SURREY RADIO CONTACT CLUB
OCTOBER 2026 – No. 1010

General Club Business:	secretary@srcc.uk
Membership/Treasurer:	membership@srcc.uk
Newsletter articles/distribution:	newsletter@srcc.uk
Club Equipment Loan:	equipment@srcc.uk
Club Website:	https://www.srcc.uk

Honorary Secretary:
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MONTHLY MEETINGS NORMALLY ON 1ST AND 3RD MONDAYS 7.30 FOR 7.45pm

Meetings at St. Paul's United Reformed Church, Croham Park Avenue, Croydon CR2 7HF

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1st MEETING Monday 5th October 2026: Surplus Equipment Sale

2nd MEETING Monday 19th October 2026: Fix-it evening led by John G8MNY

Acting Chairman	G4FDN Pat McGuinness 07711 439417
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Committee member	G6JXA Kim Brown 07498 580216
Committee member	M0RSK Krishnan Rangaswamy cqm0rsk@gmail.com
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Webmaster (non-Committee member)	G4FYF Steve Jones 01424 259377
Treasurer (non-Committee member)	G4FFY Ray Howells 01732 357474
Newsletter Editor (non-Committee member)	G3WRR Quin Collier 020 8653 6948

EDITOR'S TWOPENNY WORTH



The recent work by Krishnan M0RSK and myself on cataloguing equipment owned by SRCC and donated to us over the last few years by members (and non-members) has been continuing. We estimate that just over 50% is now "in the book". Once this activity is complete, there will be a follow-on task to look at the items (or in some cases groups of items such as component types) and decide their future. That future will be a case of "horses for courses": for example older equipment (such as an elderly Eddystone S640) may best be taken to rallies (there is one in Dover coming up in February) whereas others may be made available at our Surplus Equipment Sales (with a few probably appearing at the upcoming 5th October one) - but some sadly will have to end up at Factory Lane ☹. The associated picture shows some at the stuff already catalogued…but the picture is limited by the width of field of my camera…

Some good news! It's good to hear that Luke Cress (whose recent attendance (with his mother Jacqui) was reported last month but whose first name I had forgotten) has passed his Foundation examination and has been allocated the call M7OQJ. Further good news is that Oliver Sanderson has recently upgraded his licence class from Intermediate to Full, with the callsign M9OPS. Congratulations to both of you and we hope to work you on the bands.

Quin G3WRR

RECENT EVENTS

7th September *PCB Design using Sprint with examples from HF Transceiver Design' by Bob Burns G3OOU.* This was another excellent talk by Bob G3OOU, whose talks are always enjoyable and satisfying owing to his very thorough understanding on his subject matter.

He opened by noting that in addition to the traditonal "graph paper method" there is now a wide range of computer based systems for designing PCBs. He opened by describing the stages in a typical graph paper design for a single stage tuned cascode amplifier. He went on to describe a number of available software packages, but concentrated on his personal favourite, Sprint, which is a low cost package that works with component shapes instead of specified parts and is very easy to learn. The latest version is Sprint Layout v6 which (at the present time) costs 49 euros and runs on Windows v10 and up.

Features supported by the package include:

