



SURREY RADIO CONTACT CLUB

MARCH 2005 — No: 750

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 7th Mar 2005 SPRING SURPLUS EQUIPMENT SALE
"B" MEETING 21st Mar 2005 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
Club Meetings	G4FDN Pat McGuinness	020-8643 0491
Members	G3RJW Graham Marshall	020-8669 8722
	G8TB Bernie Wynn	020-8660 7517

Dear Members & Friends

Hello and welcome to the March 2005 Newsletter which I have started to write late on Wednesday evening – it's been busy again for me!!

For our main meeting on Monday 7th Mar we are holding the Spring Surplus Equipment Sale with Bernie G8TB and Maurice G4DDY as the auctioneers. Monday 21st Mar is the usual "B" meeting.

Maurice G4DDY and I went to a recent meeting of the Sutton Library Computer Club where David G3KQR gave a very useful talk on DIY Computer Assembly. It was interesting to note that the attendees were of age group similar to Amateur Radio meetings – where are the young ones now We also met Andrew (ex G3IAS) at the meeting and it was nice to catch up with him.

ANNUAL GENERAL MEETING

I HEREBY GIVE NOTICE that the Annual General Meeting of the SRCC will be held on Monday 4th 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 7th Mar 2005 **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. Club Room is now a NON-SMOKING area.

**NEXT "B" MEETING: Monday 21st Mar 2005
FIX-IT, Advice, Chin-Wag & "MOVE-IT-ON"**

The "B" meeting on Monday 21st March will be 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 7th Feb 2005
German Radios of WWII: Brian Cannon G8DIU**

Introducing this talk in last month's newsletter I had the wrong radio's in my mind as it was actually to be a talk about German Aircraft Radios of WWII - apologies Brian.



This Sid Morley Memorial Lecture slot was filled last year by Brian and he gave us another excellent talk this time on Monday 7th Feb.

This was a well attended meeting at which Brian displayed and talked about a number of German WWII radio systems developed for use at MF and HF in aircraft. State of the Art design techniques included:

- Die cast chassis
- Improved Iron Dust (Carbonyte) cores
- Temperature compensated oscillators
- New ceramic materials
- Reduced number of valve types

Another interesting feature was the use of variometers (variable inductors) instead of variable capacitors which had a tendency to arc in the low air pressure at high altitudes.



The die cast chassis have high magnesium content but produced a material that was very strong yet light. The samples that Brian brought along were in excellent condition, as was the wiring - unlike other equipment of similar vintage I have seen.

I also noted the modular construction techniques used - quite advanced for the time but aided serviceability. Also, everything was developed to make the German's self sufficient including minimal use of quartz (only used in Filter Calibrators).

The German Army (and others) tried to standardise valve types and industry was forced to obey with a new generation of Valves. Two examples were RV12P2000 with the meaning of: R - valve, V - low power (receive), 12 - 12v heaters, P - pentode, 2000 - mu of 2mA/V; and

the RL12P35 with L - High Power, 35 - 35W Anode dissipation.

In developing the required radios the timeline was:

- Aug 1936 - Spec Issued
- Feb 1937 - 2 Prototypes
- Jul 1937 - Die cast Version - Lorenz & Telefunken
- Aug 1937 - Lorenz chosen
- Dec 1937 - 8
- Jan 1938 - Mass production
- 1939 - All fitting done
- 1945 - 50,000 units delivered

Brian went on to describe some radios including the FUG10 which has the following spec:

- Freq Range: 300 - 600kHz IF of 140kHz
- 3 - 6m IF of 1.4MHz
- 6 - 12m IF of 1.4MHz
- 6 - 18m IF of 1.875MHz
- Frequency Stab: 300Hz -30C to +50C (wow!)

The excellent frequency stability was achieved by distributed ceramic capacitors in the units to compensate for temperature drift. Variometers instead of variable capacitors have been mentioned already, rotary transformers were used to derive the required HT of 800v.

I understand that some 11 RV12P2000s were used and the FuG10 installations were housed in cubes with dimensions of 200 x 200 x 190mm. Brian also showed us the aircraft bulkhead wiring, which included the use of circuit breakers, another advance feature.



Another set was the EZ6 - a 9valve Superhet covering 150kHz to 1.2MHz in 3-bands. I believe a crystal filter was used to get a 200 - 2400Hz response.



A further set was the FUG16 used for Air to Air comms, and Air to ground. This was on VHF covering 38 - 41MHz with an IF of 3.1MHz and modes of AM and CW.

Brian has been renovating a number of pieces although spares are now very difficult (and expensive) to obtain. Some of the examples he had brought along were working and members were able to listen through a pair of headphones. (Just had to watch where one put your fingers, avoid the HT supply!!)



