SURREY RADIO CONTACT CLUB

84th Anniversary Year - Founded 1935

JUNE 2019 – No 922

SRCC supports the RSGB Child Protection Policy

General Club Business:	secretary@g3src.org.uk
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Newsletter articles/distribution:	newsletter@g3src.org.uk
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Club Website:	https://www.g3src.org.uk

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

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

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FIRST MEETING: Monday 3 June
Contest Operating Part 2 – HF by Quin G3WRR: Using the N1MM+ logging program and the RSGB Adjudication Process .

SECOND MEETING Monday 17 June
Fix-it, Skills and Advice Night - led by John G8MNY

Retiring SRCC Committee 2018/19

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EDITOR'S OPENER

Dear Members & Friends. Hello and welcome to the 922nd edition, the June 2019 issue, of the SRCC Newsletter. On the home front, I have thought more about the ways of constructing an uplink (circa 2.4 GHz) and downlink (circa 10.5 GHz) to help me enjoy some QSOs over the Es'hail QO100 satellite. My main interest started as “narrowband” ie SSB, but I am coming to realise that might prove to be a more difficult/time consuming challenge than “wideband” in the form of reduced-bandwidth digital amateur television (RBDATV). Little more than a month ago, my knowledge of ATV was close to zero. Along the discovery path has lain joining the British Amateur Television Club, scouring back-copies of the journal CQTV and inspiration provided by Gareth G4XAT and Martin G4FKK. There is a piece later showing their recent actvities. I have to confess to not yet having a complete and coherent plan in my mind for

what I want to achieve hobbywise. A major shock has come from realising how far technology has moved-on over recent years – more to the point, the elements of my original concept that I can no longer construct because technology has advanced, the parts needed are no longer available or the performance of the overall project has become so dependent on hyper-miniaturisation of components (which even with optical aids, I can no longer see well enough) or need bespoke, accurately produced printed circuit boards. That is a very long way round of saying that I have had to start learning all over again, un-learning some of what I used to know and accepting that some things I can no longer hack. That has been a bit painful.

One glaring example is the move from the frequency domain into the time domain. For many years, amateur radio relied on heterodyning to produce a third frequency from two others. More correctly that should be bands of frequencies. It is now hard to find a piece of equipment which does not, to a greater or lesser extent, employ software defined radio techniques – a whole new ball-game and who has not got an SDR dongle? Neverthess, several sources around the world have continued to produce designs using the analogue principle (alias frequency domain) for transverters. These have usually employed a quartz crystal oscillator to produce the heterodyning local oscillator. Add a double-balanced mixer, a few band-pass filters and a few MMICs (micro-miniature integrated circuits) and you have a transverter. That principle served me well historically to employ an HF transceiver (containing all the clever and expensive bells and whistles) as the main driver and an individual transverter (each keeping its own pace with new technological advances) for each band upon which I want to operate. In my case to date this has covered 4m, 2m, 70cm and 23cm - all of which have gone through marks of upgrade and still permit operation at a level which nudges the bounds of technology. Well that's alright then? Err, no actually. Designers and components are drying up and have been doing so for some time. It is not possible to build when one can no longer procure the components, either idividually or as parts of kits.

My original plan was to extend my transverter stable to 13cm (for the QO100 uplink). This then evolved to embrace 70.5 to 71 and 146 to 147 MHz for digital TV. So here I am planning to build a wideband synthesiser covering 25 MHz to 6 GHz – just because I cannot buy crystals anymore. This new project was not foreseen in terms of time, money and comfort-zoning. But I await the postman's note to drop on the doormat which invites me to collect a small parcel and pay the import duty. All I wanted originally was a 101.5 MHz crystal!

Meanwhile, I have discovered the Minitioune digital ATV receiver project which enables reception on 4m, 2m and 23 cm. Unfortunately, stock at the BATC shop is nil right now, so that venture will also have to wait. Shack-tidying is nowhere near as exciting, but will have to do..

NEXT MEETINGS

First Meeting: Monday 3 June 2019: Contest Operating Part 2 – HF by Quin G3WRR: Using the N1MM+ logging program and the RSGB Adjudication Process.

Second Meeting: Monday 17 June: Fix-it, Skills and Advice Night – led by John G8MNY

PREVIOUS MEETINGS

First Meeting: Monday 13 May 2019 – VHF CONTESTING by PETER G3ZPB. Summary by Quin G3WRR.

Exceptionally, the May SRCC First Meeting was not held on the first Monday of the month, due to the fact that there were two Bank Holidays in May 2019. Instead it took place on Monday 13th. The lecturer was SRCC Chairman Peter G3ZPB and his talk covered 3 aspects of VHF contesting:

- how to enter RSGB contests
- methods of logging
- MINOS2 logging software.

