



SURREY RADIO CONTACT CLUB

85th Anniversary Year - Founded 1935

JANUARY 2020 – No 929

SRCC supports the RSGB Child Protection Policy

General Club Business: secretary@g3src.org.uk

Membership/Treasurer: membership@g3src.org.uk

Newsletter articles/distribution: newsletter@g3src.org.uk

Club Equipment Loan: equipment@g3src.org.uk

Club Website: <https://www.g3src.org.uk>

Honorary Secretary & Editor

John Simkins G8IYS

18 Riding Hill, Sanderstead,
South Croydon, Surrey CR2 9LN
Tel: 020 8657 0454

MONTHLY MEETINGS NORMALLY ON 1st AND 3rd MONDAYS 7.30 FOR 7.45pm

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

FIRST MEETING: Monday 6th January

IC9700 demonstration / familiarisation session

SECOND MEETING Monday 20th January

Fix-it, Skills and Advice Night - led by John G8MNY

SRCC Committee 2019/20

| | | |
|--|--------------------|---------------|
| Chairman & Club Meetings | G3ZPB Peter Burton | 01737 551413 |
| Vice Chairman & Contest Co-ordinator | 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 and 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 |

EDITOR'S OPENER

Dear Members & Friends,

I hope you all had a good Christmas and take the opportunity to wish you a happy New Year – if it isn't already 2020 by the time you read this....

First, "medical corner"...I'm delighted to say that our Secretary John G8IYS, having been released from Mayday Hospital to a nursing home in Kenley a month or two ago for

recuperation, is now back home at Simkins Towers in Sanderstead. I visited him there on 23rd December and he is continuing to improve. He is getting around in a quite spritely manner using a Zimmer Frame, and despite being on (bottled) oxygen most of the time is able to take increasingly long periods (up to sixteen hours in one case) relying on the natural stuff. We had a lot to catch up on, but after about half an hour he started to tire and it seemed time to leave (or perhaps he was just trying to encourage me out of the door...). We have agreed that he is as yet a bit short of being ready to resume his SRCC duties, so you're stuck with me as interim Newsletter Editor for a bit longer!

December has, as always, been a busy time, but as my son is (at the time of writing) away, having taken his daughter over to the Isle of Wight to visit his mother, I have a bit of time to catch up on stuff such as authorship....

Just a reminder, following my epistle in the November Newsletter, that the HF AFS contest season is upon us, with three 80/40m contests of four hours duration over three consecutive weekends, as follows:

- CW – Saturday 4th January 1300-1700 UTC
- Data (RTTY/PSK) – Sunday 12th January 1300-1700 UTC
- SSB – Saturday 18th January 1300-1700 UTC.

Rules are at the following URL: <https://www.rsgbcc.org/hf/rules/2020/rafs.shtml>

I and (hopefully) three other SRCC members will be on – at least in the CW event -, but the more the merrier. So why not come on and have a few QSOs or even put in an entry? It is (quite rightly) considered “bad form” to work just your own club members, so working at least a couple of non-members as well would be good. Hope to work some of you!

Finally, it's good to see there have been inputs for the Newsletter from other SRCC members as well as the “usual suspects” so just a reminder that inputs (sent to me at g.g.collier@btinternet.com for the time being) are always welcome.

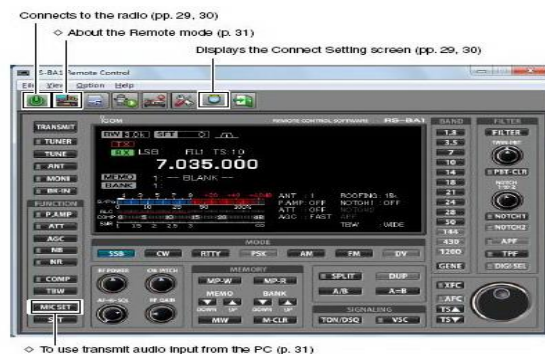
So now on to the “good stuff”...

73, Quin G3WRR

FUTURE MEETINGS

First (A) meeting: Monday 6th January 2020 – IC9700 demonstration / familiarisation session

This meeting will consist of a talk and demonstration by Peter G3ZPB of the Club's new rig - the IC-9700 (see picture). This will cover items such as how to set it for 2m SSB or 70cms FM, Voice Repeater operation, how to use it in Icom's D-Star mode, how to set filter widths, using the Spectrum Scope etc., etc.



