



SURREY RADIO CONTACT CLUB

85th Anniversary Year - Founded 1935
MARCH 2020 – No 931

SRCC supports the RSGB Child Protection Policy

General Club Business:	secretary@srcc.uk	Honorary Secretary & Editor
Membership/Treasurer:	membership@srcc.uk	John Simkins G8IYS
Newsletter articles/distribution:	newsletter@srcc.uk	18 Riding Hill, Sanderstead, South Croydon, Surrey CR2 9LN
Club Equipment Loan:	equipment@srcc.uk	Tel: 020 8657 0454
Club Website:	https://www.srcc.uk	

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

Meetings at Trinity School, Shirley Park, Croydon CR9 7AT

FIRST (A) MEETING Monday 2nd March
Spring Surplus Equipment Sale

SECOND (B) MEETING Monday 16th March
Fix-it, Skills and Advice Night

SRCC COMMITTEE 2019/20

Chairman & Club Meetings	G3ZPB Peter Burton	01737 551413
Vice Chairman & Contest Coordinator	G3WRR Quin Collier	020 8653 6948
Hon.Secretary Fund Raising & Newsletter Editor	G8IYS John Simkins	020 8657 0454
Treasurer & Membership Records	G4FFY Ray Howells	01732 357474
Resources & Liaison	G4DDY Maurice Fagg	020 8669 1480
Committee Member and Events	G6JXA Kim Brown	07812 735507
Committee Member	G4LZE Colin Lugard	07533 174388
Publicity	G3MCX John Kennedy	020 8688 3322
Webmaster (Co-opted)	G4FYF Steve Jones	01424 584143

GUEST EDITORIAL by Peter, G3ZPB

We've moved!!! Well, the Club website has. We are now at <https://www.srcc.uk> – you don't have to type all that lot to find the site, just srcc.uk will work!

I know after 20years, this will come as a bit of a shock to some people, but the committee believe it is a worthwhile change. The main reason for the change is to make us instantly recognisable on the internet. I realise many Club Members will instantly recognise the “g3src” in the old address as being our Club Callsign, but new members, visitors and potential members will not. However, we hope they will more readily associate the “srcc” with our Club.

But why “.uk” you may well ask? The ending “.co.uk” is used by the Stockport Radio Car Club and in any case “.co” is normally associated with a company. Perhaps more appropriate might be “.org.uk”? The domain name “srcc.org.uk” is registered with the Surrey Rural Community Council; although they don’t use it, they have refused to release it to us. Hence, back to the “.uk”. However, in fact, this is probably to our benefit as more and more organisations are now using the simple .uk and it will soon become the “norm” for non-commercial organisations in the UK. In addition, it results in a very short website name to type in!

As a result of the change, we have also changed all the Club email addresses as shown on the front page of this Newsletter. We will keep the domain name www.g3src.org.uk until such time as a future committee decide it is no longer required. Anyone going to the old site will automatically be forwarded to the new site.

EDITOR'S NON-OPENER

Well, what can I say to follow that?!

As usual, my epistle opens with an update on the condition of our Secretary John G8IYS. John continues to improve and has even suggested he might be able to come to the March Surplus Equipment Sale (see later....). That would be great, but best not to overdo things and we will have to wait and see.

On the subject of the Surplus Equipment Sale, John and I spent most of an afternoon at Simkins Towers recently sorting out stuff (“stuff” is of course the appropriate technical term) to bring along. Much of it from Silent Key donations to the Club. We have finished in his shack but there is still a garage full of stuff to sort through in the next week. I shall be bringing it all down to Trinity on the night – it’s at times like this I’m glad to still have my Volvo estate!

The 2019/20 AFS (RSGB Affiliated Societies contest) season is now finished so there will be no further bullying of members to take part for the next six months or so. It’s good to report than we got at least one station on in each of the eight separate events. At the time of writing, the results of the 432MHz AFS in early February have not yet been made public, and neither have those of the 2019/20 AFS Super League (which consists of the summation of all the eight annual AFS Contests). However as an “insider” I am aware of how we did in both, and don’t think it is jumping the gun to say that SRCC was well inside the top third of entrants in the Local Club section. This seems pretty good for a club which isn’t strongly contest oriented compared with some of the opposition!

