



# SURREY RADIO CONTACT CLUB

86th Anniversary Year - Founded 1935

NOVEMBER 2021 – No 951

SRCC supports the RSGB Child Protection Policy

General Club Business: [secretary@srcc.uk](mailto:secretary@srcc.uk)  
 Membership/Treasurer: [membership@srcc.uk](mailto:membership@srcc.uk)  
 Newsletter articles/distribution: [newsletter@srcc.uk](mailto:newsletter@srcc.uk)  
 Club Equipment Loan: [equipment@srcc.uk](mailto:equipment@srcc.uk)  
 Club Website: <https://www.srcc.uk>

Honorary Secretary & Editor  
 Quin Collier G3WRR  
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 SE25 6SY  
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MONTHLY MEETINGS NORMALLY ON 1<sup>ST</sup> AND 3<sup>RD</sup> MONDAYS 7.30 FOR 7.45pm

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

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**1<sup>st</sup> MEETING Monday 1st November: Autumn Surplus Equipment Sale**

**2<sup>nd</sup> MEETING Monday 15<sup>th</sup> Nov: Fix-it, Move-it-on and Social Chat with John G8MNY**

## SRCC COMMITTEE 2021/22

Chairman	Vacant	
Acting Chairman for November	G4LZE Colin Lugard	07533 174388
Vice Chairman & BE Coordinator	G3ZPB Peter Burton	01737 551413
Hon. Secretary & Newsletter Editor	G3WRR Quin Collier	020 8653 6948
Treasurer & Membership Records	G4FFY Ray Howells	01732 357474
Resources & Liaison	G4DDY Maurice Fagg	020 8669 1480
Events	G6JXA Kim Brown	07812 735507
Fund Raising & Resources	G4LZE Colin Lugard	07533 174388
Publicity	G3MCX John Kennedy	020 8688 3322
Committee Member	G7VAK Paul Beaumont	07818 660493
Webmaster (Co-opted)	G4FYF Steve Jones	01424 584143

## EDITOR'S OPENER

Dear Members & Friends,

Firstly, a piece of sad news of which some of you will already be aware. I regret to report that Benita Mathews, wife of our member and friend John G3ENG, died recently. A quiet family funeral will have taken place by the time you read this. I'm sure we all offer John our condolences and hope that he will not have too many challenges adapting to the new environment in which he finds himself.

On a more cheerful topic (but one not closely related to our hobby) I recently achieved a long-term

ambition. I have for many years wanted to drive a Model T Ford – not quite sure why: probably partly a general interest in old technology, and partly because I vaguely remember my long-deceased father trying to explain to me (at an age of seven or eight years) how its epicyclic gearbox worked. Whatever the reason, during lockdown on the internet I found a place not far from Milton Keynes that offered half day driving courses (with a bit on maintenance thrown in) at an extremely reasonable price. With the easing of lockdown, I was able to get on one of those and had an amazing time. The picture below shows me risking life, limb and historic hardware – and not a mobile rig in sight.....



**QUIN G3WRR  
DRIVING A PRE-1918  
MODEL T FORD –  
9/10/2021**

On a similar theme, and given that many of our members have been doing things not directly related to amateur radio during the summer, this month's issue includes a brief report on Ted G3EUE's holiday on a canal boat. Personally I feel that including occasional "off topic" items involving our members helps to keep the Newsletter fresh and interesting. If you have any views, either way, on that idea - please share them with me!

And so, on with the show....

## 73, Quin G3WRR

## PREVIOUS MEETINGS

The October A meeting on Monday 4<sup>th</sup> was the Construction Contest, at which eight items were submitted, as follows (numbers are merely identifiers for voting purposes):

1. **Gareth G4XAT** – multi-component multi-band / multi-mode setup including of:
  - a. *70MHz – 6GHz all mode (DATV(DVB-S, DVB-S2, DVB-T), SSB, CW, AM,FM) setup* - based on BATC Portsdown and UK Microwave Group Langstone packages
  - b. *Portsdown / Langstone bare bones development model* – robust and well suited for /P usage
  - c. *Ryde DATV receiver* – another offering from BATC – 50MHz – 2,45GHz set top box optimised for DATV
  - d. *Oscar QO-100 PA* – based on £30 surplus Nokia UMTS PA from Poland. 250W CW output for 200mW drive (36dB gain!! – full marks for keeping that stable...). Includes 3 speed fan
  - e. *Portable 24cm PA* – 12V powered, using "brick" amplifier. Cooling a bit marginal –

despite four fans in push-pull, it cooks up after 5 minutes!