Second (B) meeting: Monday 20th January 2020 - Fix-it, Skills and Advice Night – led by John G8MNY

PREVIOUS MEETINGS

First (A) meeting: Monday 2nd December 2019 – Construction Contest

On display at the 2019 Construction Contest was the usual wide selection of interesting exhibits, with the number of entries (17) actually exceeding the number of those present (13) !

In addition to allowing time for those present to inspect the entries, each entrant was allowed a couple of minutes to describe his (no “her”s this time) goodies. Brief details are as follows:

1. **G8MNY – Construction Project VK5TM noise canceller kit** – John admitted that this had been built in a bit of a hurry in time for a presentation to CPREC. It used a plastic box, which had the advantage that holes could be created using a soldering iron!
2. **G8MNY – stereo microphone preamplifier** – this used “ugly construction” with components hanging in the wiring and offered 10dB of gain between an unbalanced input and balanced output (making it a sort of audio balun). Either side of the output can be earthed without affecting the output. Each channel used a long tail pair shunted by 600Ω and included an RF filter (a wise move in amateur radio circles...).
3. **G8MNY – 375W power amplifier with internal mixer** – this had been acquired “in a bit of a mess” as a result of liquids having corroded the PCB. Fixing this involved a major disassembly job. The mixer was resurrected by hybridising the internal one with a similar item acquired at a rally.
4. **G4XAT – parts for Radio Truck** – recognising the limitations of using his Ford Scorpio for portable radio operation, Gareth has bought a Bedford CF based “Autosleeper” and has proceeded to adapt it as a dedicated mobile shack. This entry included a number of parts, several created by 3D printer and others sourced from a local scrap yard, to make the inside user friendly and to provide external support for a variety of mastage. These were successfully tried out at this year’s Wimbledon camp.
5. **G4XAT – narrowband 2m preamplifier and SAW filter** – this was built in support of Gareth’s DATV activities from an AMSAT kit designed to keep out-of-band emissions from broadband SDRs such as the Funcube Dongle. Construction was lengthy and difficult due to the use of very small surface mount devices, but it worked exactly to specification.
6. **G4XAT – high power low pass filter for 4m** – this was built to a design from OZ2M to prevent second harmonic radiation from a Chinese broadband amplifier used on 4m for DATV. It was built from junk box items and required minor tweaking from the basic design owing to the need to work up to 72MHz for DATV.
7. **G4XAT – 12V power distribution panels** - these were built to form a 12V power distribution system for Gareth’s Radio Truck (see item 4...). Electrically, XT60 connectors were chosen on grounds of cost, ease of assembly (no crimping tool required) and 60A peak (30A continuous) current capacity. The housings were 3D printed to designs from Thingiverse. *[Editor’s note – I have purchased a dozen of these XT60 connectors to try them out and am most impressed, and am minded to adopt them as standard rather than Powerpole connectors for my own stuff]*
8. **G4XAT – 4m “brick” PA** – based on a design by, and PCB from, GM3SEK. While fine at 50W of FM, it showed traces of instability on DATV (its intended application) until boxed and provided with input attenuation. It now provides a clean 10W on DATV off a 12V DC supply.

Operating in class A it is quite inefficient and a large ex-PC fan (protected by a 3D printed shroud) provides cooling.