Peter noted that the current presentation focussed on VHF contesting. The next A meeting on 3rd June would be a presentation by Quin G3WRR dealing with HF contesting and the N1MM+ logging program. It would also provide a demonstration of the software used by the RSGB Contest Committees as part of adjudication of RSGB contests.

How to enter RSGB contests

Peter explained that the RSGB Contest Committee website (https://www.rsgbcc.org/) includes a calendar showing all the RSGB contests (HF & VHF) for the year. Having identified a contest of potential interest, a click on the appropriate link will bring up the page for the contest in question showing the rules, including:

- date & time
- band(s) involved
- sections available (eg. Open, Restricted) and rules applying to each
- information to be exchanged (usually callsign / signal report / serial number / Maidenhead locator but sometimes others such as post code – eg. CR for Croydon)
- cut-off date for entries.

For VHF contests a set of General Rules also applies, and a link to these is included in the contest specific rules.

Logging

Entrants may keep their real time log either on paper or using a computer logging program, of which a number are available. For newcomers to contesting, paper logging may be a wise choice as use of computer logging can take a bit of getting used to due to the need to use the program in real time while also doing potentially unfamiliar actions with the radio! However, once a little bit of experience in contest operating has been gained, computer logging definitely offers a number of advantages, the most useful of which is probably automatic checking for duplicate contacts. However unless there are exceptional circumstances, logs must be supplied to the RSGB electronically in an approved format. The preferred format for VHF contests is now .edi – one reason being that use of this format avoids the need for a separate cover sheet as the requisite information is contained in the file. However certain other formats are also accepted such as Cabrillo and the older RSGB standard format. Word and Excel files are **not** accepted. Most if not all logging programs produce appropriately formatted log files automatically: even if paper logging was used in real time, the logging programs can be used after the event to produce the file in an appropriate format. Logging programs also score the logs automatically (avoiding the tedious exercises with maps and rulers in days of yore). Although logs are rescored as part of the adjudication process, a facility exists which allows entrants to post claimed scores on the CC website. An alternative option for submitting contest logs is the use of an on line entry form on the Contest Committee website: this can be accessed via a link on the rules page for the contest in question.

Minos 2

Peter went on to describe and demonstrate the MINOS2 logging program. It is based on the earlier MINOS1 product but includes a number of new features. Peter is part of the development team led by Mike Goodey G0GJV who is a member of the RSGB Contest Support Committee. Key features of the program are:

- support for most RSGB and Region 1 contests
- real time or post event contact input
- real time scoring
- automatic duplicate checking
- callsign lookups from previous contests
- logs production in various formats
- Maidenhead locator calculator
- loading of predefined contest and station setups
- rig control (including memories)
- rotator control (including presets)
- chat and inter-station log visibility in multi-station setups
- “keyer” – both CW and voice!
- DX Cluster access.

Further information can be obtained at http://minos.sourceforge.net. Program files, documentation and associated information can be downloaded from https://sourceforge.net/projects/minos/files/

Peter explained that the main program was downloaded as a .exe file, the running of which initiates a Setup Wizard which steers the user through the installation process and offers options such as where to locate the program files, whether a desktop shortcut is required, etc.

Having installed and opened the program, Peter then demonstrated the basic configuration, which is reached by clicking the “OK” box on the welcome page. As is usual with software where the user interface is important, there is a wide range of options allowing the user to configure the program to his/her personal preferences (for example to change the layout of the contact entry page). The details of these and how they are selected is shown in the Minos.pdf document which can be downloaded from the above website. As a “starter for ten” Peter described the default configuration *(which does work - and is used “as is” by your scribe…)*. The first action is to select a contest the user wishes to enter. This is done by selecting *File/New Contest* which produces a page from which the VHF Contest calendar can be accessed. Following selection of the chosen contest, a number of mandatory fields (outlined in red) appropriate to that contest (typically callsign, section locator and power) are displayed and must be filled in, together with a file name for the log for the contest. (This page also permits parameter by parameter selection of characteristics for non RSGB contests). On completion, the main contact logging page is presented – this is basically the “shop front” for the contest, on which individual contact details are entered.