- f. *Portable 13cm PA* – again 12V powered, using “brick” amplifier – designed for 1.9GHz but good at 2.4GHz
- g. “*Knucker DVB-T receiver* – 44MHz – 1002MHz. Outstanding sensitivity direct from antenna.
- h. a number of other items were included for interest but not included in the formal entry.

2. **Jason G7RUX** – a portable setup for 2m / 70cm satellite use, optimised for use on top of buildings (for which he has access permission!). Consists of:

- a. a pair of FT817s (with homebrew 3D bracket holding them together)
- b. homebrew HB9CV antennas for 2m & 70cm, bolted together – surprisingly little interaction
- c. phosphate batteries to supply power – expensive but not heavy!
- d. filters (VHF low pass and UHF high pass) to minimise problems of 3<sup>rd</sup> harmonic of 2m affecting 70cm. When installed there were no problems with crosstalk or desensitisation.

Jason noted that by orienting the antennas at an angle of 45° to the vertical, cross polarisation loss was minimised.

3. **Pat G4FDN** – breadboarded “receiver lab”. Designed by EI8KI, this is essentially a superhet receiver kit with separate stages (e.g., RF, mixer, audio) that can be patched together (or to external items such as filters) as needed by coaxial jumpers. Pat has used this (for example) in conjunction with a modified Pye PMR rig.

4. **John G8MNY** – 13.8V @ 25A linear PSU, built on an old TV chassis. Features include overvoltage protection, overcurrent foldback and negative rail-based design. The latter has the advantage that the power transistors can be connected direct to the chassis without the need for insulators.

5. **John G8MNY** – pictures of his extensive home antenna installation displayed on a laptop, plus some of the erection tools (e.g. catapult).

6. **Quin G3WRR** – balanced ATU for 160m/80m in CW Field Day, where matching 160m can be a problem because of the low antenna impedance. Based on simple parallel tuned circuit design and using the coil out of T1154 transmitter PA section.

7. **Paul G7VAK** – passive splitter used with QRP (5W) transceiver allowing audio to be split between headphones and a recording device.

8. **Quin G3WRR** – “just for fun” TRF receiver with grid leak detector using a single EF50 valve (as used in radar equipment during WW2). Coils were wound on super low loss toilet roll formers and variable capacitors made from a design in *Scientific American* (?) using soft drink cans wrapped in sheets of tin foil with an overhead projector slide (remember them?) between them as dielectric. It worked when last tested, but the regeneration was a bit fussy.

The attendees were allowed to vote for up to three items: the results were:

**1<sup>st</sup> Gareth G4XAT** - winning the Coronation Cup and small financial award

**2<sup>nd</sup> Jason G4RUX** - winning the Basil Wardman Tankard and small financial reward

**3<sup>rd</sup> Pat G4FDN** - winning small financial reward.

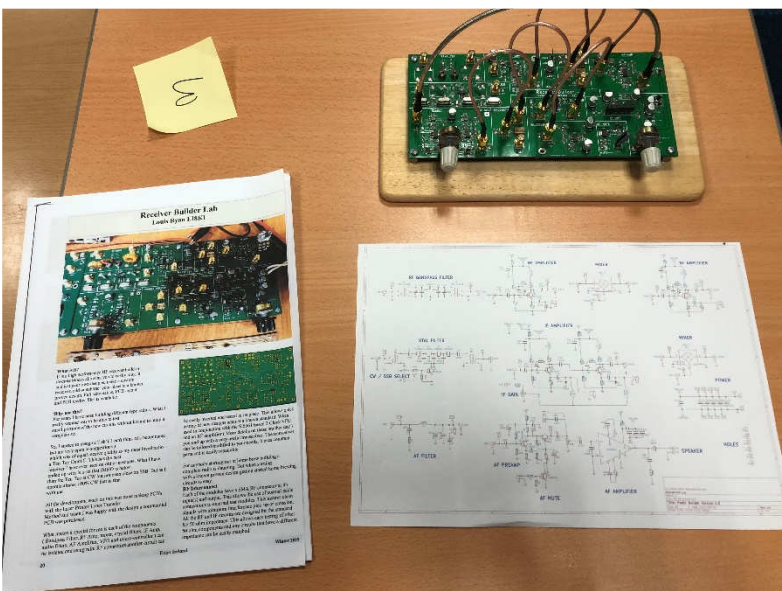
Thanks to Ray G4FFY for the following pictures which give an idea of the evening:



**WINNING ENTRY (MULTI-BAND /  
MULTI MODE STATION) BY GARETH  
G4XAT**



**SECOND PLACED ENTRY  
(PORTABLE SATELLITE STATION) BY  
JASON G7RUX**

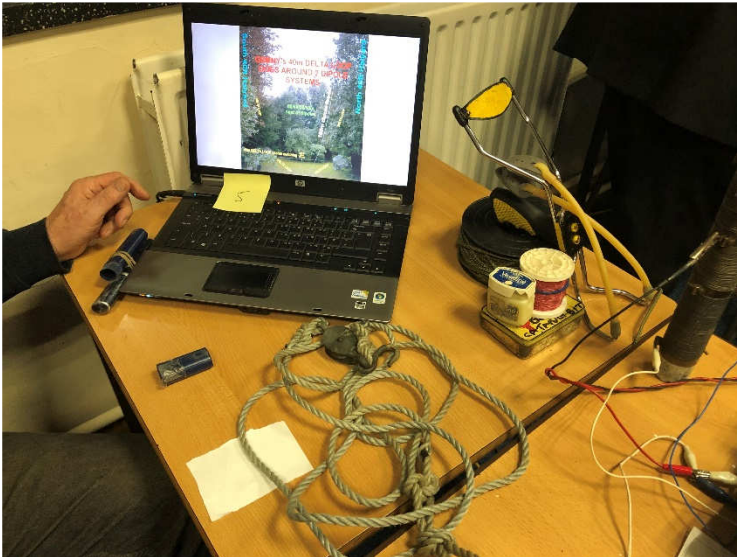


**THIRD PLACED ENTRY  
(BREADBOARD "RECEIVER LAB")  
BY PAT G4FDN**

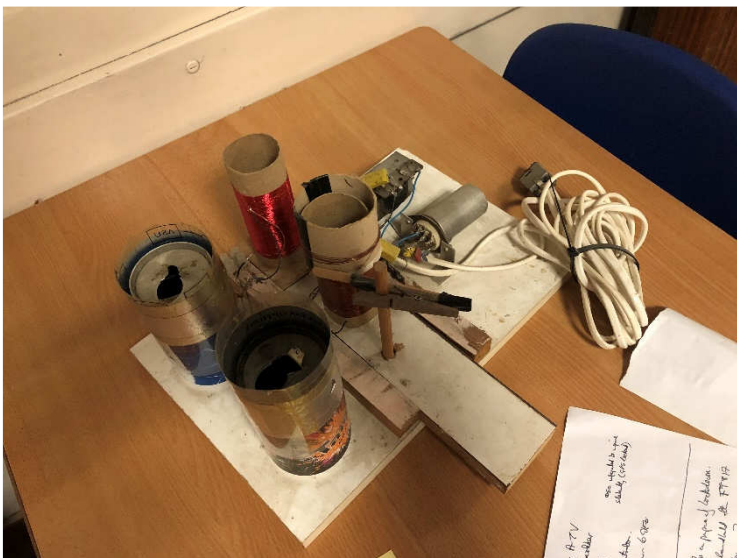




**WINNER GARETH G4XAT RECEIVING  
CORONATION CUP AND MYSTERIOUS  
ENVELOPE FROM ACTING SRCC  
CHAIRMAN JOHN G3MCX**



**SOME OF JOHN G8MNY'S ANTENNA  
ERECTING TACKLE – PLUS ON-SCREEN  
PICTURE OF HIS HOME ANTENNA SET-  
UP**



**FROM THE SUBLIME TO THE  
RIDICULOUS – G3WRR'S SINGLE  
VALVE (EF50) TRF RECEIVER**

The B meeting on 18<sup>th</sup> October could not be considered a major success. For reasons that are not yet clear, we were unable to gain access to the inside of Trinity School! About a dozen of us – including an overseas visitor (Polish but currently working in the UK) named Stephen, who holds the callsigns SP9RTI and M0RTI plus the contest calls SQ9I and M0X, spent a surprisingly enjoyable hour or so standing in the pouring rain chatting. And Stephen did not seem to be put off and has said that he intends to revisit us! Contact is being made with Trinity to make sure this situation does not recur....