9. **G4XAT – 20W amplifier for 9cm** – based on “modern surplus” (ex-WiMax) technology, this five stage class A ultra linear amplifier needed little modification (apart from adding fans, which are mounted using 3D printed brackets) for amateur usage. Although intended for DATV use it is also suitable for narrowband.
10. **G4XAT – double bi-quad antenna for 9cm** – this was designed using an internet based tool. The element was based on wire from the junk box and was formed using a 3D printed jig to ensure the accuracy needed at these short wavelengths! PCB material was used as a ground plane, with the elements mounted on this using 3D printed mounts.
11. **G4XAT – portable satellite dish for Oscar QO100** – having previously tried a 1.4m dish which he found tricky to adjust, Gareth downsized to a 95 cm dish but using an “upside down mount” on a pallet base, with the elevation angle adjustable between 40 and 53 degrees using a turnbuckle. The dual band (2.3GHz uplink/10GHz downlink) feed consists of co-mounted patch (=sort of flat plate) antenna for 13cm and circular waveguide for 3cm. *[Editor’s note - you may have sensed from my wording that I don’t really understand this ...].* Gareth has not had any QSOs yet but has seen (on a band scope) his signal make the 38k mile round trip, so watch this space...
12. **G3WRR – 6m / 4m Moxon antenna** – so back down to earth.....this simple 2 element beam consists of wire elements for 6m or 4m which can be clipped onto an H-frame and are tensioned with knicker elastic. The H-frame uses distinctly non antenna type materials – a boom of 2.5” square plastic drainpipe, with spreaders of 1” x 1” angle aluminium extended by 1” x 1” plastic cable trunking...all a bit wobbly but stable - and it works. Quin noted, however, that the scaled-up version for 15m & 10m had broken during erection – but a design modification will be incorporated next spring.
13. **G8HDP – video system with 5.8GHz (6cm) link** – this consists of a lightweight (25gm?) camera and transmitter run off a lithium polymer battery. The receiver and monitor allow the user to see what the camera sees.
14. **G8HDP – remote controlled Lego truck** – this had been included “as a bit of a laugh” to quote Roger. It has a “horrendous” gearbox in the middle, and will drive and steer “but not much else”. The video link from item 13 was mounted on the cab, and those present had great fun steering the truck around and observing the “truck’s eye view”.
15. **G4ADM – potential divider network** – this is part of the triode linear (to a GM3SEK design) that Andrew has under construction. The role of the divider is to provide a low voltage to tell the system control that EHT is present. He noted that the design provided paralleled resistors at the bottom end of the dropper chain – if this was not done, failure of a single bottom end resistor would results in EHT being applied to the controller board – this would be undesirable. The divider chain is currently built on SRBP, but a rebuild on fibreglass board is planned.
16. **G3WRR – foot switch** – this had largely been included to make up the numbers. It had no particular claim to fame except that (a) it had been used on the 70cm station in VHF NFD in 2019, and (b) in a worthy instance of recycling, the base consisted of a discarded wooden toilet seat cut down to size.
17. **G4DDY - Construction Project VK5TM noise canceller kit** – Maurice explained that this was “work in progress” and would be completed in due course.

Voting by those present then took place – despite the General Election the following day, nothing clever was involved....no proportional representation, multiple transferrable votes or the like – all entries were considered as a single class, and each voter was invited to vote for his/her first, second and third choice entries. The results were as follows:

1. Item 7 – 4m “brick” PA – G4XAT
2. Item 4 – parts for Radio Truck – G4XAT

3. Item 9 – 20W 9cm PA – G4XAT

Congratulations go to Gareth who wins the Coronation Cup and Basil Wardman Tankard and also takes the three financial rewards. This is well deserved in view of the innovation of ideas, quality of design and standard of construction involved by Gareth's entries.

A few photographs of the event follow:



**John G8MNY
demonstrating his
VK5TM noise
canceller kit**



**Foreground –
Gareth G4XAT
demonstrates his
Oscar QO100 dual
band dish
Background –
G3WRR's 6m/4m
Moxon antenna**



**SRCC meeting,
as experienced
by Roger
G8HDP's Lego
truck....**



**Gareth G4XAT
receives
Coronation Cup
(first prize) from
Peter G3ZPB**

As if the above aren't enough, here are a few pictures from the November A meeting, the Inter Club Quiz:



SRCC Team "X"



S&CRS Team "Damp Coax"



CATS Team "CATS 1"



SRCC Team "1155"



S&CRS Team “W9ICQ”



**Winning (SRCC “1155”) Team with
Quizmaster G4CDY (extreme right)**

Second (B) meeting: Monday 16th December – Christmas Social and Fix-it, Skills and Advice Night

In addition to the usual evening of test gear and equipment (as always led by John G8MNY), the meeting included a large selection of crisps, sausage rolls, mince pies, drinks and so on (you get the picture, I’m sure...) which made for a very convivial evening – and also offered attendees good practice for the Christmas festivities.

CHAIRMAN’S BLOG

I’ll start by wishing you all a very Happy and Peaceful New Year. Potentially, 2020 could be an interesting year and I don’t just mean because of the “B” word; of much more interest to Radio Amateurs is the fact that Sunspot cycle 24 is about to end and we can look forward, hopefully, to a period when HF propagation should improve over the next five or six years. Now it’s after 21st December, I suppose we can look forward soon to lighter evenings???