Central to this is a data entry panel, essentially the electronic equivalent of a line in a paper log book, in which the following information is entered:

- callsign of station being worked F1
- report sent F2
- serial number sent (auto entered by MINOS)
- report received F3
- serial number received F4
- locator F5
- other required information received (eg. postcode) F6

The Fx numbers listed are the numbers of the function keys by which the cursor can be moved to the field in question. Moving between fields can also be achieved by use of TAB key / SHIFT + TAB key or by use of the mouse. Once all mandatory contact information has been entered, hitting the ENTER key causes the contact information, after “sanity checking” by MINOS, to be recorded and displayed in a log panel at the top of the screen together with contact distance and bearing. This panel can be scrolled up and down to see details of all contacts made during the contest. A couple of helpful features exist here:

- if the callsign of a station that has already been worked is entered in the callsign field, that field is displayed in red as a warning (although the contact can still be force entered if necessary)
- where the contents of the callsign or locator field match those of station(s) already worked, the details of the relevant contacts are displayed in a panel at the bottom of the screen. This need not be an exact match – for example in IO8 is entered in the locator field, the details of all contacts made with stations in IO8xxx are displayed
- such matches need not apply only to the current contest. MINOS provided facilities for the creation of Archive files (CSLs) based on multiple contests. Examples might be CSLs for all 2m UKACs, or for all contests in a calendar year. Where one or more CSLs has been created, callsign or locator matches for the current contest and all active CSLs are displayed in the bottom panel. (**But** entrants should be careful of how such data is used, because RSGB rules require contact information to be received and logged in real time during the contest rather than determined later!).

With the contest completed (successfully, one hopes), MINOS can then produce outputs in one of a number of formats. Selecting *File* then *Produce Entry/Export File* at the top of the contact details page, the entrant can select the required output format. This will typically be .edi format for RSGB contests, but other options are available. Details of how this is uploaded to the RSGB website are expected to be included in the upcoming (3rd June) presentation!

Peter noted that what has been described above had been available in MINOS1. He went on to demonstrate two of the new features introduced in MINOS2, rig control and rotator control. The new features have been implemented as applications (Apps) embedded within MINOS2. They are enabled by clicking on the *Apps* tab in the welcome screen. This brings up a Minos App Configuration window which allows the requisite Apps to be selected. Since running any one of these Apps also requires a Server App to run, this is best selected first, via a drop down menu and tick box. The App associated with the chosen function can now be selected, again via the drop down menu and tick box.

Peter first demonstrated rig control. This feature allows the frequency on which the radio is operating to be passed to the computer, thus allowing the frequency on which contacts took place to be included in the log: and in the other direction it is possible to control certain aspects of radio operation (eg. mode or frequency) from the keyboard. MINOS2 supports a wide range of current transceivers, which have a wide range of different computer interfaces in terms of physical characteristics (eg. USB, RS232, CI-V), bit rate, parity and handshaking protocols. The configuration process involves selecting the radio of choice and, where options exist, choosing from the drop down menu presented the ones being used by the radio. It is possible to load data for several different radios in advance and simply select the one being used "on the day". Peter commented that where possible direct USB – USB connection between the radio and the computer was the most trouble free option.

He then demonstrated rotator control – with a torch attached to a real rotator! A number of features are available, including:

- turning the beam automatically in the direction of an entered locator – a useful feature where very sharp beams are being used…
- establishment of a number of preset directions that can be selected by function keys (eg. primary compass bearings or direction of beacons)

- in effect operating the "rotate clockwise" and "rotate anti-clockwise" buttons on the rotator from the keyboard.

As with rig control, some configuration data is required (eg. to set up the rotator on an initial heading) and small interface boards need to be inserted in the rotator control box.

A number of points came out during the question and answer session:

- MINOS2 is free to users
- a Linux based version is available
- unless the computer being used has an internet based timing function (not common in everyday usage but possibly becoming more so with the rise of FT8) the user is responsible for making sure that the computer clock is accurate, otherwise logged times will be wrong! However computers generally perform BST/UTC conversion automatically
- when using USB/RS232 adapters (radios with a USB physical interface are still far from universal), those using the FTDI chipset are regarded by many as less "fussy" than those using Prolific.

73. Quin G3WRR

Second Meeting: Monday 15 March: Fix-it, Skills and Advice Night

One day, someone will send me some pics of this popular cornerstone of what SRCC offers under the expert tutorship of John G8MNY.

CHAIRMAN'S BLOG

I am writing this during a lovely pre-summer sunny day. Let's hope we get plenty more this year! It seems to have been another busy month in the G3ZPB household though when I look back I'm not quite sure why???

Radio Contesting – no contesting activity this month and no results to comment on (the April 2m MGM contest results have not been published yet).

Other Radio Activity – however, in spite of no contesting I have been active…..
The 1000th QSO is in my logbook – a JS8 mode contact on 10m with Colin G4LZE.
But the main radio operation during the month was at Brooklands Museum. The 27th of April was "International Marconi Day" and so GB1BM was active during the day, mainly on 40m. Nothing very unusual or DX, just the normal European countries from Denmark in the north to Spain in the south but good experience for a (newish) team at the museum. The next scheduled event is for "International Museums Weekend" when GB1BM will be active on Saturday 22nd June.