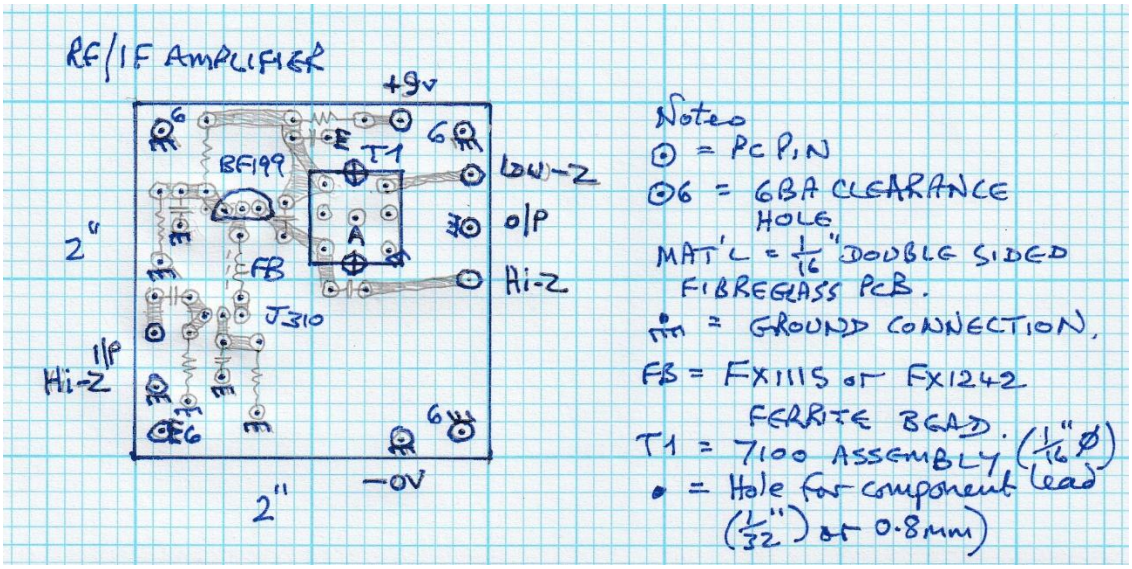
- basic shapes including PCB outline, pads of various shapes and sizes, tracks, plain holes, through links, component idents
- pads which may be round, square, oval etc and plated through or not
- libraries of standard component types by shape and size but not device type so a BC107 would be a TO-18 shape.
- the ability to create your own shapes from scratch or by copying and modifying standard library shapes
- shapes and text may be set to any angle although the preset values are 0°, 90°, 180° and 270°
- PCB layout can be magnified on screen as required
- automatic infill function for ground planes
- print to any Windows printer including a PDF generator
- track continuity tester - very useful in correcting errors!
- rubber banding may be activated or not *(no, your scribe does not understand either…)*.

The package outputs the designs in Gerber format, an industry standard which can be used to manufacture PCBs. (This is presumably not the same Gerber who make baby foods…). Bob noted that in the case of some manufacturers (such as JLCPCB in Hongkong).
However he suggested the following steps before proceeding to manufacture:

- make sure that your PCB design is cross checked against the circuit including all of the component idents
- use the test facility to display interconnections - very useful to show errors, particularly with ground connections
- peer review if possible - you often miss your own errors
- ensure your PCB is viewed from the top side and export the Gerber and drilling files
- With all those steps taken, Zip them into a single archive and send to your preferred manufacturer for a quote.



BOB G3OOU IN FULL FLOW MAKING HIS PRESENTATION



"GRAPH PAPER DESIGN" FOR RF/IF AMPLIFIER



COMPLETED MULTIMODE DETECTOR BOARD FOR AM, CW, SSB AND FM. THE EMPTY SOCKET IS FOR THE MC3357 FM DETECTOR IC.

DOUBLE SIDED WITH TOP COPPER GROUND PLANE.

21st September *Fixit evening* led by John G8MNY

FUTURE EVENTS

5th October *Surplus Equipment Sale* As well as being a very good opportunity to grab a bargain, members are encouraged to view it also as a fund-raising event for the club and to either bring along something to sell or bid for some of the items for sale. Nigel G4CLY in Ashtead has recently donated some items to the club which include 2 straight morse keys, a Shure 201 microphone, a Bird power attenuator, brand new Eddystone diecast metal boxes (several sizes and shapes), other ABS/plastic project boxes and cases, , CirKit 15W HF Linear Amplifier Kit (from R&EW magazine design) and is complete including heatsink, Maplin MOSFET audio amplifier (completed kit) 2 6146B valves (Boxed), 6 x SEW Panel meters BNIB various types, S, Volt, Milliamp, power transformers, high ripple current electrolytics, Audio ICs, mobile mics and speakers.

19th October *Fixit evening* led by John G8MNY

2nd November *Antenna modelling* This will open with discussion of the use of antenna modelling programs and the factors that need to be considered in using them. It will go on to consider antennas actually designed and built by members and what they learned from the experience. So far, John G8MNY, Quin G3WRR and Pat G4FDN will be making contributory presentations. If there are any other members who would like to contribute can they please make themselves known as soon as possible.