## FUTURE MEETINGS

The November A meeting on Monday 1<sup>st</sup> will be our first Surplus Equipment Sale for over a year. This is an excellent opportunity to sort out those no-longer-needed items and bring them along. All sellable goods are welcome, even those with just a tenuous link with amateur radio – but no rubbish please. You are also encouraged to bring along a wallet full of money to take the opportunity of acquiring choice items that other members have decided to pass on for rehoming.

The standard rules for conduct of this (and any physical sale held on Trinity School property) are as follows:

- This meeting will be held in Room 7 rather than the Sandison Room
- It is very helpful for sellers, and their intended sale items, to be in the meeting room by 7:30 pm.
- All members, and visitors who are accompanying them, must sign the attendance book and be conversant with the rules.
- Note that the club accepts no responsibility for goods sold at this private sale, and that purchasers buy on the understanding that they, personally, are capable of determining the usability, fitness for purpose and SAFETY of goods obtained.

The following also apply:

1. Only SRCC members are permitted to sell. Non-members are welcome to invite an SRCC member to act as vendor on their behalf, but that member must accept full responsibility, particularly financial and delivery of goods obligations, before undertaking that role.
2. 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.
3. Bids shall start at 50p and increment in steps of 50p up to £10 and £1 steps thereafter – unless determined otherwise by the Auctioneer.
4. The Auctioneer, in his sole discretion, will determine what constitutes an acceptable bid.
5. Sellers will not be paid until all buyers have settled up.
6. The club levies 15% commission on all sales.
7. All corridors and fire escape routes must be respected and instructions complied-with.
8. The school premises, buildings and grounds, are NO-SMOKING.

The November B meeting on 15<sup>th</sup> will be the usual Fix-It & Move-it-On + Advice Clinic session.

The December A meeting (6<sup>th</sup>) will be a talk by Paul G7VAK on Spy Communications.

The December B meeting (20<sup>th</sup>) will be the Christmas Social at which comestibles and drinks may be consumed!

## TED'S HOLIDAY – BY TED G3EUE

For many years when one or other of two sons who live in Tasmania came over for a visit, we organised a holiday so that we could all get together. That normally took the shape of a boat on a canal and at times there were eight of us. With Covid we haven't been able to arrange anything with them for some time, so a minor change of plan resulted in us hiring a 45' boat which comfortably accommodated the three of us. We decided on the Brecon / Monmouth canal which is only about 35 miles long and very quiet because it is not connected to any other canal system. Being mid-September, we were past the school holiday period and the whole canal is really rural. It was built originally to carry iron ore, coal and lime. We collected the boat at Llangynidr (I can't pronounce it either!) The craft was very well kitted out with a gas cooker, fridge/freezer, central heating and a decent bathroom/shower. For entertainment there was TV but unfortunately reception was very poor, and we only got a signal in a couple places. (This problem was acknowledged in the boat notes.)

We decided that we wanted a really quiet week with minimal travelling. Daily routine was a slow start after breakfast as we trundled north towards Brecon, stopping off near a village to do domestic shopping, pick up a newspaper and maybe decide it was time for a coffee break. Travelling time was somewhere around the 2mph mark. We could judge that because on one side of the canal was a towpath which was used by walkers, runners and cyclists all of which were faster than us. Several stretches had been upgraded to improve its use by cyclists. The non-towpath side was privately owned land, much of it heavily overgrown with numerous oak trees and dense understory growth. The number of people using the towpath was pretty limited, so several were happy to exchange a good morning or a more detailed chat. On one occasion we had stopped at a narrow section whilst a boat came the opposite way. Quite suddenly a woman called out "are you Simon Jones?" It turned out that she remembered Simon from when they were both members of the Steyning Young Farmers Club so he can't have changed all that much over 30 years!

Recently we bought a Bat Detector and heard a few here in Bramber with many more on the brooks or near the castle. An evening routine was to switch on at about 7.30 to see what was about. We heard bats every day with lots of activity in some places. The receiver covered around 20 to 120 kc/s with most of the signals on or close to 45 kc/s. I believe the most common bat is the Pipistrelle which calls on that frequency - but so do another 6 types so what we were listening to I have no idea! I was astonished by the strength of the signals. Daphne and Simon usually stood on the deck or on the towpath whilst I stayed inside the boat; I could usually hear the signals quite clearly. I understand there are some 17 species in the UK, and we heard some calls at both ends of the spectrum.