Radio activity here this month has been mainly confined to 2m – the 2m MGM contest and 2m Friday evening net with some limited HF operating. New versions of software are coming out almost on a weekly basis. Of particular interest was a new version of JS8Call released about a month ago. This software is based on the well-known FT8 protocol but is much more flexible in as much as messages are not confined to a few short, standard messages. One can hold a real QSO with free-form messages of any length. However, the major advance in the new version is the ability to select the transmission speed – there is a trade-off between speed and minimum S/N that can be decoded but with a good signal path significantly faster data speeds are possible. In its “Turbo” mode, the transmission speed is equivalent to about 20 WPM which is somewhat faster than the 8 – 10 WPM common in FT8 and “Normal” speed in JS8. I used “Fast” mode for a QSO with Ireland and on the 10m JS8 net with Colin, G4LZE.

Also, we have just released a new interim version of MINOS – v2.3. There are a few

improvements in the way various aspects of the software operate and a few bug fixes. There will be a major new release next year when HamLib v4 is released; HamLib is the software interface used by MINOS to communicate with a connected Transceiver or Rotator. The new version 4 contains protocols for a long list of new Transceivers that have come onto the market during the past year or so and a number of “bug fixes”.

Completing the new interface to my Rotator Controller has taken a “back seat” to another project I have been meaning to implement for a long time – the ability to remotely control my IC-9100. And I don’t mean from the other side of the room, or even from another room in the house – no, I mean real remote control from (almost) anywhere in the world using the Internet! Icom produce some software to do just that and have recently updated the software to version 2 to include several new rigs. However, the original version 1 supposedly works perfectly well with my old IC-9100 and I found a supplier on eBay offering it at half the price of the new version. At the time of writing this, I am part way through the installation. Talk about complicated!!! The first thing to do is adjust the settings in the Router Firewall to allow data to come into the home network. Then I needed to ensure I had the latest “Icom approved” USB drivers installed in the computer connected to the rig. Then install the “Remote Utility” in the computer to adjust various settings to allow data to flow via the LAN connection, through the Windows operating system and to the correct USB port to the rig. Then install the “Remote Control” program to check it all works at that end. The Remote Control program mimics the front panel of the radio with most the controls and settings available (see attached diagram). This is where I have got to so far and is referred to as the “Base Station” end. The next steps are to install the “Remote Utility” on my other laptop computer that I am going to use at the far end, followed by the “Remote Control” program; this end is all referred to as the “Remote Station” end. I also need to ensure my new “computer USB headset” works properly for the “Remote Station” end. In theory, it should then all work and I will be able to operate my rig from the Museum or when I’m away. I’ll let you know how I get on but I am expecting much “head scratching” before this project is finished!!!!

That’s all for this month so it’s bye for now. I hope to see lots of you at the first meeting of 2020 when I will be giving a talk and demonstration about the Club’s new IC-9700 rig.

73 and 88, Peter G3ZPB

PREDICTIONS FOR SUNSPOT CYCLE 25

Many thanks to our member Mike M1CCF, from whom I have recently received the following, which will make useful reading for all of us interested in how the HF bands will behave over the next decade or so: he concludes with the comment “I hope we can all wait this long!” – something with which those of us “of a certain age” will no doubt concur!

NOAA/NASA Panel Concurrs that Solar Cycle 25 will Peak in July 2025

The NOAA/NASA-co-chaired international Solar Cycle Prediction Panel has released its latest forecast for the coming Solar Cycle 25. The panel's consensus calls for a peak in July 2025 (± 8 months), with a smoothed sunspot number of 115. The panel agreed that Cycle 25 will be of average intensity and similar to Cycle 24.

The panel additionally concurred that the solar minimum between Cycles 24 and 25 will occur in April 2020 (± 6 months). If the solar minimum prediction is correct, this would make Solar Cycle 24 the seventh longest on record at 11.4 years. In its preliminary forecast released last April, the scientists on the panel forecast that Solar Cycle 25 would likely be weak, much like the current Cycle 24.

"Solar Cycle 25 may have a slow start, but is anticipated to peak with solar maximum occurring between 2023 and 2026, and a sunspot range of 95 to 130. This is well below the average number of sunspots," the panel said last spring, adding with "high confidence" that Cycle 25 "should break the trend of weakening solar activity seen over the past four cycles." The panel said the expectation that Cycle 25 would be comparable in size to Cycle 24 suggests that the steady decline in solar cycle amplitude seen from Cycle 21 through Cycle 24 has ended and that there is no indication of an approaching "Maunder-type" minimum. Cycle 24 peaked in April 2014 with an average sunspot number of 82.