16th November *Fixit evening* led by John G8MNY



7th December *Construction Evening*. The activity will be to make up a Bluetooth Speaker kit, which also includes an FM Radio with remote control. The cost will be around £10 to £12 and the kit can be assembled in just over an hour or so. More details will be made available to members shortly.
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21st December *Christmas Social*

HERE AND THERE

Jamboree on the Air (JOTA) for the 7th/12th Croydon Scouts Saturday 17th October 2026 (G4FDN) - The SRCC is supporting this event and putting on a station for the scouts at their HQ at 35A Birdhurst Rise, South Croydon CR3 7EJ. This club support is being led by John G8MNY and Krishnan M0RSK, and they are requesting other members to spare an hour or two in assisting with the operating and log keeping and assisting scouts and explain amateur radio. If you can help please contact John or Krishnan (cqm0rsk@gmail.com) directly.

TV Monitor in St Pauls Jubilee Room (G4FDN) - This has been recently replaced with a brand-new Samsung 55" model UE55U7000FKXXU. This will make presentations and demos much easier as it now supports wireless display which most laptops and phones made in the last 10 years support. The club also now has its own Samsung TV remote control which works with the new set, should we find the church's one missing on one of our evenings.

Posters (G4FDN) - The SRCC Committee wants to put up posters on St Paul's notice boards and other local places, advertising the club's meeting and location. Is there a member who would like to have a go at this and create a sample?

Really small and really big numbers (G3WRR) - We all know, and often use, the prefix *nano-* but did you know the source? Apparently it comes from ancient Greek in which "nano" translates as "dwarf". Just the sort of trivia that appeal to me, but this got me to thinking about how wide the range of powers of ten with names there are. Investigation (thankyou, Wikipedia) shows that there are names allocated by SI (System Internationale) for powers of ten between minus thirty and plus thirty at intervals of three powers of ten as follows:

POWERS >1	NAME	POWERS <1	NAME
10^{3}	kilo	10^{-3}	mili
10^{6}	mega	10^{-6}	micro
10^{9}	giga	10^{-9}	nano
10^{12}	tera	10^{-12}	pica
10^{15}	peta	10^{-15}	femto
10^{18}	exa	10^{-18}	atto
10^{21}	zetta	10^{-21}	yotta
10^{24}	ronna	10^{-24}	ronto
10^{30}	quetta	10^{-30}	quecto

Just another example of information that we will never use but is nevertheless interesting…

Using the ISS repeater (G7VAK) – I had read the ISS had a cross-band repeater with around 20W on its output. The last time I had done anything with satellites was with Salyut on 19.995MHz and plotting the changes in its frame transmissions. I was lucky that I had met Geoff Perry during a spell at Nottingham University. We kept in touch over this subject; the change in frame 12 data I had noted meant it was coming down. The nominal frequencies for the ISS repeater is 145.990MHz UP and 437.800MHz DOWN. CCTCS 67Hz on both freqs, although I left it off the Downlink.(Why let a few Hertz stand in the way of reception)?



The cheapo Chinese handheld I use is the TIDradio 8 (Unlocked) - see picture. Using a special unit programming via Bluetooth and mobile phone is possible using the App 'Odmaster.' Obviously Doppler will play a part here. To cope with this I have programmed five channels, no 3 being the nominal freqs, no1 being 10kHz down, no2 5kHz down and no4 5kHz up and no5 10kHz up except I have varied the tx freq by only 2.5kHz only for being at 146MHz. I tried on nights of 16th and 17th Sept with no success. It turned out the repeater was turned off for a spacewalk. At 2014z 20th Sept standing on my back step I switched my handheld on and was immediately rewarded with chatter. Due to Doppler the chatter broke up after my first call but I managed to hear a reply I think from a French station followed by a German. Not totally sure but an American voice was also heard. I held the unit so the antenna was parallel to the ground.

A really good demonstration of Doppler Shift was had; I did similar on the Physics Patio at Imperial College a few years ago. It was, I felt, a better description than that afforded in Nelkon and Parker's 'A' Level Physics. *(The same text book I used for my Physics A level in 1969 and I still have a copy! – G3WRR)*

There are a number of ISS prediction apps available; I use 'Heavens-Above'. On the night of 22nd Sept I was aware of an ISS pass at 1920z. Standing on my back step at 1910z, tuned 10kHz down from the nominal frequencies for the repeater and the squelch wide open I heard the briefest of calls, weak but I answered it with no success.I was aware the pass was on a lower azimuth and therefore not right over the QTH; in fact much further south.

