



SURREY RADIO CONTACT CLUB

MARCH 2004 — No: 738

CLUB NET 1.905 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
 9 Aultone Way
 SUTTON
 Surrey SM1 3LD
 (020) 8644 7589
 E-Mail: secretary@g3src.org.uk

MONTHLY MEETINGS 1ST AND 3RD MONDAYS 7.45 FOR 8pm

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

"A" MEETING 1st Mar 2004 SPRING SURPLUS EQUIPMENT SALE

"B" MEETING 15th Mar 2004 FIX-IT, ADVICE, CHIN-WAG, CLUB STATION + "MOVE-IT-ON"

Chairman	G4XAT Gareth Evans	020-8462 2837
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
Members	G3RJW Graham Marshall	020-8669 8722
	G4FDN Pat McGuinness	020-8643 0491
	G8TB Bernie Wynn	020-8660 7517

Dear Members & Friends

Hello and welcome to the March 2004 Newsletter which I have started to write on Wednesday evening after another busy period for me including the Computer Consultant work and Home building work (which stopped me being involved with 70cm AFS this year – more on this later). It is likely that this Newsletter won't be posted until Friday I am afraid.

For our main meeting on Monday 1st Mar we are holding the Spring Surplus Equipment Sale with Bernie G8TB and Maurice G4DDY as the auctioneers. Monday 15th Mar is the usual "B" meeting.

The home building site is now at the decorating stage with the extended lounge now being wallpapered. Just the extended hallway, front study and guest bedroom/dining room to go!!

ANNUAL GENERAL MEETING

I HEREBY GIVE NOTICE that the Annual General Meeting of the SRCC will be held on Monday 5th April 2004 at the clubroom 7.45 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 a nomination slip for proposing members for the new committee and Secretary (nominated separately).

NEXT "A" MEETING: Monday 1st Mar 2004 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' c.
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 15th Mar 2004 FIX-IT, Advice, Chin-Wag & "MOVE-IT-ON"

The "B" meeting on Monday 15th March 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.

Now for an additional twist, at the recent VHF NFD, it was proposed that for communication between stations that DECT Cordless Phones would fit the bill. But it needs to be tested. So at this "B" meeting those of you who are willing to loan a DECT Cordless phone over the field day weekend (3rd-4th July) could you please bring them up to the clubroom so that a test can be carried out - many thanks. . .

LAST "A" MEETING: Monday 2nd Feb 2004 "Zen and the art of HRO Re-building" with Brian Cannon G8DIU

The February meeting was our annual Sid Morley G3FWR Memorial Lecture and it was fitting to have a talk on the National HRO Receiver. Brian G8DIU gave us a presentation on "Zen and the art of HRO Re-building". Brian started his talk with a history of the National HRO Receiver and the company. We then learn about Brian's acquisition of the HRO and his decision processes about what to do with it. Finally we learnt about his experiences, etc on the HRO rebuilding.



Brian G8DIU with HRO and Coil Sets

A comment received was that it was nice to have a meeting which reflected the true spirit of amateur radio.



Looking in the top of Brian's HRO

Brain's first experience of an HRO was via G2XP in the early nineties. G2XP was a member of the Voluntary Interceptors during the 2nd World War, which Sid Morley G3FWR was also a member, so a nice link for this evening.

In the mid nineties a talk was given at the Wimbledon Club where a member there had converted an HRO to solid-state. It was in 2002 that Brian finally laid his hands on this HRO which had no valves, but solid state front end and IF strip, and an audio block.

The history of the HRO starts in America when planes performing the Mail and Parcel deliveries needed ground base stations to be super stable on 3 & 6Mhz. The HRO was developed with many positioned along the routes under aerial poles and landline connections to the audio outputs. It had a welded chassis and used up to the fifties.

Each plug-in coil set consists of 4-coils, and the receiver has high rejection up to 14MHz. One set of coils covers 7.0 - 7.2MHz with 500 divisions on the unique tuning knob!! Early models used 2.5v filament valves, whilst in the forties it was octal valves like the 6K7.

Brian then had to decide what to do with his example and went through his valve box. He settled on small valves for the front-end (6.3v) and metal Octal's in the IF (12SK7 12v heater). It has a separate PSU which weighs more than the HRO with a 5Z4G rectifier. The RF deck is made out of double sided PCB making use of stand-offs and tag-strips. He has used a triode product detector with BFO. The original filter he is still looking for but in the meantime has used trans-filters (cheap crystal resonators @ 460kHz). The S-meter circuit is borrowed from the G2DAF receiver. In his words - "this receiver is a marriage".