High Speed Broadband – I won't bother going into the detailed reasons why, but the broadband speed at home has been "upgraded" and now runs at what for me is fast – nearly 50Mbps download and around 11Mbps upload which about 50% faster than previously. Has it made a difference? Well, I'm not sure if I can honestly say it is a huge improvement!!! It is all very well have super-fast download speeds but in reality most of what I download is pages from internet sites where the server time is the dominant factor in governing speed. I guess if I downloaded lots of videos and feature films, then yes, I would notice a significant difference.

Preparations for VHF NFD – I have also spent some time getting ready for VHF NFD. Although the event is not until the beginning of July, I know I have several non-radio activities that will keep me busy in June so preparation now will ease a last-minute panic. The Rotator and Controller (with computer interface) is all finished, tested and working plus a number of ancilliary items such as Headphone splitter/amplifier. We just have to hope for some decent weather again to look forward to an enjoyable weekend.
That's all for this month, so it's bye for now. I look forward to our next Club talk about HF Contesting.

73 and 88, Peter G3ZPB.

GX3SRC/P Amateur Radio Demo station on 19 May 2019 at their SUTTON MODEL ENGINEERING CLUB Open & Prize-giving Day.

Maurice G4DDY, & John G8MNY put up Maurices's G5RV antenna on Thursday morning before the event, between the 2 largest trees at 50ft, using a catapult and
fishing line. At 08:10 on Sunday, everything was still OK. SMEC had put up their tents. John parked up early with van full of kit, carried it to the centre of the field and put up his operating tent - then assemblest the staton kit. The 2nd station operator Kim G6JXA arrived in time to start the Club's 160m net on the G5RV as a Marconi T to a tiny earth stake with Johns' IC735 & Vetronics ATU. as the kit for that was just asemmbled in time. Gareth G6XAT, Martin G4FKK & Pat were on the net. After that, the 80m BT international net was joined just as it was closing. For QRO HF demonstration, a Drake L-4B linear amplifier and a Palstar 1500 ATU were used. RFI tests undertaken with a public address system right under the aerial were completely clear @ 400W SSB and the radio-controlled trains had no problems either!

For the Public to follow the Demo station's goings-on, an RF-proof 20W PA system was fed from the BHI loudspeaker and rig's microphone output. This gave the several hundreds of members and visitors good, clear audio of both sides of the QSOs. These contacts were also listed on a white board so they could follow our progress.
Kim & John did much of the operating with Maurce having a short stint. RF conditions were poor an all bands, so 80 & 40m only were used for 55 contacts until 15:00 when the Prize giving started. So the station was slowly de-rigged - ready for the many wheel barrow rides back to the Van. We worked: 33 G, 1GS, 4GM, 6 F, 5 DL, 2 EI, 2 HB 1 LA, 1 EA Other items on display were ham course books and a large EU ham map.We had heavy rain, some rain, no rain and drizzle - but no sun, until the tent had to come down - when all was dry!

73. John G8MNY

Across town via RB DATV (Reduced Bandwidth Digital Amateur Television) First 2-way DATV contact on 146.5MHz between Gareth G4XAT & Martin G4FKK.