I have just come back from a few days break in Totnes Devon: it was distinctly moist but at least there was no flooding – just as well since the hotel was right next to the River Dart! I am just starting to get ready for the RSGB Commonwealth Contest (aka. BERU) on the weekend of 14th/15th March for which I shall again be going to the Isle of Wight (provided the site near Brighstone has not been washed away). Come on sun, let’s have some spots.....

Finally, following up on my query last month about shredded halyards, thanks for the

responses I've received...these agree that a fox is the most likely culprit rather than an outraged neighbour, and the suggestion from Rick M0LEP to replace the lower end of the halyards with wire seems like a good one – thanks!

73, Quin G3WRR

FUTURE MEETINGS

First (A) meeting: Monday 2nd March 2020 – Spring Surplus Equipment Sale

Most of you will be familiar with the format – but for any newcomers the “rules of engagement” are as follows:

1. It is very helpful for sellers to be in the meeting room by 7:30pm and to bring good quality saleable stuff – no “rubbish” please – although, like beauty, what constitutes rubbish and what constitutes high quality gear is in the eye of the beholder!
2. All members and visitors whom they have brought along must sign the attendance book and all must be conversant with the rules.
3. It should be noted 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
4. The following also apply:
 - only SRCC members are permitted to sell
 - all items not donated for the benefit of the Club must be marked with the name or callsign of the vendor, a brief description and details of any reserve price
 - bids shall start at 50p and increment in steps of 50p up to £10 and £1 steps thereafter – unless determined otherwise by the auctioneer
 - the auctioneer, in his sole discretion, will determine what constitutes an acceptable bid
 - sellers will not be paid until all buyers have settled up
 - the club levies 15% commission on all commission sales
 - please do not obstruct the doorway, facilitating escape in case of fire
 - the school is a NO SMOKING area.

Gareth G4XAT will again be acting as auctioneer using his usual combination of bonhomie and hard sell to shift the goods.

Second (B) meeting: Monday 16th March 2020 - Fix-it, Skills and Advice Night – led by John G8MNY

PREVIOUS MEETINGS

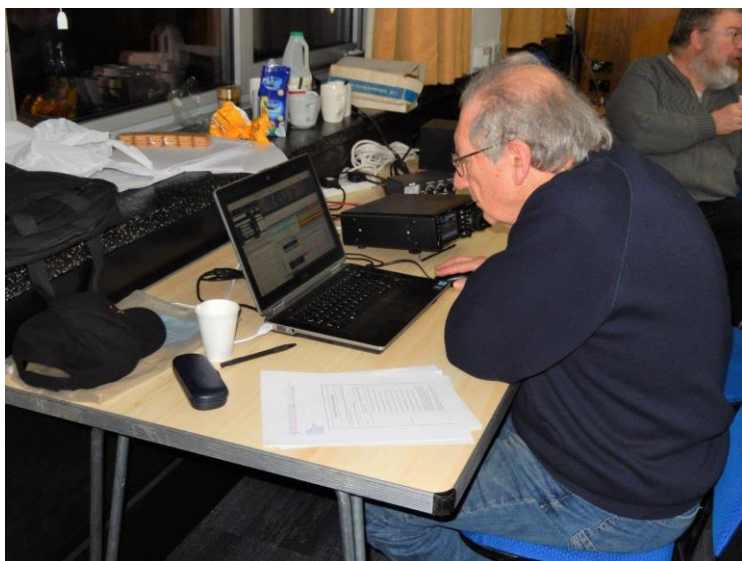
First (A) meeting: Monday 3rd February 2020 – Digital Voice Radio by Mike G6PTY

The presenter Mike Greenow G6PTY had intended the evening to consist of a presentation on digital voice radio followed by a demonstration. Unfortunately the quality of the internet connection available at Trinity was not good enough to allow the demonstration to be as effective as could be wished. A summary of the presentation will be included in next month's Newsletter.