Its name - HRO - well one thought is "Hell of a Rush" but couldn't really use HOR!! Another anecdote is that its designer James Millen sought the call-sign W1HRO but by mistake got W1HRX.

The Zen bit, well there's a classic book "Zen and the art of Motor Cycle Maintenance" and the trick is to become one with the activity, to engage in it fully, to see and appreciate all details - be it hiking in the woods, penning an essay, or tightening the chain on a motorcycle. So discipline is needed and Brian followed a long and methodical process to rebuild the HRO. For example he drew out the layout of the IF stage and checked how it would all piece together before doing it. In total it took some 6 weeks, with drilling the chassis being quite difficult.



Underside of re-built HRO

We thank you Brian for an excellent evening which re-lived the true Amateur Radio experience and the HRO sounded good during the live demonstration. As a side I was searching the Internet I came across this HRO page:

<http://www.portabletubes.co.uk/boats/hro.htm>

CHAIRMAN THOUGHT of the MONTH - March 2004



I have often wondered what the fascination of an HRO was - now I know as do a large number of members who were present at the meeting, reliving in many cases their earlier experience of this interesting radio. Brian treated us to a potted history of the sets origins and then followed this up with the storey of his acquisition and its subsequent de-semiconducting. What surprised me was the contact fingers required to make reliable contact with the coil packs and the fact that they worked reliably at all - let alone after all those years. Thanks Brian for an entertaining evening. Our next meeting will be our annual Spring Junk sale, sadly I shall have to miss the beginning of this twice yearly pilgrimage as there is a talk at school for boys and their parents who are attending the battlefield tour, a poignant day spent in and around Ypres, culminating with the daily playing of the Last Post, and the laying of a wreath at the Menin Gate. I have been on this trip once before and found it very moving. It must have been terrible to have been part of either side. Even after the event, the scale of human suffering and loss remains so vast as to be almost beyond belief.

A visit to the Tank Museum, Bovington Camp, Dorset, by Gareth Evans

In pursuit of an engine from a Centurion tank (a 27 litre, V12...but that is another storey!) I recently had occasion to visit the Tank museum, located as part of what appears to be the British Army's tank testing, repair, firing range and training facility at Bovington. It certainly isn't marked very well on my road map - security reasons, presumably, although their internet site provided suitable guidance. I have an enduring fascination for most things mechanical and whilst holding little interest in warfare I have to say that this museum kept me interested (fascinated even) for four hours! Son Joshua who accompanied me was similarly interested without any prompting or pressure from me. The exhibits are well presented with helpful concise information boards and there are a large number of supporting displays. In particular, the lead-into the whole exhibition through replica WW1 front lines was particularly good, showing why tanks were developed in the first place and the generally terrible conditions British troops fought and lived under. The on-site restaurant was fine (although a little pricey) should you not wish to take a packed lunch. At around 150 miles each way, it was a fairly long day but the proximity to Lulworth Cove (about 8 miles 'down') means that the day could easily be extended, as we did, taking in a cliff top walk (which provided an excellent view of the cove) and meaning a traffic jam free journey home without sitting stationary on the M25. The journey took about 2 hours 40mins on the way down and a shade under 3 hours on the way back (from Lulworth) including a petrol stop. The museum holds several 'special event' days during the year, details of which can be found on their website, www.tankmuseum.org. If you wish to see some of the collection 'in action', then Sunday 23rd May is Tankfest day, when much of the stock gets started up and driven. If you want to see 30+ tons of steel rapidly accelerate and wave its gun around, make this event a must! B&B abounds in the surrounding area so it could make a nice short break.

Annual Club Dinner

The club dinner has been fixed as being at The Beefeater Pub & Restaurant, Park Place, 54 Commonside West, Mitcham, on Saturday 3rd April. All members and their wives are welcome, last year the venue and food proved excellent value for money with good access and plenty of easy free parking.

