dorking – opp. Spotted Dog. Details: Jon G0GNA 01306-883718
27 th Mar	Crawley ARC – Worthing Repeater Group – Talk on TV Repeaters @ Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley – 7.30pm. Jerry G0FPI 01293-512932 jerry@spence0663.freemove.co.uk
27 th Mar	Mitcham & District ARS – Meetings last Wednesday of month @ ATC Headquarters, Commonside West, Mitcham. m0bgx@freenet.co.uk
29 th Mar	W&DARS – No Meeting @ St. Andrew's Church Hall, Herbert Road, Wimbledon – 7.30 for 8pm. 2 nd & last Friday's Details: Jim G4WYJ 01737 356745
8 th Apr	AGM
15 th Apr	VHF NFD 2002 Meeting – 8pm @ G3ZPB's
13 th May	Construction Evening
10 th Jun	Construction Contest

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

Rally Calendar, etc:

6 th Mar	Surrey IEE Meeting @ Lecture Theatre M, University of Surrey, Guildford – 7pm Free Admission. "The History of the Croydon Tramlink" – Jim Snowdon, Tramlink. Contact John Stevens: jstevens@iee.org http://www.ieesurrey.org.uk/ - follow Programme link
9 th Mar	Crystal Palace Spring Fair, St John's Hall, Sylvan Road, London, SE19 – 10:30 to 13:00. Contact Bob Burns G30OU - rfcburns@aol.com
17 th Mar	Bredhurst R&TS Rainham Radio Rally, Rainham School for Girls, Derwent Way, Rainham, Kent. Details: Martin M0AAK, 01634 365980 martinm0aak@yahoo.co.uk
23 rd /24 th Mar	London Amateur Radio & Computer Show, Lee Valley Leisure Centre, Pickett's Lock Lane, Edmonton, London N9. 01923 893929 http://www.radiosport.co.uk The last at Pickett's Lock
13 th /14 th Apr	RSGB Spring Radio & Computer Show (incorporating RSGB National Convention). Info: Jan 0870 9047377
16 th June	Epsom Radio & Electronics Fair – Epsom Downs Racecourse Grandstand. Contact Paul Berkeley M0CJX - m0cjsx@lineone.net SRCC will be there - tables have been booked. www.epsomrally.co.uk/
14 th July	Sussex Amateur Radio & Computer Fair, Brighton Racecourse. CANCELLED

CLUB ACTIVITY: Sunday 3rd Feb 2002 0900 - 1500 432MHz AFS

Members will be pleased to learn that we have made an entry as follows:

Callsign:	Contacts:	Score:
G4WYJ	50	5052
G8IYS	36	2519
G3ZPB	28	1351
G4FFY	8	132

Thanks to all who took part and put SRCC on the map. Unfortunately the conditions were poor and the weather wet and horrible – good job we were indoors! Jim G4WYJ had some excellent contacts working a DF2 in JN39 (553km) and an ON4 in JO21 (326km).

CROYDON AIRPORT SOCIETY

I have received the following from Bernie G8TB:

"I can recommend this society which gathers people interested in Aviation (particularly old), and maintains the old Croydon Airport reception building as a museum. Open to the public first Sundays in the month.

They also hold regular meetings and yesterday (Tuesday 19th Feb) Tony, John, and I was at one presented by Air Vice Marshall Clive Evans. He was a very clear and concise speaker, which is perhaps why he got promotion. He dealt with the Falklands war and particularly his part, which was to provide air transport mainly with C130 planes under his command. He was responsible for transporting by air thousands of tons of supplies, ammunition, personnel, etc. much of which was dropped in the sea to be picked up by the task force.

He was able to stress the problems of the long distances involved and particularly with the airborne refuelling, and this involved the adaptation of aircraft, at very short notice, as tankers and also of fitting of probes to receive the fuel.

He also stressed the point that nowhere in many of the books that have been written was credit given to this section of the war effort, nor has credit been given to the long hours the aircrews and staff put in to make the venture a success.

Some 200 people attended this meeting that lasted three hours, and was a most interesting and enjoyable evening.

G8TB"

MEMBERSHIP NEWS:

Blanca Wynn – Paintings on Show

If you are quick, Blanca has eight of her paintings on show at Sutton Library (Europa Gallery?) until Sun 3rd March.

Ian Richardson G3KXT - Silent Key

It is with great sadness that I have to report that Ian G3KXT has recently become a Silent key.

Ian had entered Bromley hospital for a minor operation but this was then cancelled due to a chest infection. Unfortunately Pneumonia developed and despite the efforts of the staff, he succumbed on Tuesday 19th Feb when he finally gave up the fight at 1pm.

John G3BFP, who had passed on the sad news to me, had known Ian since the forties as teenagers and then the war came and John went off to do his bit in the RAF. It wasn't until the early fifties that by chance they met again at the corner of Lisle Street, that Mecca of war surplus radios etc!! Ian leaves Ann and the three children, Neil, Wendy and Beverley to whom we extend our sympathies at this sad time.