73, Quin G3WRR

Second (B) meeting: Monday 17th February 2020 - Fix-it, Skills and Advice Night

In addition to the usual set of test gear, advice and general chat, the opportunity was taken to enter the RSGB FT4 contest on 80m, which took place on the same evening. Using a Yaesu FT991 running 30W to a dipole antenna, 16 contacts were made. These included 2 SRCC members, Colin G4LZE in Selsdon and Terry G4CDY on the Lizard in Cornwall ! Although most of the contacts were within the UK, several European stations and one in Greenland were also worked. The latter is highly creditable and also rather surprising as Greenland is regarded as part of North America and is seriously rare! The following pictures (courtesy of Mike M1CCF, for which many thanks) show Peter G3ZPB operating the contest station and Gareth G4XAT demonstrating his triband Moxon antenna. (for which also see article by Gareth below....).



CHAIRMAN'S BLOG

Welcome to another rain-filled SRCC Chairman's Blog – I keep telling myself there can't be much more rain left up there; but it still keeps coming! Thank goodness Amateur Radio can also be an indoor hobby. Plenty of varied radio activity this month, from three different locations!

Firstly, I was testing the new version of Log4OM on HF using the data mode FT8. One of the advantages of these data modes is not only you can work significant distances with comparatively

low power, but they will also cut through high levels of noise (QRN). At Brooklands Museum where the Radio collection is currently housed, there is a very high level of RF interference from the LED lamps installed. However, running about 30W from an IC-7300 produced an excellent QSO with a DL7 on 20m.

This was followed by some QSOs using my FT-991 from home running about 30W in preparation for the RSGB 80m FT4 contest.

The contest itself was held on a Monday evening, so a station was setup at our SRCC Meeting using my FT-991 and John MNY's dipole antenna and tuner. A quick QSO with Ukraine to check everything was working and bang into the contest at 20.00hrs. 16 QSOs later we decided it was time to pull the plug, the highlight being a QSO with an OX3 in Greenland which was a new country for me.

Finally, setup the station back at home with my main rig, an IC-9100. After a lot of trying various software configurations, I eventually found the setup that worked and had a couple of FT8 QSOs on 40m with Germany and Spain.

It has been a busy month for contest results with three in my case....

RSGB AFS 80m + 40m – I could only operate on 40m and only with low power (10W) and thus only managed 6 QSOs = 6 points. But I wasn't last in the table! This helped the SRCC Club entry to come 41st of 64. I think I have now fixed the problem of RF getting into the equipment so hope to be able to run much more power next time.

1.3GHz UKAC – my entry of 620 points from 4 QSOs meant I was 56th of 60 entries. This proved that having 10W to a Co-linear antenna is not very competitive!!! Anyway, it was my first experience of 23cms so was useful for the experience.

Finally, my first FT4 contest (see above) – 240 points from the 16 QSOs resulted in 32nd place of 43 entries. Not bad for what really a “temporary” contest setup.

Perhaps the most important thing I can take from these three contests is that I did not lose any points through errors in my logging.

Those who read my piece last month may remember me saying I could only run about 10W on 40m without RF getting into the shack. Some tests this month seem to have identified the main culprit – what appears to be a “not very well shielded” USB cable running from the rig to the computer. Disconnecting it seems to have made a considerable improvement and I can now run a couple of hundred watts with little trouble. The biggest problem now may be RF getting straight into the SSD as it seems a couple of Windows driver files have been corrupted. There are still some further improvements to make which I hope to try in the next few weeks. My aim to be able to run full legal limit on all bands without RF getting into places it shouldn't!!

Software changes still continue unabated...particularly HamLib v4 – I have been testing the very latest “Beta” versions and most of the “bugs” now appear to be cleared. Whereas last month, new updates were being posted every day, this has now slowed to every few days so I am hoping the full public release is now not far away.