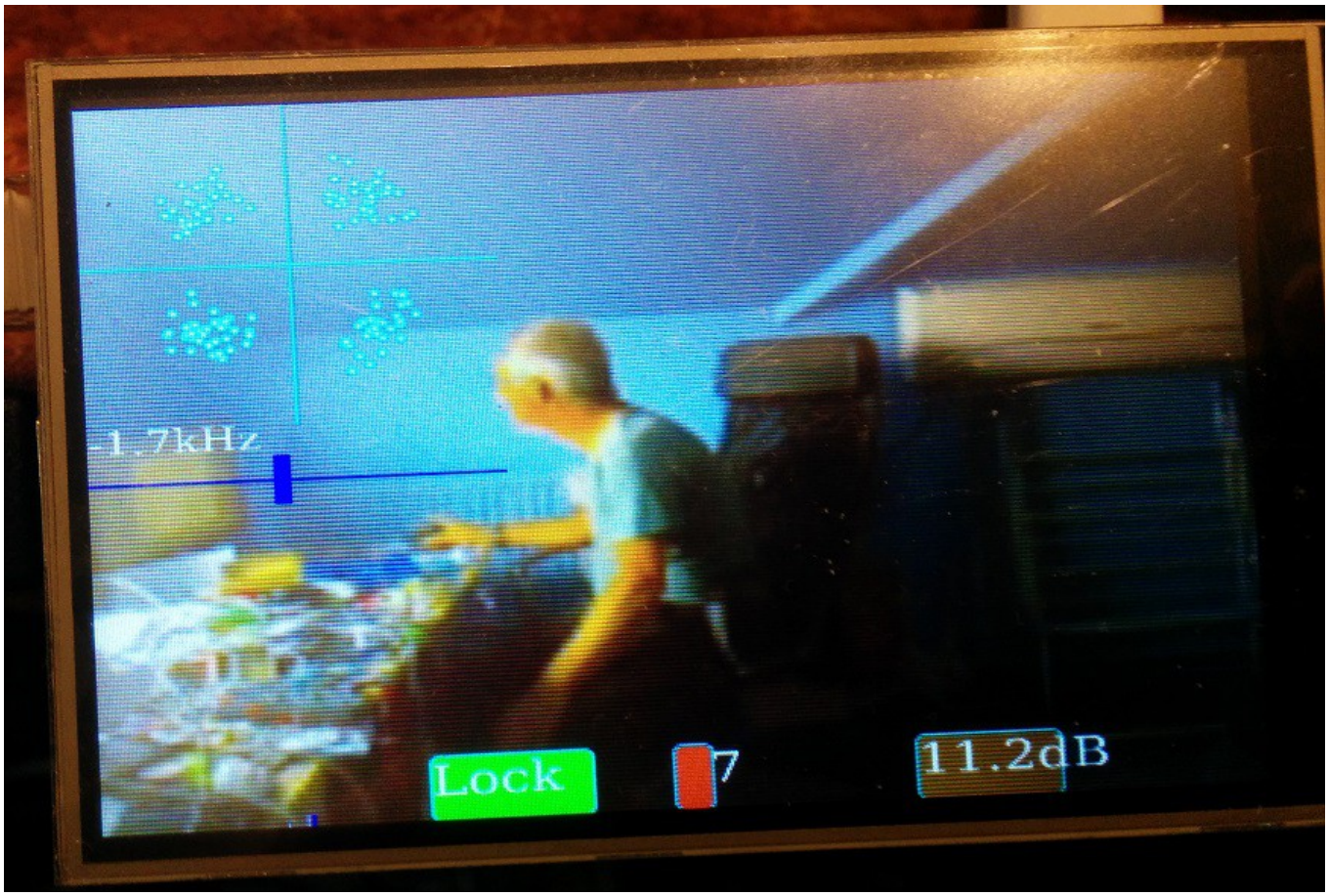
After lots of experimenting and 'amplifier bias tweaking' my/our first DATV 'QSO' took place this afternoon at around 16:30. We nearly managed it last weekend but the signals exchanged over a non-line-of-sight path were simply not strong enough. Today though, in place of a Moxon that I was using last weekend, I was using my portable 12 element ZL special, mounted at 6M AGL. Not an ideal height as it was beaming at house roofs some 100 yards distant.
It was however enough for solid copy and a quick lock at 125KS data rate – picture quality a bit like a very tired VHS tape. Pictures were exchanged in both directions (see attached). Martin was able to run a little more power than I and I was able to copy him easily on 250KS and occasionally on 333KS.