Moving in frequency by reason of Doppler I heard louder unbroken signals from EA and CT. A 2E0 also managed to be heard; he was followed by a reasonably strong and clear YK1.
I didn't recognise the prefix immediately and as signals were disappearing I heard a PA station calling as the ISS went out of range of my cheapo Cino technologically advanced TIDradio handheld ground station. I immediately thought the YK1 was one on these newly issued prefixes for the dissolution of Yugoslavia. On checking I discovered it to be quite rare, Syria. I was surprised the footprint was wide enough, but the inference is there: if it's overhead then expect decent, workable signals but if lower and possibly out of reach then you may just hear the exotic even with a Nagoya knock off ~18 inch screw on antenna.

GX3WIM – WIMBLEDON & DARS SUMMER CAMP 2026 by G8MNY

My kit needed a good check over before packing my 29 year old Masda Van the 1.3 tons of kit for the 9 day event.

As usual I got there at 08:00 on Saturday, using my Coulsdon route from Croydon. The site was the South field this time, (already used by SRCC for VHF field day a few weeks earlier). Lee M7THX, and others had already set up camp on Friday evening with some aerials, but Chris G0KPU had a car issue and could not attend with his caravan, wife & entertaining dog were missed.



I sized up my exact parking spot needed, by laying out the 80m & 40m dipoles and mast rotator cable, to define where the shack had to be and put the van in position. On its passenger side went the shack awning tent with the aid of a 10cm 3mm masonry drill to make the tent peg holes in the concrete like ground. Two carpets were laid, then a car battery in for HF PA and placed the operating table in position. This year again we used Lee's 2nd tent butted up to mine. A great success allowing the 2m station to have more access and people in the shack.

We then assembled the aerial poles for the 40ft 2 pole mast, Alvin G6DTW (an old club member recently out of hospital), made a surprise visit and helped assemble the mast kit until it was too hot in the sweltering heat and he had to leave. No aerials for the 1st test lift, and adjusted mast for vertical. We then spent the next hour putting on the 3 aerials, an up-rated Mosley TA33 HF Tribander, a 6el 5m beam, & a VHF Triband V2000 colinear coaxes.

Only 1 person was needed to pull up the 42ft mast with my 30ft gyn pole and pulley, others were required for safety and to slowly set the mast up. Once up SWR was checked on all coaxes, The mast was then lifted onto the ground rotator and the direction calibrated. Wire aerials used catapulted & thrown up a tree, sky hooks were sorted and attached to the 2 mast halyards, a 40m dipole pulled up with a Union flag, and 80m dipole. Later an inverted L (80m of wire) added for 160m and my Xtal set.

HF station had newly re-valved Drake L4 (1960) this year (not L4B) and my 12V HF T500M PA in series (1 @ a time) both available. A battery floated with 2 PSUs did it all. The rig was a 40 year old IC735, Autocaller, BHI LS, and a Rx Suck out trap for in case of a 2nd on site Tx. (not planned this year.) The shelf had the Palstar 1500 ATU, peak reading Dummy load, Alinco Rotator controller, LS, & a bendy lamp.
6m had FT690R Rig, BHI LS & 50W BNOS PA, I did not wire up the QRO 6m valve PA again this year.



The cooking tables stack was put in place with its minimum shack footprint. Both tents were lit with 4 small 4W LED lamps & backup 12V fluorescent lamp.

2m was a dual band Kenwood TM731E on the 2nd table with a pile of band log & attendance books.

As usual I started preparing a well-deserved evening dinner after an exhausting hot day (I had drunk 4l that afternoon in the heat.) Then some HF working and VHF FM 3 band shack set up dual band Kenwood TM731E. I had missed packing my 4m 1/2 wave collinear from the loft, so no 4m activity logged this year.

At the rear of the Van was my Alinco Dual band HH for 2m packet system running into the van's passenger side dual bander. I was able to send my daily packet bulletins & read the RSGB news OK.



No 160m Sunday net this year but 80m was OK. The site's HF noise floor was very very low and a pre-amp could be used on 80m & 40m to give only S1-2 levels!