I have also, of course, been heavily involved in moving the Club website to its new home at srcc.uk (see the Editorial above).

That's all for this month so it's bye for now and I hope to see lots of you at the Surplus Equipment Sale next Monday.

73 and 88, Peter G3ZPB

A COMPACT 12 VOLT BEAM ANTENNA ROTATOR AND HOW THINGS COME IN USEFUL ONE DAY....by GARETH, G4XAT

I have a variety of beam antenna for various Amateur Radio bands and often use them when operating portable. As the name implies, they 'beam' a signal in whatever direction they are pointing in usually the station I'm trying to talk to. There are plenty of mains powered HD units available, but they are heavy and not particularly fast, often taking over a minute for a complete rotation. Something lightweight and faster was needed.....

I salvaged a pair of these handy geared motors many years ago when I dismantled an old Ford Scorpio. These motors adjusted the rear seat back angle and clearly would 'come in useful one day'. The first was used to adjust belt tension in a drive system that had a Picador variable ratio pulley. The seat back peg was machined to take a ball-race and that mounted the tensioning/idler pulley. The ratio could be adjusted 'on-the-fly' with a centre-off toggle switch. It lasted well over 6,000 miles in its application.

Fast forward to a couple of weeks ago and with a new beam and further planned portable operations looming the thinking cap was popped on. My collection of geared motors (voltages, various, sizes, many, ratios lots) were assembled and laid out, including a couple of worm-drive mains voltage Parvalux motors acquired at a rummage sale last year. Worm drives are handy for their reduction and not needing any brake mechanism. A Parvalux unit was dismantled and found to have a 8mm drive shaft, the worm conveniently secured with a roll-pin. The seat motor drive shaft speed was tested at 12 volts and in conjunction with the worm found to offer a single 360 rotation in just over 20 second. That should do.

Some thinking and measuring ensued, followed by turning down the drive shaft and shortening it to mount the worm. A 3-D printed (in PETG) adaptor collar was designed and used to mount the worm-wheel gearbox assembly. A sprocket engagement plate was reverse engineered and a mast base clamping unit produced to bolt the assembly together and secure it to the drive sprocket. Gear wheel design software was used to produce suitable gear ratio .DXF files which I imported into Inventor 18 and made the required changes. To drive the motor a eBay H bridge driver board using the L298N dual 2 amp bridge was pressed into service (doubled up) along with a Picaxe 14M2 on one of my own design project boards. Some software development later (with help from the excellent Picaxe forum) I have a working unit.

Problems solved included dealing with a larger than expected 'dead-zone' at each end of the position potentiometer travel and overshoot due to momentum of the gear train. This was solved by introducing PWM motor speed reduction as the beam heading approached commanded position. A degrees readout (to +/- 10 degrees) was added using a digital voltmeter module and driving it from another PWM output, suitable scaled in software (saves using additional components).

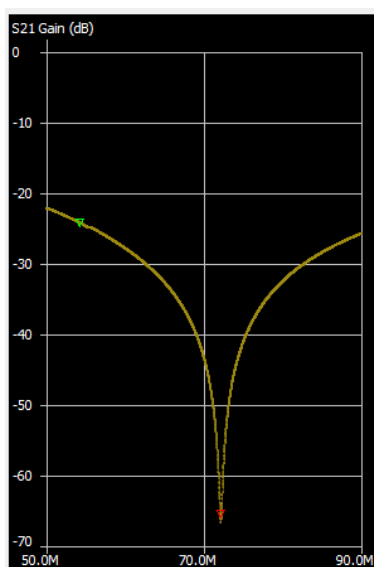


Example of the seat adjust motor – I forgot to take a picture of my unit before I took it to pieces. On eBay for £149.99, New Old Stock!!