Gareth G4XAT

THE CALENDAR SECTION SRCC and Local Club Meeting Dates:

1st Mar	Spring Surplus Equipment Sale
5 th Mar	Crystal Palace – Natter night/Club projects/Morse Class @ All Saints Church Parish Rooms, Beulah Hill. 7:30 for 8pm. Bob G300U 01737 552170 (Meetings 1 st and 3 rd Fridays) http://members.aol.com/rfcburns
8 th Mar	CATS – Demonstration of Military Radio – Andy G8JAC. Meetings held @ St. Swithun's Church Hall, Grovelands Rd, Purley 8pm 2 nd Monday's. Contact: Andy G0KZT 01737-552139. cats@briarsa.fsbusiness.co.uk
12 th Mar	W&DARS – Getting Out on 160m – Martin G4FKK @ St. Andrew's Church Hall, Herbert Road, Wimbledon – 7.30 for 8pm 2 nd & last Friday's Details: Jim M0CON on 020-8874 7456 http://www.wadars.thersgb.net
15th Mar	Fix-It, Advice, Chin-Wag, Move-It-On
16 th Mar	Bromley & District – Quiz. Meetings on 3 rd Tuesday's @ Victory Social Club, Kechill Gardens, Hayes – 7.30 for 8. Alan G0TLK 020-8777 0420 www.bdars.org.uk
18 th Mar	Sutton & Cheam RS History of the BBC Radiophonic Workshop by Dick Mills (ex BBC Radiophonic Workshop). Meetings @ Vice Presidents Lounge, Sutton United Football Club, Gander Green Lane, Sutton – 7.30 for 8pm. Sec: John G0BWV 020-8644 9945 www.scrs.org.uk
19 th Mar	Crystal Palace – The FT817 Keith Holland G3MCD @ All Saints Parish Rooms, Beulah Hill – 7:30 for 8pm. Further details from Sec: Bob G300U 01737 552170 – http://members.aol.com/rfcburns
23 rd Mar	Dorking & District Radio Society – Meetings normally 4 th Tuesdays @ Friends Meeting House, Butterhill South Street, Dorking – opp. Spotted Dog. Details: Jon G0GNA 01306-883718
24 th Mar	Crawley ARC – DSP Evening. Meetings normally held @ Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley – 7.30pm. Jerry G0FPI 01293-512932 www.carc.org.uk
26 th Mar	W&DARS – Club Projects @ St. Andrew's Church Hall, Herbert Road, Wimbledon – 7.30 for 8pm 2 nd & last Friday's Details: Jim M0CON on 020-8874 7456 http://www.wadars.thersgb.net
31 st Mar	Mitcham & District ARS (Meetings normally last Wednesday of each month) @ ATC Headquarters, Commonside West, Mitcham. Sec: Mike Knott GOWCR 020-8764 4716
22nd Mar	VHF NFD Meeting @ G8IYS QTH
5th Apr	AGM
10th May	Constructing Evening
7th Jun	Construction Contest

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

Rally Calendar, etc:

6 th Mar	Crystal Palace Radio & Electronics Club Spring Fair at St. John's Hall, Sylvan Road, London SE19.
18 th Apr	West London Radio & Electronics Show (Radio Fairs). Exhibition Centre, Kempton Racecourse, Sunbury. www.radiofairs.co.uk Doors open 10:15

CRYSTAL PALACE RADIO & ELECTRONICS CLUB

SPRING RADIO FAIR

Sunday 6th March 2004

10:30am to 1pm

St John's Hall, Sylvan Road, London SE19

CLUB DINNER 2004

We have now agreed a date of Saturday 3rd April at The Beefeater Pub & Restaurant, Park Place, 54 Commonside West, Mitcham (020-8646 0028) 7:30 for 8pm. Would you please send your £5 per head deposits to myself (cheques payable to Ray Howells) ASAP so that we advise the restaurant of likely numbers – thank you. We thank Prim G4CCY for liaising with the restaurant, etc. The 3-course meal plus coffee will cost £17.00 (same as last year) with a choice of dishes, which can be selected prior to the evening.

SCIENCE WEEK beginning 12th Mar 2004

The RSGB is once again supporting the “British Association for the Advancement of Science” during “Science Week 2004”. Last year many clubs participated and they reported an overwhelmingly positive response with 1000's of people turning out and seeing amateur radio being demonstrated. National Science week is from 12th March until the 21st March. Clubs can organise anything from a simple talk at the club or school visit through to some of the huge events that were run last year. Why not visit www.rsgb.org/scienceweek to see some of the successful events from 2003

SRCC RADIO ACTIVITIES

The following is proposed for SRCC to participate in:

CONSTRUCTION EVENING

Gareth believes that the most likely project for the construction evening is now going to be the Bat receiver (and LF to audio converter). No one has spoken to him about wanting to build anything for top band although one member did send him some circuits to consider. So what about it – what would you like to build on 10th May – please let one of the committee know – thanks.