I took 2 petrol generators, 500W and my old 2.3kW to backup Andrew G4ADM's 4.5kW Diesel that had been installed late Saturday. It worked fine although initially on a 100m of 2.5mm cable and there was quite a bit of loss starting out at only 230V (not 254V). Later it was moved closer to 100ft away. As usual it ran on the farmer's red fuel while in the field (a very cheap solution).



Fae M7PHM & Nathan M7NAJ visited for a few days, Lee M7THX, Andrew G4ADM, Steve M0PEL, & Damien 2E0EUI camped all 9 days and did much of the organising.

Old club members Eric G0KRT & Mary 2EFMY visited with biscuits and did some operating. Graham G4WNT spent a few hours visiting. Jim G4WYJ & Barbara M3WYJ from Devon stayed 4 days in their repaired large camper and had a family get together on their multi-stop August tour and Bob G0IIP also stayed a few nights with his tiny camper and sun telescope. Kim G6JXA stayed over in a 1 man tent a few nights, but went home for frequent visits.

Visitors Jo M0SOZ & Garry M5YRG visited and on a 2nd visit they also brought Alan Betts G0HIQ, who visited GX3WIM for the 2nd time and saw many of his students at the event.



Wx was hot & hotter, warm enough for scolding solar showers most days and several campers had their own set-ups. So getting hold of the sites band log books before you Rx made sure there were no blown up rigs. In all there were 12 camped and 16 visitors, several who tried /P operating with their own kit, but this was risky near a 1kW Tx on a Rx!

All left the site by 17:00 Sunday I was the last to leave, an exhausting and long van pack in the dry, and at home I had a well needed relaxing bath!

Main station operating was done by G8MNY, M0PEL, 2E0EUI, G6JXA, M6SLQ, G0KRT, G1ROK, G4WYJ, G4ADM, G3CAT, 2EKXA often until after midnight and 1 night till 03:30hrs!
From the logs...

160m with 30W had just 2 contacts with no Dx.

80m with 400/1kW had 12 QSOs G GW M0 M7.

40m saw 205 QSOs D EA EI F G GB GM GW IS LX LZ M MC MI MW M7 ON OO OZ PA SA SP 2E 2M 2W.

20m saw 514 QSOs A CR CT D EA EI EG EJ ES E7 F G GM HA HF HG HK HZ H8 I JA J3 K LX LZ MM N OE, OU OM ON PJ PR PV PY R SA SP SQ SV S5 S57 TA TF TG TI UW VA VE VK VP VY W YI YT YO YU 2E 2M 4Z 5Y 6Y 7Z 8Z 9A.

15m had 3 QSOs 2 in CW by 2E0CXA. K OH VE.

10m saw only 1 QSOs to EA.

6m was 50W had 10 contacts local FM & 2 sporadic E SSB sessions. CT G IS IZ YT.

2m had 35 QSOs all G stations QSOs with 35W to V2000,

70cms had 4 QSOs on repeaters etc.

73, John G8MNY

SRCC NETS

The following is a list of structured nets on which members of SRCC meet regularly. They are sometimes joined by members of other local clubs, who are always made most welcome. The net is not usually led by a nominated controller, but stations normally transmit cyclically in the chronological order in which they sign in. If any member wishes further occasions and frequencies to be added to the table, please let me know at g3wrr99@gmail.com.

BAND/FREQUENCY/MODE	DAY OF WEEK	START TIME (clock)
160m / 1905 kHz / LSB	Sunday	9.30 am
80m / 3710 kHz (+/- QRM) LSB	Monday	9.00 am
10m / 28.078 MHz / JS8	Wednesday	10.00 am
6m / 51.55 MHz / FM	Tuesday	8.00 pm
4m / 70.30 MHz / FM	Thursday	8.00 pm
2m / 144.6125 MHz / Digital Voice	Friday	7.30 pm
2m / 145.35 MHz / FM	Friday	8.00 pm

* The Friday night Digital Voice net usually starts with D-star.
In addition to the regular Club Nets, several members monitor the local repeater channels, particularly GB3XP (145.6875MHz 82.5Hz CTCSS FM).

THAT'S ALL FOLKS…..

Well, that's it for another month… Thanks to all the contributors for another healthy crop of inputs! However more material is always welcome 😊

73, Quin G3WRR
SRCC Newsletter Editor