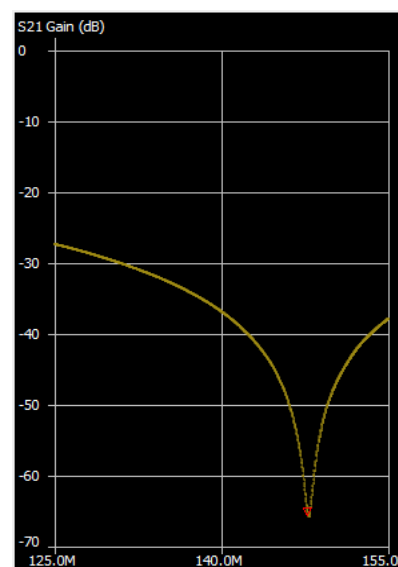
The finished article, nice sloping front box from a junk sale about 20 years ago and yes, lots of CAD and 3-D printing.

And a little snippet regarding the tri-band Moxon.....don't you just love having the right test gear?? Screenshots from the PC via my NanoVNA which I was using to cut traps for 146MHz and 71MHz. Checked with a spectrum analyser and a noise source, they agree.....the read marker give a numerical value (not shown in screenshot) for the ultimate in precision.



4m

2m



WANTED - NEW SCREEN FOR KENWOOD TH-75E !

As the photo shows it's not the latest technology, does not have facilities for all these new-fangled modes, but it does work on FM, however it has a problem, as you can see.



Does anybody have one with a working screen they don't need? I would be very happy to re-home it!

Mike, M1CCF (m1ccf@talktalk.net)

TROPICAL TRAVELS

I didn't go to Kenya for Xmas at the end of last year, but I did fit in a fortnight's holiday at the end of January. Usually, by January Kenya is well into its "dry season", but this year was different. We got quite a lot of fairly heavy rain, with anything up to 80 mms of rain a day. The unusual weather has also had a part to play in the plague of locusts at present causing devastation in parts of the country. The last time Kenya had a comparable plague was in 1954. We didn't see any of the affected areas, though we did see a few of the culprits, but the local news was showing the latest devastation almost daily.

Of course, rain doesn't affect HF propagation, but if you've been keeping an eye on the Sun you'll know it's been rather quiet. HF operating conditions from Kenya were about as poor as I've encountered. I made exactly zero DX contacts despite spending quite a few hours calling CQ. I was picked up by a few reversebeacon.net listeners. DF7KF in Germany heard me on one occasion on 40 metres. E28AC in Thailand, 3B8CW in Mauritius, and V51YJ in Namibia all heard me on 20m. 3B8CW and V51YJ heard me on 17 metres, and 3B8CW also heard me on 12 metres. I could hear a few stations, but I figure they must have been high-power ones with big antennas, and none of them could hear me, even when I was running with 100 watts from my Kenya home location.

One of the places from which I operated was the boathouse near Nanyuki shown below. However, I only had my KX3 with me there, and its 10 watts didn't get heard, not even by any reversebeacon.net listeners.



I did, however, meet up with Ted 5Z4NU on a couple of occasions. Among other things, we talked a bit about Kenya's licensing system, which relies on the RSGB's International Amateur Radio Exam (IARE) for its technical qualification, and he was in discussion about running on-line exams for candidates in Kenya. With a bit of luck the mobile network infrastructure should be able to manage the required data throughput. If so, then there's at least one candidate presently studying for the exam.



Ted's antennas, showing a little misalignment caused by the Hadada Ibises who consider it a fine perch.

On air, I did get three 5Z4 calls into my log, so at least I didn't come home with a completely empty one. They were Ted 5Z4NU (of course), Kam 5Z4BV and Andy 5Z4/G3AB.

Rick 5Z4/MOLEP

SRCC MEMBERSHIP RECORDS

The SRCC has updated its membership record system to a web-based system called *Membermojo* which offers the following benefits to the Club:

- No more printed application forms - members join, renew and maintain their own details online.
- Renewal and expiry notices are sent automatically.
- No more manual member mailing lists - send an email to a single address and let membermojo forward to members. (We are using this feature for our Newsletter distribution for example)
- No more circulating a membership list - one up to date online database.