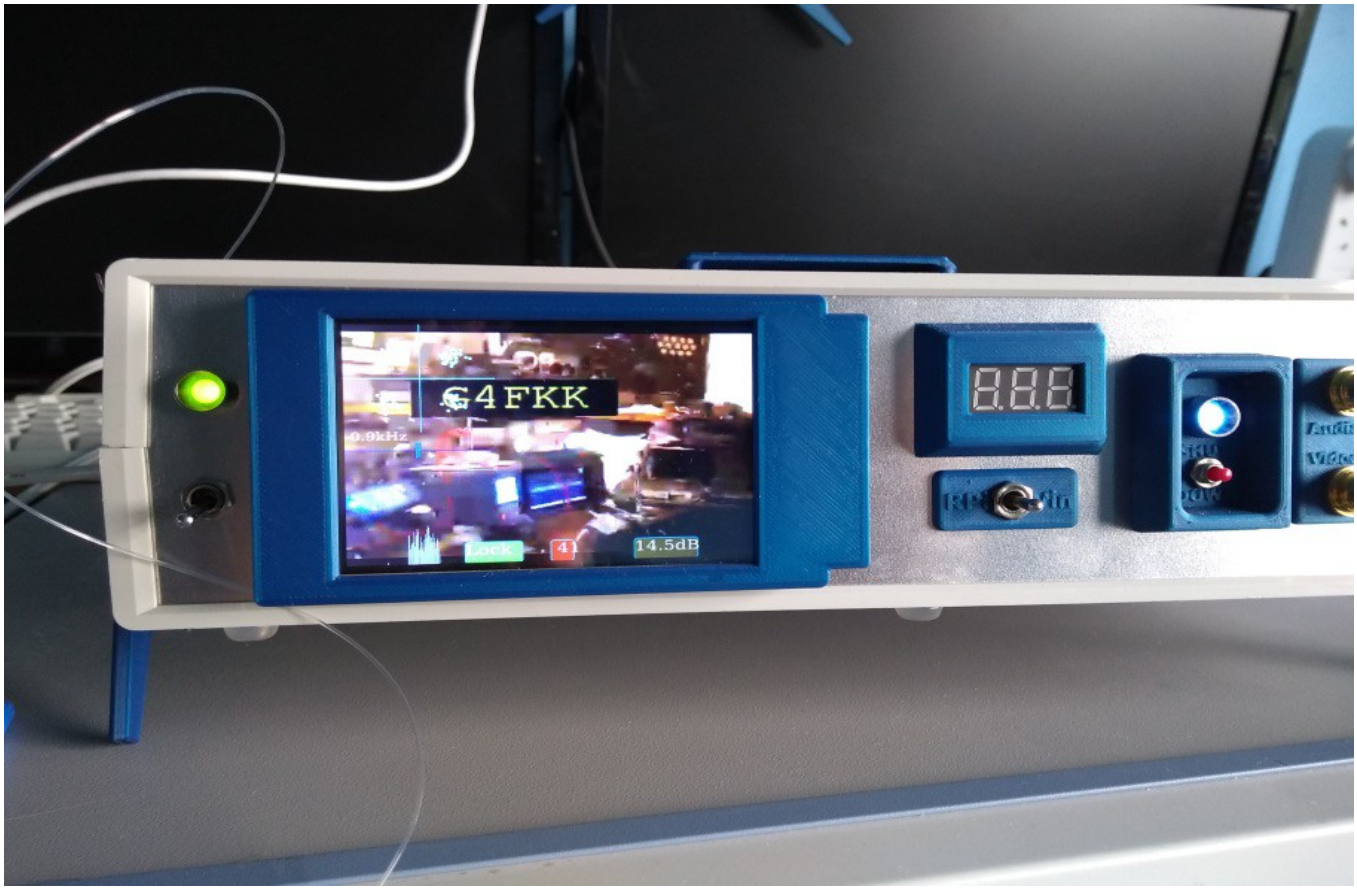
TX my end: BATC Portsdown with outboard amp then driving a Chinese '100 watt VHF' amp to 43dBm, feeder down garden to my fishing pole 12 element ZL special.

At Martin's end: ADALM PLUTO (upgraded firmware) driven by DATV-Express software via homebrew ½ watt amp into his MOSFET amp suitably re-biased, thence via feeder to a Tonna beam pointing in my direction.

Receive at both ends was a humble RTL T2 dongle via the Portsdown software. Screenshots direct from the Raspberry Pi 3.5" touchscreen.

I am very grateful for this contribution. From a selfish point of view, it slots nicely into my own (now completely revised) tv plans. I aim to start with the construction of the BATC Minitioune receiver project. - when stocks thereof are renewed, but promised imminently. I now know that there is a fair probablity of copying signals from both Gareth and Martin – always a good start to have some relaible signal sources . I have re-found my 2m 12 ele long-yagi consequential of my shack tidying exercise, together with a rotator and pole sufficient to raise to 10m agl on my gable-end. I have also re-found a low noise masthead preamplifier and my stocks of LDF4-50 and RG213 coax. Given success from a receive point of view, a transmitter from the BATC Portsdown stable seems a sensible next target. I can also blow the dust off a 300W linear amplifier project which I started 5 years ago.
In a few moments of idling time, I have also tripped through the possibilities of running on 5.8 GHz using cheap "drone" transmitters and receivers (now bought) plus wifi patch antennas.(not yet bought because they are not cheap). Memory tells me that Gareth has trod this path before. How to change TX and RX channel when the kit is in a box above the roof is a challenge. Better stop now, because thoughts are running away -----Ed.


1.7kHz
Lock
11.2dB


G4FKK
0.9kHz
Lock
14.5dB

NEWARK HAMFEST – a message from Mike M1CCF

Friday 27 and Saturday 28 September at Newark & Nottingham Showground, Lincoln Road, Newark, NG24 2NY.

Further info on www.nationalhamfest.org.uk/

Just a reminder to let Mike know, asap, so he can get planning going!!.
Entry Tickets are £5 on the gate, and usually with a long queue, or £4.50 in advance, which jumps the queue. Contact Mike at M1CCF@talktalk.net

ADDITIONAL DINNER OR LUNCH – A further message from Mike M1CCF

At the AGM we discussed having a meal together, either LUNCH or DINNER, so there are options, locally. For my pennyworth I think there needs to be good car parking facilities with easy disabled access, good food and convivial surroundings all at a reasonable price.

I am assuming that we might have in excess of 16 people including partners and that the majority will take two courses with coffee/tea after, all seated at one table. Drinks are extra in all cases.