The Solar Cycle Prediction Panel forecasts the number of sunspots expected for solar maximum, along with the timing of the peak and minimum solar activity levels for the cycle. It is comprised of scientists representing NOAA, NASA, the International Space Environment Services, and other US and international scientists."

The source of this information is <https://www.swpc.noaa.gov/> which looks like a very useful site for anyone interested in "Space Weather".

Thanks also to Mike for sending me an extract from a document which sets out the views (and self-perceived responsibilities) of Ofcom and Openreach on the impact of VDSL on radio reception, which will make interesting reading, particularly for those who use the HF bands. At present the origin of the document is not clear and I am unwilling to include the extract in the Newsletter until its source is clear, allowing us to understand the context. I will look into that with a view to inclusion in the February Newsletter.



73, Quin G3WRR

RSGB CONVENTION, MY FIRST VISIT OCTOBER 2019

You need to be pretty keen to justify a whole weekend away for 'radio stuff', or you need to be retired. Fortunately I'm the latter and seeing the lecture list for this year's convention I thought – 'Well, why not'? So I booked up, with food and an overnight stay included. I drove up early morning Saturday, aiming to miss most of the traffic on the M25-M1 route to Milton Keynes. The journey was pretty much as Google predicted and I was directed straight into the venue without any problems. Needing breakfast I booked in and paid the extra for feeding rights, promptly taking advantage of a FEB (Full English Breakfast, one of my treats!) As I had previously entered items for the construction competition, I carried these boxes in and found the display room. Setting up my Portsdown DATV TX and MiniTiouner RX/Windows Tablet didn't take long (previously tested) and my assemblage of mobile aerial facilitations wasn't an issue either. Onward to the lectures. I'd previously chosen what I fancied listening to and so the day progressed with ample free coffee,

displays by various clubs and societies, lots of new gear on display from ML&S, a good lunch, and so to the end of the day and off to find my room. The whole complex is apparently an ex-BT training centre and is every bit as good as a typical Travel Lodge/Premier Inn. The staff were universally friendly and helpful, this was really noticeable. The room was clean, comfortable and quiet and a good night's sleep was had especially after the gala dinner where I sat across from one of the RSGB directors and had interesting conversations between the courses.

Sunday arrived and after another FEB it was onwards to yet more lectures, 11 attended in all. The plenary session saw the raffle draw and construction contest results announced and then homeward, fortunately on reasonable quiet motorways.

Would I go next year? Almost certainly, it was nice to be fully immersed in the many aspects of our fascinating hobby for two whole days.

73, Gareth G4XAT

[Editor's note: Gareth has also provided two further articles, but owing to the amount of material this month these are being stood over until the February issue]

SRCC LEAGUE TABLE – NOVEMBER 2019

The number of entrants for November was again seven (all the usual suspects). The results for the month are as follows:

| ENTRANT | HEARD DXCC / SQUARE | HEARD IN CONTEST | HEARD - SRCC MEMBER | WORKED DXCC / SQUARE | WORKED IN CONTEST | WORKED - SRCC MEMBER | POINTS THIS MONTH |
|---------|---------------------------|------------------------|---------------------------|----------------------------|-------------------------|----------------------------|-------------------------|
| G4WGE | | | | 68 | 64 | | 200 |
| G3EUE | 11 | 8 | | 47 | 39 | | 152 |
| G4LZE | 34 | | | 59 | | | 152 |
| G3WRR | 12 | 12 | | 33 | 33 | | 123 |
| M0LEP | | | | 8 | | | 16 |
| G4FYF | | | | 3 | | 1 | 8 |
| G3ZPB | | | | 4 | | | 4 |

Nearly all entrants' scores for November were up on October, with at least three taking advantage of the CWWW CW DX contest at the end of the month to pick up some interesting countries. All but two entrants have changed position. Alun G4WGE moves up from third place to first, displacing Ted G3EUE and Colin G4LZE down by one place to equal second (the first time we have seen identical scores). Quin G3WRR retains fourth place. Rick M0LEP and Steve G4FYF change places, now taking fifth and sixth positions, and Peter G3ZPB brings up the rear.

Alun's activity was mostly on CW (in the CQWW contest) with a few FT4/8 contacts. 55% were on 80m, with the majority of the rest on 160m & 40m, plus two each on 20m & 15m. 65% were European, with 13% North American, 9% Asian and African plus 4% South American.