For members it also offers:

- Online payment using PayPal, credit or debit cards.
- Members join, renew or update details in minutes from a PC, tablet or phone.
- Notify members when their offline payment, such as cheque or bank transfer, has been received.

In summary, the system allows you as members to access your record and thus ensure it is up to date, check your membership renewal date, and also view the membership directory.

To do this visit <https://membermojo.co.uk/src> to log in - for the first visit you enter your email address that is used in the club records and Membermojo will send you a link by email to complete your login. You will then have the opportunity to enter a password for future logins if you wish.

This is our Membermojo welcome page:



Welcome to Surrey Radio Contact Club

We meet from 19:45 on the 1st and 3rd Mondays of each month at:

Trinity School, Shirley Park, Croydon CR9 7AT



Sign In



Contact Us



Membership Secretary - Ray G4FFY

✉ membership@g3src.org.uk

☎ 07921 567651

🌐 www.g3src.org.uk

Memberships

F £12.50

M £8

Expires 01/05/2020

Membership requires approval



[Join Us / Renew](#)

Payment: PayPal, card, Bank Transfer or Cheque.



The sign in link is located at the top right. Once you have successfully logged in you will see this screen:

[Home](#) [Your Membership](#) Ray ▾



[Home](#) / [Your Membership](#)

Summary

Membership:	H	Name:	HOWELLS Ray
Membership state:	Active	Email:	ray@g4ff.co.uk
Expires on:	_		

Options

My Details
View or edit your membership details. [View or Edit](#)

Payments
View your payment history. [View Payments](#)

Password
Set or change your membermojo password. [Set Password](#)

Member Directory
Lookup other member contact details. [Member Directory](#)

Additional Membership
Start a new membership that shares your email. [New Membership](#)

From this screen one can view and edit your own details, view your payments, set a password for future log ins, and view the membership directory.

Any questions I'll be happy to help. Enjoy!

Ray G4FFY

SRCC LEAGUE TABLE – JANUARY 2020

Well, here we go for a new year! The number of entrants for January 2020 was eight - all the usual suspects from 2019 plus the club call which has had a busy month because of the HF AFS contests early in the month! The CONTACTED section results for the month are as follows:

ENTRANT	WORKED DXCC / SQUARE	WORKED IN CONTEST	WORKED SRCC MEMBER	POINTS THIS MONTH
G4LZE	49	3	0	101
G3EUE	50	6	1	98
G3SRC	25	25	1	78
G3ZPB	8	6	1	24
G4FYF	8	3	2	23
M0LEP	8	0	0	16
G4WGE	1	1	1	6
G3WRR	0	0	0	0

Regarding positions, as this is the first session of the year there is not a lot to say, other than to note that Colin G4LZE, last year's winner, takes first place with Ted G3EUE snapping at his heels only 3 points behind. Also Alun G4WGE and Quin G3WRR made distinctly token entries!

Over 80% of Colin's contacts were on 40m, with five on 80m, three on 30m and one on 20m. With the exception of three contacts in Asia, two on North Africa and one in North America all his contacts were with European stations. With the exception of five contacts using PSK63 (three is the AFS data contest) the contacts were fairly evenly balanced between FT4 & FT8.

All Ted's contacts were made using CW. Again over 80% were with European stations, but there were also three Asian, two North American, two African and one South American contact. Ted mentions JY (Jordan), SU (Egypt) and S01 (South Sudan) as "interesting" contacts – amen to that – as well as four gotaways !

For the first time the club call G3SRC appears in the table, an entry based on entries in the CW and SSB AFS contests on 80/40m. As might be expected the great majority of contacts were with Europe – but one W1 (New Hampshire) appears in the CW log on 40m. More surprisingly G3SRC was spotted on RBN (the Reverse Beacon Network) by VK4CT (Queensland) on 80m with a 16dB signal to noise ratio at 1655 UTC – five minutes before the end of the contest. This does not, alas, count for League Table points! The operator at G3SRC was Quin G3WRR, who claims this as a (feeble) excuse for not earning any points using his own callsign...