We finished the holiday with an unexpected visit. Simon is a builder and has spent most of his years helping to renovate old buildings so each job is different. Somehow, he discovered that an old property in Brecon was up for sale and he fancied having a look so after returning the boat to the yard we drove the few miles to Brecon. The agent's blurb said the property was not for the faint-hearted because the building needed a complete renovation. It was built in the very early Victorian era. The 2/3-bedroom house had originally been a police station, constructed on sloping ground down to the river with the lower level still comprising three cells, one of which has its original bed frame. A fellow piece is in the Brecon Museum. A further piece of the building was, at one time, the fire station, all of which have the original doors. Overall, it is Grade II listed. An interesting renovation project.

It all worked out as an excellent holiday. My abiding memory is the absolute quiet at night. After about 7.30pm we didn't see anyone or hear any sounds - with no traffic noise whatsoever.



Some pictures are shown below:



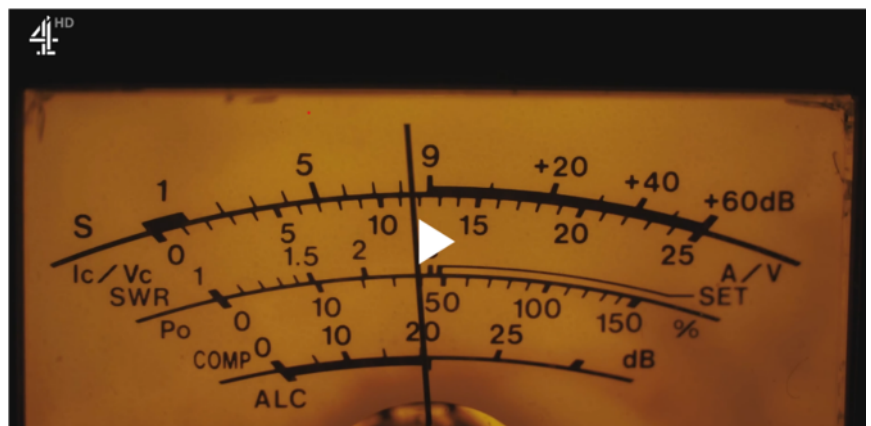




73, Ted G3EUE

## HERE AND THERE

I have recently received SRCC's copy of 2022 RSGB Handbook cum Callbook, which I will be bringing along to the meetings – so if you would like to have a peruse just come and ask me!



Steve G4FYF recently sent me the picture on the left under the title “Nature, not Radio or Electronic”. You will probably recognise it as a wasps’ nest, recovered from his daughter’s house. It was 22cm (8.5 inches in old money) in diameter. A fascinating example of nature at work. I thought it might be of particular interest to holders of the old Class Bee licences....

The picture on the right was sent by the eagle-eyed Alun G4WGE. It appears briefly in the middle of a film (I think it was one of the James Bond series). Does this mean that Q (Bond’s “gadget man” for those who are not Bond aficionados) is, in addition to his other technical skills, a radio amateur?!

Another item from Steve G4FYF reads as follows....

*“Daughter and partner called me about a "fishy" smell when their electric hob was on. Had a look and, as anticipated, the neutral cable on the load side of the isolation switch had charred insulation in addition to the switch connection. Managed to get back to bright copper cable wire and installed new switch. So, why is it just the load neutral suffers apparent overheating?”*  
Any suggestions welcome!

## SRCC LEAGUE TABLE – SEPTEMBER 2021

Eight entries were received for the September 2021 League Table, the same number as in August, although two of these were null scores and leading scores this month were around 25% lower. The top two entries change places, with Ray G4FFY taking first place and Ian M0CGF taking second, with Colin G4LZE (with a non-scoring entry last month) back to his more familiar third. Colin’s return to the upper echelons caused Steve G4FYF and Rick M0LEP to move down one place each to fourth and fifth. Quin G3WRR moves up one place to sixth following a non-entry in August, leaving Ted G3EUE and Peter G3ZPB with non-scoring entries bringing up the rear.