The funeral service had been arranged for 2:30pm on Thursday 28th Feb at Hayes Church, followed by the cremation at Beckenham Crematorium, near Birbeck Station.

Phil Manning M3LKJ

Congratulations to you Phil on passing your Foundation Licence in early February and being the proud owner of the call: M3LKJ. Look forward to working you on the HF bands.

Bernie G8TB - Postage Stamps

Bernie passes on his thanks to the many of you who have sent him used postage stamps, which help raise funds for the Diamond Riding Centre. They are always welcomed so please continue to send your used stamps to Bernie.

Bernie G8TB - Tip of the Month

Have you had that problem of placing a transistor on a crowded PCB and can't get your fingers in, well put a piece of coax cable sheath over the transistor making a nice handle. Take it off once soldered.

Ted G3EUE - Correction

In the last Newsletter I printed an article from Ted G3EUE, which included a piece about a Morse key. The specification referred to a Bulldog clip and nails !! I omitted an important item namely an elastic band (otherwise no tension !!).

Prue G4RWW - Thanks

Chatting with Prue over the last weekend she wishes me to pass on her heartfelt thanks to everyone for the donations to the St. Christopher Hospice in memory of Ron G6LX. Thank you for remembering Ron in your minds and thoughts.

Pat G4FDN - PSK31 Experiences

In a recent E-Mail Pat advises of the following:
"Not much to report on my own amateur activities though I have been listening these last couple of weeks on PSK31, mostly 10m, 20m & 80m. Not able to transmit until I knock up an audio transformer coupling interface to stop a ground loop between my FT100 and the laptop sound I/F. Most impressed with the weak signal handling capability of the PSK31 mode - I was listening on 10m last Monday evening, just before departing for the club, and pulled in an LU6 & PY9 with the antenna being a 5/8th 70cm sitting on the radiator"

FOUNDATION LICENCE MORSE Assessments

"In the recent Bromley Newsletter was an insert from Colin G3VFD who is registered to conduct Foundation Licence Morse Assessments.

Doing the Assessment is simple and will enable holders of Class B Licenses for over 1 year to operate on most of the HF Bands with 10 watts. There is no speed requirement for the assessment and you can use a Morse Code Crib Sheet - basically, you just keep on trying until you get it right - so you can't fail! These assessments will be carried out for anybody at Bromley Society Meetings - just bring £5-00 and your licence for identification."

I would recommend a chat with Alan GOTLK 020-8777 0420 alangm4@clara.net prior to attending if interested.

CRAY VALLEY RADIO SOCIETY

"Well now! What do you think of this!

In this Golden Jubilee of the Queen's Reign, Cray Valley RS have just received approval from Windsor Castle to operate an amateur radio station from the Castle in celebration of the Queen's Jubilee this May and June.

At the present time, the arrangement is for CVRS to run the station jointly with the Bumham Beeches Radio Club, although it is expected that CVRS will do most of the work in setting up the station and the antennas. The station has the full support of the Radio Society of Great Britain and of the Radiocommunications Agency, and Cray Valley RS hope to have the full support of all of their members.

They will have a very special callsign that will be aired from 29th May-9th June. There is also a web site currently being set up."

Thanks to Mitcham & District ARS Newsletter

SEA CADETS TERRA NOVA

In a recent E-Mail from Pat G4FDN he advises:

"On the practical side of things help is still required in getting them set up for Morse. They have enough keys but need practice oscillators and headphones sorting out before Charles (MOBIN) will be able to get going with them on tuition. Antennas for 6.992MHz and 73MHz are also still required plus a SWR meter and probably an ATU as well to interface with Maurice's FT101."

Can anyone help?

WANTED

* Ted G3EUE is seeking an ATU for a PYE C12 or even a complete unit. A friend of his has been searching for one for ages, without success including an Ad in Radio Bygones. Any leads where one might trace one would be most welcome. Is there one lurking in your loft?

Contact Ted G3EUE on 01903 813112

* Tony G3GHI is seeking a surplus Astra analogue dish & LNB.

Contact Tony G3GHI on 020 8660 4068

SIGNING OFF:

That's it for this month, other than please check the enclosed Membership list - please advise me of any errors including E-Mail addresses to be corrected/added, etc.

Don't forget the AGM on April 8th - please complete the nomination slip below. I understand that we will need at least two new faces on the Committee so volunteers will be very welcomed with your new ideas, etc.

Next "A" Meeting is the "Sale" on Monday 4th March - see you all there.

Ray G4FFY

73 and 88

Posted: 27th Feb 2002

NOMINATION FOR COMMITTEE 2002—2003 (Please return to Ray Howells G4FFY)

I wish to nominate

For the position of **Secretary / Member** on the SRCC committee 2002 - 2003

If elected I agree to stand. Signed: Date

(You may wish to photocopy this form rather than spoil the Newsletter)