I have on offer 3 suggestions, coupled with a choice of Lunch or Dinner, commencing with the most expensive & where we can expect the best attention:

A. The Chateau Napoleon in Coombe Lane will do a silver service in a private room at £17.95. In the past I have managed to get coffee/tea included. Separate anti room/bar.

https://thechateau.co.uk/menus/set-menu-april-may/

B. Beefeater at Coombe Lodge offer a served special party meal of £15.99, and we could get a private table in a separated area, depending a litle on the numbers. Coffee extra

https://www.beefeater.co.uk/steak-restaurant-menu/London/Coombe-Lodge-Croydon/party_menu.html

C. Toby Inn, Brighton Road South Croydon (or Mitcham or Eden Park) offer two courses, depending on the current offer at around £7.99 a head with coffee/tea extra

No service or private room or area and with 16+ we could not have a single table, probably split into two, not the ambience but good value at the Carvery.

https://www.tobycarvery.co.uk/restaurants/south-east/southcroydongreaterlondon/carverymenu

So can you let me know your thoughts, say choice – **A, B or C** or none – and **Lunch or Dinner** and finally when **August**, perhaps and any speciific day of the week (Napoleon will not do a Monday)- **PLEASE** do reply to **m1ccf@vmars.uk** (either A/Lunch/August or perhaps, C/Dinner/July or perhaps even NO/None/Never!**)**

Any transport problems can be overcome, so show interest and we will get you there!

CLUB CONSTRUCTION PROJECT

Attention all those who have signed up to build the VK5TM HF Noise Canceller. 12 kits are in transit from Australia and all moneys are in. No new joiners – unless you can find 10 or so more to form a further set. http://www.vk5tm.com/homebrew/noisecancel/noisecancel.php

SRCC LEAGUE TABLE – APRIL 2019 RESULTS

Welcome to the results of the April 2019 session of the SRCC League Table. This month there were six entries, the same number – and in fact the same participants - as in March. April's results are shown below:

ENTRANT	HEARD DXCC / SQUARE	HEARD IN CONTEST	HEARD - SRCC MEMBER	WORKED DXCC / SQUARE	WORKED IN CONTEST	WORKED – SRCC MEMBER	POINTS THIS MONTH
G4LZE	40			67		1	176
G4WGE	57			45	5		152
G3EUE	7			41	10		99
G4FYF	1			32		1	67
G3WRR	2			9	9		29
G3ZPB				9	3		21

The only change in position this month was Alun G4WGE moving up from third to second place with Ted G3EUE correspondingly moving down from second to third.
Leader Colin G4LZE as usual made all but one of his claimed HF contacts on FT8, the exception presumably being his regular 10m JS8 sked with Peter G3ZPB. Apart from that contact, all the others took place on the bands between 40m and 12m, 67% being on 40m and the rest, in decreasing numbers, on 20m, 17m and 30m. Apart from three Asian stations, two Africans and one North American, all the rest were with European stations. And again there was also a nice selection of "gotaways", mostly on 40m, including YB (Indonesia), 9M2 (West Malaysia) and S01 (Western Sahara). Colin also worked nine English "big squares" in six European countries on 6m – demonstrating once again the power of FT8 (really must get my act together and give it a try).
Following Colin quite closely was Alun G4WGE, another "FT8 only" entry. Alun made contacts on all the HF bands with the exception of 160m, 15m & 10m, with 42% on 30m followed by 20m, 80m, 12m & 40m. 75% of the contacts were with European stations, with a sprinkling of Asians, North Americans and Africans. He also had one scoring contact on 6m FT8. Alun's list of countries heard but not worked was longer than those he actually worked – and from a string of interesting places too lengthy to list here!
Ted G3EUE's contacts were, as usual, all on CW, and on bands between 80m & 15m with a few "heard only" stations on 12m & 10m – the first reports of claimed countries stations on 10m this year as far as I can recall!
Steve G4FYF's report opened with the words "when is someone gonna switch the bands on again?" which strongly hints how he found HF conditions! Nevertheless he managed contacts with all continents except Oceania and Antarctica, plus a number of big squares on 6m using a low G5RV…not an antenna usually associated with sparkling performance on 50MHz…..
Quin G3WRR made all his scoring contacts in a single contest on 6m, but managed to hear a couple of South Americans on 15m, oddly enough while testing out a SK Yaesu FT901 prior to the club (successfully) attempting to sell it at the Kempton Park Rally.
Peter G3ZPB has again been busy but managed to work a number of stations on 40m & 2m – again all on FT8.

The cumulative score table is shown below. This displays no change in entrants' positions, although Colin seems to be increasing his lead over the stations snapping at his heels!