ENTRANT	WORKED DXCC / SQUARE	WORKED SRCC MEMBER	WORKED IN CONTEST	POINTS THIS MONTH
G4FFY	75	6	31	193
M0CGF	71	0	8	150
G4LZE	49	0	16	110
G4FYF	19	1	0	40
M0LEP	2	6	0	16
G3WRR	2	0	2	6
G3EUE	0	0	0	0
G3ZPB	0	0	0	0

All but one of Ray’s scoring contacts were made using either FT4 or FT8, of which just over 40% were in RSGB HF FT4 or 2m FT8 contests. 60% of his HF contacts were on 20m, with 25% on 40m, followed by 30m, 17m, 160m and 80m in descending order, and none above 17m. As expected, given the state of the sunspots, 62% were with European stations but all continents except Antarctica were worked with North America, Asia, South America, Africa and Oceania in descending order. He managed to add a couple of new DXCCs in the form of VR (Hong Kong) and ZL (New Zealand) but VP8 (Falklands) was a gotaway. On VHF he worked 11 big squares in England, France and Belgium.

Ian describes his September contribution as a “token entry” as he was away working in Qatar from mid-September to the first week in October. Nevertheless, he was able to manage a certain



amount of remote operation (i.e., operating his home station from Qatar via the internet), although he found the environment over there hardly conducive! Just over three quarters of his scoring contacts were made using FT4 or FT8 (mainly the latter), with the balance of SSB. His most productive band was 20m (39% of scoring contacts), followed by 17m (34%), 40m (17%) 15m (3%) and 6m (7%). Like Ray he managed contacts with all continents except Antarctica, the majority being within Europe (55%) followed by North America (17%), South America (13%), Asia (10%) and Africa and Oceania (3% each).

Colin comments that his score was rather lower than normal this month, due to continuing non-radio related activities. As usual, his scoring contacts were all made using data modes (almost two thirds on FT8, the rest on FT4) with many of the latter, like Ray, being made in the RSGB FT4 contest). This month all were on HF, with the majority (80%) on 40m and the remaining 20% on 20m. Scoring contacts were made with all continents except South America and Antarctica, with Europe again dominant at 71%, followed by Asia (14%), North America (8%), Africa (4%) and Oceania (2%).

Steve describes his entry as a “leisurely radio play”, assisted somewhat by a couple of contests (including a couple of odd callsigns. With the exception of one on 80m (with G8MNY), all his scoring contacts were on 40m or 20m.

This month, Rick untypically failed to manage any scoring contacts with SOTA stations but managed to offset this with a useful bag of SRCC members, include Pat G4FDN using both his UK and Eireann calls (and yes, Wikipedia assures me that is the correct spelling....).

Quin’s contribution was the lowest scoring entry and better than a null input – but only just! His less than impressive entry consisted of two big squares worked using his HF inverted L antenna in the last half hour of the 4m AFS contest (which he had completely forgotten about until reminded by G3TBK).

The 2021 cumulative table is shown below. There are no changes from the positions in August.

ENTRANT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOT
M0CGF	310	281	313	220	616	473	441	223	150				3027
G4FFY	211	215	252	224	535	405	431	122	193				2588
G4LZE	179	177	239	180	592	319	217	0	110				2013
G3WRR	21	66	62	33	156	167	33	0	6				544
G3EUE	15	60	80	97	140	63	0	0	0				455
G3ZPB	20	136	77	74	51	0	0	18	0				376
G4FYF	40	36	36	28	40	43	40	44	40				346
M0LEP	22	14	12	18	24	22	10	44	16				182
G3SRC	48	21	0	0	0	0	57	0	0				126

There is still no sign of a consistent upturn in sunspot cycle 25 (although as I write the SFI is (just) above 100 for the first time in ages) - but rather surprisingly brief random listens on 15m & 10m gave rise to statins in South America, typically PY (Brazil) and LU (Argentina) - so it’s always worth a listen!

### 73, Quin G3WRR (SRCC Leaguemeister)

## UPDATE TO WEBSITE CALENDAR

During the last few weeks, the Webteam has installed a new “Calendar” feature on the [www.srcc.uk](http://www.srcc.uk) website. Regular events such as weekly Radio Nets now appear as a list in the right-hand column of most pages. Also included are our regular monthly meetings. “Clicking” on any of the entries shows further details.

The full month’s table of events can be viewed in a number of ways, the most straightforward one being from the main navigation menu “Meetings/Calendar”; complete months can then be scrolled forward or backward.

**73, Peter G3ZPB**

## 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](mailto:q.g.collier@btinternet.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
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

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.....

Nothing much to add, other than to say that we hope to see you at the Surplus Equipment Sale, with lots of kit to sell – and plenty of money to buy more!

**73, Quin G3WRR**  
**SRCC Secretary / Newsletter Editor**