MILLS WEEKEND 2004

This is taking place over the weekend of 8th/9th May 2004. Details can be found at the following Web Site: <http://www.gsl.net/g4cdd/mills.htm>. Last year we operated from the Shirley Windmill in Postmill Close, Shirley Road, Shirley. For this year details are being finalised as I write but if you are interested to help please let me know.

LAST CLUB ACTIVITY: Sunday 1st Feb 2004 0900 - 1500 432MHz AFS

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

Callsign:	Contacts:	Score:
G4WYJ	33	3080
G8IYS	31	2852

Thanks to Jim and John who took part and so put SRCC on the map. We all managed the same number of contacts as last year with similar scores.

Our West Sussex Correspondent

“Dear Ray

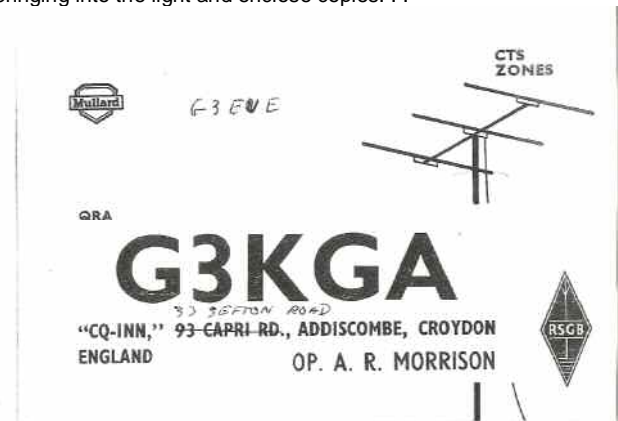
I thought it was about time I reported in to the club as one of your country members. Daphne and I have been out to Tasmania again for a few weeks to visit family and had a very good time. One of the reasons for travelling at this time was to attend my grandson's graduation as a pharmacist. That's two out of three with a degree and one to go!

Overall the weather was rather disappointing and despite being their summertime it wasn't particularly hot, very windy nearly all the time and occasionally really cold with a southerly wind.

I managed to catch up with an ex-pat who has had a house built in the same area WHERE No. 2 son, Tim, lives. Bill reckons to divide his time between the UK and Tasmania and just before I left had got an inverted V aerial up and running. His call is VK7HH and normally operates around 14274kHz. He is phone only. That frequency is also used by a friend of mine around 0730/0830 GMT taking to GW4SLZ. I have had several QSOs with him when conditions are good. His QTH is right by the sea just south of Hobart and I know he is always pleased to talk to stations in the UK. He, too, is an ex-pat.

En route to Australia we had a decent stop in Singapore. The whole place seems to be getting bigger each time we visit it and there is now an extensive “tube” service around the island with, I believe four lines. Very efficient and clean with no food or drinks allowed on the trains or at the stations. Hotels excellent and general costs are lower than they were just four years ago.

On club member matters you might be amused to learn that I recently dug through a box of QSL cards which brought back many memories of past activities. Two cards are, perhaps, worth bringing into the light and enclose copies. . .



1. Did you know that Rex, G3KGA, used to operate on CW ? I have his card to confirm a top band contact in 1958 : A centre-fed aerial and an HRO
2. The second card was from dear old Sid to confirm my first ever amateur QSO in 1953 on 80 metres. At that time I would have been operating a one valve one watt TX. Very chirpy !! Although I got my licence in about 1948 I didn't get on the air until I moved to Norbury in 1953.

All the best to you, Mary and friends at SRCC

Ted G3EUE”

SIGNING OFF:

I think that is it for this month, if I have missed anything I give my apologies – it has been again a very busy month for me with the house still being upside down due to the building alterations and squeezing in the production of this Newsletter. For our main meeting on Monday 1st Mar it is the Spring Surplus Equipment – lets have a large turnout in support of the Club – thank you.

Ray G4FFY

73 and 88

Posted 27th Feb 2004