ENTRANT	JAN 19	FEB 19	MAR 19	APR 19	MAY 19	JUN 19	JUL 19	SEP 19	OCT 19	NOV 19	DEC 19	TOTAL
G4LZE	109	134	158	176								577
G4WGE	115	144	126	152								537
G3EUE	111	106	139	99								455
G4FYF	34	31	66	67								198
G3WRR	2	27	62	29								120
G3ZPB	32	46	4	21								103
G7RUX	42											42
M0LEP	34											34

Although the SFI seems determined to stay "bumping along the bottom", the bands are on occasion sounding a bit livelier – as stated above I actually heard signals on 15m during April. And during this weekend's CQ WW WPX contest both 15m & 10m are quite lively with contacts made with 12 countries on 10m – mostly Europeans with that sporadic E feel to them – the right sort of distance, signals pretty strong but subject to sudden very deep fades etc - but there were also a couple of PYs (Brazil). However that is getting ahead of ourselves so I'll finish now, and having sent this epistle to John G8IYS to do his usual Rupert Murdoch act on it, I will have a cup of tea then dive back into the shack to see what's going on!

73, Quin G3WRR

SRCC NETS

The following is a list of structured nets where 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 secretary@g3src.org.uk.

Band – Frequency - Mode	Day of week	Start Time
160m – 1.905 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 JULY AND LATER

01/07/19	Club Construction Project: The VK5TM Noise Canceller
15/07/19	Fix-it, Move-it-on, Skills and Advice Night, Social Chat
05/08/19	Summer Barbecue at QTH G3ZPB in Coulsdon

19/08/19	Fix-it, Move-it-on, Skills and Advice Night, Social Chat
02/09/19	TBA
16/09/19	Fix-it, Move-it-on, Skills and Advice Night, Social Chat
07/10/19	Autumn Surplus Equipment Sale
21/10/19	Fix-it, Move-it-on, Skills and Advice Night, Social Chat
04/11/19	Inter-Club Quiz: SRCC, Coulsdon ATS and Sutton & Cheam ARS
18/11/19	Fix-it, Move-it-on, Skills and Advice Night, Social Chat
02/12/19	Construction Contest
16/12/19	Fix-it, Move-it-on, Skills and Advice Night, Pre-Christmas Social
06/01/20	RSGB Video Evening
20/01/20	Fix-it, Move-it-on, Skills and Advice Night, Social Chat
February and later	All 1st meeetings TBA. May tentative for speaker from UK Six Metre Group

OTHER LOCAL CLUB MEETINGS

18 June	**Bromley & District ARS** Direction Finding Evening with Steve M0PEL. Normal Meetings are held on third Tuesdays 7.30 for 8.00pm @ Victory Social Club, Kechill Gardens, Hayes, Bromley, Kent. Contact Andy G4WGZ on 01689 878089 or enquiries(at)bdars.co.uk. Website: www.bdars.co.uk
10 June	**Coulsdon ATS** Annual DF Hunt. Meetings are held at 8pm on 2nd Monday each month at St. Swithun's Church Hall, Grovelands Rd, Purley. Contact Andy Briers G0KZT on 07729 866600 or secretary@catsradio.org Website: http://www.catsradio.org/

20 June	**Sutton & Cheam RS** Highlights of Dayton 2019 with Chris M0CTH. Meets 8pm on 3rd Thursday every month. They also run a practical group most Monday evenings at the Banstead Scout Hut. Contact Chris Howard. email info(at)scrs.org.uk Website: http://www.scrs.org.uk/
06 June	**Horsham Amateur Radio Club** Raio Astronomy with Peter East. Normally meets on the first Thursday of each month at the Guide Hall, 20 Denne Road, Horsham, West Sussex, RH12 1JF. NRQ TQ172304 at 20.00hrs local time. Contact Alister Watt G3ZBU at g3zbu(at)hotmail.com Website: http://www.harc.org.uk/
25 June	**Dorking & District Radio Society** Morse Code with Mary Ashdown. Meetings at 7.45pm. Contact: David Browning (M6DJB) at djb.abraxas(at)btinternet.com. Website: http://www.ddrs.org.uk
07 June	**Crystal Palace R&EC** On-Air Noise Reduction with John G8MNY. All Saints Church, Beulah Hill (Normally meets monthly on first Friday). Contact: Bob G3OOU 01737 552170 Website: http://www.g3oou.co.uk
31 May – 26 June	**Cray Valley Radio Society** GB19FO Cricket World Cup Station on the Air. Meetings at 1st Royal Eltham Scouts HQ, Rear of 61-71 Southend Crescent, Eltham, London SE9 2SD Website: www.cvrs.org

Sign Off.

Well that is another one in the can. I will close with my usual entreaty: It would be really good to have more input from members - particularly data/pictures on what you have worked with what equipment and more-so what you have built yourself. 73 from John G8IYS Hon Sec and Newsletter Editor.