Brian has kindly sent me the following E-mail giving some Internet links based on the discussion held during the evening (including Radar):

"Hi Ray,
Some references that members may wish to look into including IFF, British, USA, and Japanese developments

Book: The Radar War by David Pritchard
ISBN 1-85260-246-5

www:
<http://cdv-and-t.org/>
<http://www.vectorsite.net/ttwiz8.html>
<http://home.online.no/~la8ak/e.htm>

Google: search via 'German WW2 IFF systems'

Footnote: The 2 main airborne German IFF transponders were actuated by Ground to Air radars 'Freya' at 125 MHz and 'Wurtzburg' at 600 MHz. More can be found on the 'vectorsite' <http://www.vectorsite.net/> compiled by Greg Goebel.

Brian G8DIU"

Thanks are extended to Brian for the excellent evening and taking the time to visit the SRCC, and bringing along the examples of equipment. Trust my notes are reasonably correct, and thanks to Crystal Palace for some of the text.



CHAIRMAN THOUGHT of the MONTH - March 2005



I think I'm caught in a time warp at the moment, everything is flying by like I'm sitting in John Wyndhams 'Time Machine' - not least it's time for another offering!!

Upper 6th projects have been and gone, the only exceptional two being a Rugby Time Clock with 58 bit serial decoding - (nicely written up too) and a Video Thermometer that displays a blocky temperature on a video monitor. Lots of work went into most of the others, but the needs of the exam board sometimes preclude the 'sensible' option.

As I write this (Wednesday evening 2/3) lower 6th projects have been running for 6 days (two weeks to go) and I have just returned from a Field Day where I accompanied Trinity Cadets to RAF Odiham, there we had a tour around the fire department, demo of a fire truck in action, a visit to Air Traffic Control and a flight in a Chinook at various heights off the ground. Different, as they say - quite how the things don't fail from fatigue after a few hours is beyond me - one pilot said "If it's not leaking oil it must be empty!!" Enough said and an experience to remember! This was preceded by a mornings 'Skirmish Paintball Experience' at nearby Lasham. I declined to partake, and having seen the sizes of the bruises imparted, the split fingers etc. I'm glad I did! Inevitable 'boys' (well some) are attracted by 'guns and war' so members of a Combined Cadet Force are bound to be skewed in favour of such activities. One lad however, declined to join in the last foray into the woods, having been shot three times already he had had enough 'pain'. If only real wars could be resolved so simply. Standing around in the woods for a couple of hours wasn't exactly fun either, as it was snowing. Each to their own....

Next Wednesday I'm hosting a meeting of the southern division of the Battery Vehicle Society (at Trinity). A bit like our SRCC 'B' meetings only involving electric powered transport....we are also beginning to 'burn oil' on our various car projects and we need to finish off the battery capacity tester being built by Joshua. Jayne's Nissan has lit up it's management fault light (emissions fault apparently) and I need to fit new catalyts to my Granada. Looks like another busy month ahead then....see you at the junk sale, club dinner or VHF field day meeting.

Gareth G4XAT

- SRCC Club Dinner: 19th Mar 2005

May I remind you of the Club Dinner that is being held at the Beefeater Park Place Restaurant in Mitcham on 19th March 2005. I shall be pleased to take your bookings on a first come first served basis - secretary@g3src.org.uk or 07949 533839

Menu to choose from is as follows:

Starters: Soup of the Day or Breaded Mushrooms or Prawn Cocktail, or Stuff Potato Shells

Mains: 8oz Rump or Salmon Fillet with Béarnaise sauce or Chicken with Smoky Red Wine Sauce or Rack of Ribs or Moroccan Lamb

Desserts: Horn of Plenty or Chocolate Fudge Sundae or Layered Apple Pudding or Frozen Passion Fruit Cake or Warm Belgian Waffle and Strawberries.

THE CALENDAR SECTION
SRCC and Local Club Meeting Dates:

4 th Mar	Crystal Palace – The G3FZL Memorial Lecture – “My Adventures on Top Band” with Martin G4FKK @ All Saints Church Parish Rooms, Beulah Hill. 7:30 for 8pm. Bob G3OOU 01737 552170 (Meetings 1 st and 3 rd Fridays) http://members.aol.com/rfcburns
7 th Mar	Spring Surplus Equipment Sale
8 th Mar	Dorking & District Radio Society – Meetings 2 nd & 4 th Tuesdays @ Friends Meeting House, Butterhill South Street, Dorking – opp. Spotted Dog. Details: John G3AEZ on 01306 631 236
11 th Mar	W&DARS – Channel Rail Communications with Dennis GOOLX @ 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
14 th Mar	CATS – Echolink - Meetings held @ St. Swithun’s Church Hall, Grovelands Rd, Purley 8pm 2 nd Monday’s. Contact: Dave G8VXB on 020-8546 5445 dyoung@photo-scan.com
14 th Mar	VHF NFD Group Meeting @ G8IYS QTH
15 th Mar	Bromley & District – TBA. 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
17 th Mar	Sutton & Cheam RS – Pings, Bursts and such like with Nick G7DND/M5DND. 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
18 th Mar	W&DARS – “Picatune” construction & “On-Air” @ 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
19 th Mar	SRCC Dinner – Mitcham Park Place – contact Ray G4FFY to book your place
21 st Mar	Fix-It, Advice, Chin-Wag, Move-It-On
22 nd Mar	Dorking & District Radio Society – Meetings 2 nd & 4 th Tuesdays @ Friends Meeting House, Butterhill South Street, Dorking – opp. Spotted Dog. Details: John G3AEZ on 01306 631 236
23 rd Mar	Crawley ARC – Travels in Afghanistan with Mike G0KAD @ Hut 18, Tilgate Forest Recreational Centre, Tilgate Forest, Crawley – 7.30pm. Sec: Keith G8KZZ 01403 257788 www.carc.org.uk
30 th Mar	Mitcham & District ARS (Meetings normally last Wednesday of each month) @ ATC Headquarters, Commonsides West, Mitcham. Sec: Mike Knott G0WCR 020-8764 4716
4 th Apr	AGM
9 th May	Project Constructing Evening
6 th Jun	Construction Contest
4 th Jul	Summer BBQ @ QTH of G4XAT
1 st Aug	Defence of the UK from Enemy Bombers – John Downs
5 th Sep	TBA

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

Rally Calendar, etc:

5 th Mar	Crystal Palace Radio & Electronics Club Spring Fair at St. John’s Hall, Sylvan Road, London SE19. 10:30am to 1:00pm - see notice at end of Newsletter
24 th Apr	West London Radio & Electronics Show, Kempton Park Racecourse. Doors open by 10:15 Entrance still £3.50 Web: http://www.radiofairs.co.uk/

VHF NFD 2005

The next meeting of the group is to be held on Monday 14th Mar 2005 from 8pm at John’s G8IYS QTH of 18 Riding Hill, Sanderstead, CR2 9LN. Please advise John of your intention to attend either on 020-8657 0454 or johns@connectnet.org.uk

SCIENCE WEEK beginning 11th Mar 2005

The RSGB is once again supporting the “British Association for the Advancement of Science” during “Science Week 2005”. 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 11th March until the 20th 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 for more details and see some of the successful events of 2004

Members News

- John G3MCX

John’s operation to have a kidney removed on Friday 4th Feb at Guy’s went well and John is well on the way to full recovery.

- FOR SALE

Maurice G4DDY has for Sale a 2metre Repeater complete with cavities (will not be bringing to the sale) so anyone interested please contact G4DDY
 There is also a TELEQUIPMENT service scope S51T in working order (no Manual)

SIGNING OFF:

I think that is it for this month, if I have missed anything I give my apologies and hopefully remember it next month. Our main meeting on Monday Mar 7th is the Spring Surplus Equipment Sale and we look forward to seeing you all then. The next meeting of the VHF NFD Group is on Monday Mar 14th at John’s G8IYS, and don’t forget the SRCC Club Dinner on Saturday Mar 19th – I will be pleased to receive your booking – a few places are left.

Ray G4FFY

73 and 88

Posted: 4th Mar 2005

WEST LONDON RADIO & ELECTRONICS SHOW
A PREMIER RALLY FOR THE SOUTH OF
ENGLAND

KEMPTON PARK RACECOURSE

SUNDAY 24th APRIL 2005

Doors open 10:15 - £3.50 entrance
(under 16's free)

RadioFairs

Some of the Show supporters are listed below, and for more
[show](#) info click on the logo above. . .



Waters & Stanton PLC [SyCom](#)



KENWOOD
Listen to the Future



Crystal Palace Radio & Electronics Club

G2LW

Web site: <http://www.members.aol.com/rfcburns>

SPRING RADIO & ELECTRONICS SALE

Amateur Radio, Electronics, Computing, Tools etc.

Saturday 05 March 2005

10:30am to 1:00pm

At St John's Hall, Sylvan Road, London, SE19

Tables for sellers (access at 8:30am):

Booked and paid in advance	£6.00 each
On the day (if any available)	£8.00 each

Admission (includes one free drink)	£1.00 each
Children free (under 16 years old)	

Refreshments available

Contact Bob on 01737 552170 or by email to rfcburns@aol.com
if you wish to hire a table or require more information

Location of hall:



Public Transport:

- Free local parking.
- Buses: 410 along Sylvan Rd., 468, 196, 249 on nearby roads.
- BR Stations: Crystal Palace and Norwood Junction.