Peter's entry, to quote his own words consisted of "Quite a mix of bands and modes this month - 70cms FM (with Club Member G4ADM/M), 40m JS8, 40m SSB in AFS Contest and 23cms SSB in 23cm UKAC Contest".

Steve's entry consisted entirely of European stations, including two SRCC members.

Rick's entry was, with one exception – 5Z4 (Kenya) - all with European stations and these were mostly made while SOTA (Summits On The Air) chasing.

No entries were received for the HEARD section.

January HF conditions were still subdued, but the SFI continues to creep slowly up – let's hope this translates to improved conditions sooner rather than later!.

Looking now at the annual "story so far", the results are as follows:

ENTRANT	1/ 20	2/ 20	3/ 20	4/ 20	5/ 20	6/ 20	7/ 20	8/ 20	9/ 20	10/ 20	11/ 20	12/ 20	TOTAL
G4LZE	101												101
G3EUE	98												98
G3SRC	78												78
G3ZPB	24												24
G4FYF	23												23
M0LEP	16												16
G4WGE	6												6
G3WRR	0												0

73, Quin G3WRR (SRCC Leaguemeister)

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 g.g.collier@btinternet.com.

BAND/FREQUENCY/MODE	DAY OF WEEK	START TIME (clock)
160m / 1905 kHz / LSB	Sunday	9.30 am
10m / 28.078 MHz / JS8	Thursday	10.00 am
4m / 70.30 MHz / FM	Thursday	8.00 pm
6m / 51.55 MHz / FM	Tuesday	8.00 pm
2m / 144.6125 MHz / D-Star	Friday	7.30 pm
2m / 145.35 MHz / FM	Friday	8.00 pm

SRCC MEETINGS – MARCH TO APRIL 2020

02/03/20	Spring Surplus Equipment Sale
16/03/20	Fix-it, Skills and Advice Night – John G8MNY
06/04/20	Annual General Meeting (AGM info for SRCC members follows)
20/04/20	Fix-it, Skills and Advice Night – John G8MNY

THAT'S ALL FOLKS....

Well, that's it for the first Newsletter of 2020 – thanks to all the contributors: please keep the inputs coming!

73, Quin G3WRR

FORMAL NOTICE OF THE 80TH SRCC AGM FROM ACTING HON. SEC. QUIN COLLIER G3WRR

I HEREBY GIVE NOTICE that the 80th Annual General Meeting of the SRCC will be held on Monday 6th April 2020 at Trinity School, 7.30 for 7.45 p.m. start.

Following usual practice, this notice is issued more than a month ahead in order to comply with Club rules. It allows time if there are proposed alterations to the rules, or to allow members an opportunity to give advance notice of any points they wish to raise at the AGM. We also ask for nominations for Honorary Secretary and Committee Member, with such nominations (and acceptances) to be received by the Committee prior to the opening of the AGM.

Minutes of the last AGM and the full Agenda will follow separately. Nomination Slips for proposing Members for the new Committee and Secretary follow.

Quin Collier G3WRR

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NOMINATION FOR HONORARY SECRETARY - 2020 / 2021

(Please return to Acting Hon. Sec., Quin Collier, G3WRR or before the start of the AGM).

I.....wish to nominate.....for
the position of SRCC **Honorary Secretary** for 2020 - 2021.

I agree to stand and serve if elected.

Signed.....Date.....

.....

NOMINATION FOR COMMITTEE MEMBER - 2020 / 2021

(Please return to Acting Hon. Sec., Quin Collier, G3WRR or before the start of the AGM).

I.....wish to nominate.....for
the position of **Committee Member** on the SRCC Committee for 2020 - 2021.

I agree to stand and serve if elected.

Signed.....Date.....