Ted's contacts were mostly (79%) European with the rest in Africa, Asia and North America in that order. I believe they were all on CW and although the bands were not stated, from the distribution

they were most likely on 40m & 20m.

As usual, all Colin's contacts were on FT4/8. 80% were on 40m (which definitely seems to be his band) with the rest equally divided between 80m, 20m & 17m. 60% were European, with the majority of the rest Asian and a (small) handful of African, North American and Oceanian (if that is a real word...).

Quin was one of those who focussed on the CQ WW contest, and 83% of his contacts were on CW. Owing to antenna difficulties all but three of the CQ WW contacts were on 15m. The other three were on a nearly dead 10m - one of which was, surprisingly, in ZD7 (St. Helena). 60% were European, with the rest fairly evenly balanced between Africa, Asia, South America and North America.

Rick's contacts were again all intra-European and mainly SOTA CW. He noted that gardening had again been getting in the way of radio, but he has ambitions to erect his Hexbeam at the new QTH.....

Steve's entry was a limited one due to "other activities", consisting of three contacts – but is welcome as it helps to "keep the pot boiling". These were all within the British Islands (ie. United Kingdom and Eire) and include a contact with a fellow SRCC member.

Likewise, Peter's entry was a limited effort, with two contacts, both on 40m and using the beta version of JS8 (the conversational version of FT8). He promises to do better in December!

Moving on to the cumulative annual scores, these are tabulated below – with no change in positions from last month. In fact there has been no change in overall positions for at least six months!

| ENTRANT | JAN 19 | FEB 19 | MAR 19 | APR 19 | MAY 19 | JUN 19 | JUL 19 | AUG 19 | SEP 19 | OCT 19 | NOV 19 | DEC 19 | TOTAL |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| G4LZE | 109 | 134 | 158 | 176 | 243 | 335 | 300 | 236 | 140 | 90 | 152 | | 2073 |
| G4WGE | 115 | 144 | 126 | 152 | 212 | | 115 | 134 | 114 | 59 | 200 | | 1375 |
| G3EUE | 111 | 106 | 139 | 99 | 153 | 80 | 63 | 18 | 123 | 123 | 152 | | 1167 |
| G4FYF | 34 | 31 | 66 | 67 | 53 | 48 | 80 | 58 | 50 | 10 | 8 | | 505 |
| G3WRR | 2 | 27 | 62 | 29 | 138 | 0 | 0 | 36 | 51 | 31 | 123 | | 499 |
| G3ZPB | 32 | 46 | 4 | 21 | 4 | 24 | 0 | 0 | 0 | 10 | 4 | | 145 |
| M0LEP | 34 | | | | | | | 12 | 20 | 10 | 16 | | 92 |
| G7RUX | 42 | | | | | | | | | | | | 42 |

The solar flux index has been creeping slowly up for the last few weeks (very slowly one has to admit, but it is at least a steady climb without much noise in the data – or to put it another way, without the number jiggling up and down too much). This seems to fit in with the data from NOAA/NASA shown above so perhaps the time has come for cautious optimism?

Despite the fact that we are now at the end of the calendar year, there remains a month more to run in the 2019 League Table owing to the lag resulting from the need for entrants to collate their entries and myself to check them and produce the tables. So watch the next Newsletter to see who has won the SRCC Club Cup for 2019.

Following discussions with the regular entrants, there will be a couple of minor changes to the rules for 2020, and these are expected to be available in time for the start of the new season.

73, Quin G3WRR

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 q.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 – JANUARY TO APRIL 2020

| | |
|----------|--|
| 06/01/20 | IC9700 demonstration and familiarisation session – Peter G3ZPB |
| 20/01/20 | Fix-it, Skills and Advice Night – John G8MNY |
| 03/02/20 | Digital Voice Radio – Mike G6PTY |
| 17/02/20 | Fix-it, Skills and Advice Night – John G8MNY |
| 02/03/20 | Spring Surplus Equipment Sale |
| 16/03/20 | Fix-it, Skills and Advice Night – John G8MNY |
| 06/04/20 | Annual General Meeting |
| 20/04/20 | Fix-it, Skills and Advice Night – John G8MNY |

THAT'S ALL FOLKS....

Well, that's it for another month – I look forward to seeing you again in 2020!

73, Quin G3WRR