An Amateur Radio publication for the Microwave Enthusiast

scatterpoint

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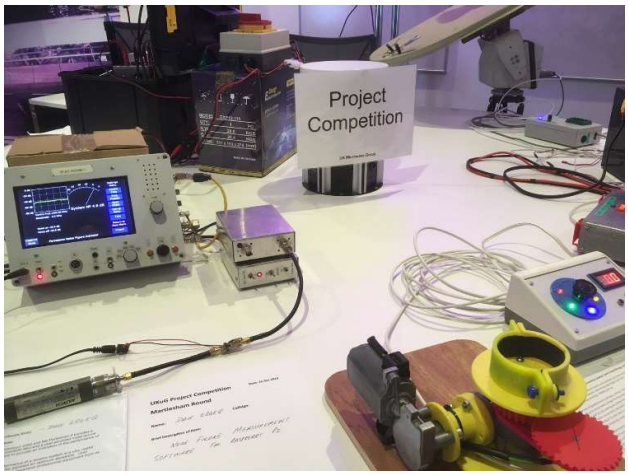
In This Issue



Martlesham Project Competition


G4RFR EME dishes

UK Microwave Group

Subscription Information

The following subscription rates apply

UK £6.00 US $9.00 Europe €9.00

This basic sum is for **UKuG membership** For this you receive Scatterpoint for **FREE** by electronic means (now internet only) via

https://groups.io/g/Scatterpoint and/or Dropbox Also, **free access to the Chip Bank**

Please make sure that you pay the stated amounts when you renew your subs next time If the amount is not correct your subs will be allocated on a pro-rata basis and you could miss out on a newsletter or two!

You will have to make a quick check with the membership secretary if you have forgotten the renewal date Please try to renew in good time so that continuity of newsletter issues is maintained Put a **renewal date reminder** somewhere prominent in your shack

Please also note the payment methods and be meticulous with PayPal and cheque details

PLEASE QUOTE YOUR CALLSIGN!

Payment can be made by: PayPal to

payukug@microwavers.org

or a cheque (drawn on a UK bank) payable to 'UK Microwave Group' and sent to the membership secretary (or, as a last resort, by cash sent to the Treasurer!)

Articles for Scatterpoint

News, views and articles for this newsletter are always welcome

Please send them to

editor@microwavers.org

The CLOSING date is

the FIRST day of the month

if you want your material to be published in the next issue

Please submit your articles in any of the following formats:

Text: txt, rtf, rtfd, doc, docx, odt, Pages

Spreadsheets: Excel, OpenOffice, Numbers

Images: tiff, png, jpg

Schematics: sch (Eagle preferred)

Please send pictures and tables separately, as they can be a bit of a problem.

Thank you for you co-operation

Roger G8CUB

Reproducing articles from Scatterpoint

If you plan to reproduce an article exactly as in Scatterpoint then please contact the Editor – otherwise you need to seek permission from the original source/author.

UKµG Project support

The UK Microwave Group is pleased to encourage and support microwave projects such as Beacons, Synthesiser development, etc. Collectively UKuG has a considerable pool of knowledge and experience available, and now we can financially support worthy projects to a modest degree.

Note that this is essentially a small-scale grant scheme, based on 'cash-on-results'. We are unable to provide ongoing financial support for running costs – it is important that such issues are understood at the early stages along with site clearances/licensing, etc.

The application form has a number of guidance tips on it – or just ask us if in doubt! In summary:-

- Please apply in advance of your project
- We effectively reimburse costs - cash on results (e.g. Beacon on air)
- We regret we are unable to support running costs

Application forms below should be submitted to the UKuG Secretary, after which they are reviewed/ agreed by the committee

www.microwavers.org/proj-support.htm

UKµG Technical support

One of the great things about our hobby is the idea that we give our time freely to help and encourage others, and within the UKuG there are a number of people who are prepared to (within sensible limits!) share their knowledge and, what is more important, test equipment. Our friends in America refer to such amateurs as “Elmers” but that term tends to remind me too much of that rather bumbling nemesis of Bugs Bunny, Elmer Fudd, so let’s call them Tech Support volunteers.

While this is described as a “service to members” it is not a “right of membership!”

Please understand that you, as a user of this service, must expect to fit in with the timetable and lives of the volunteers. Without a doubt, the best way to make people withdraw the service is to hassle them and complain if they cannot fit in with YOUR timetable!

Please remember that a service like our support people can provide would cost lots of money per hour professionally and it’s costing you nothing and will probably include tea and biscuits!

If anyone would like to step forward and volunteer, especially in the regions where we have no representative, please contact the committee.

The current list is available at

www.microwavers.org/tech-support.htm

UKµG Chip Bank – A free service for members

By Mike Scott, G3LYP

Non-members can join the UKµG by following the non-members link on the same page and members will be able to email Mike with requests for components. All will be subject to availability, and a listing of components on the site will not be a guarantee of availability of that component.

The service is run as a free benefit to all members of the UK Microwave Group. The service may be withdrawn at the discretion of the committee if abused. Such as reselling of components.

There is an order form on the website with an address label which will make processing the orders slightly easier.

Minimum quantity of small components is 10.

These will be sent out in a small jiffy back using a second class large letter stamp. The group is currently covering this cost.

As many components are from unknown sources. It is suggested values are checked before they are used in construction. The UKµG can have no responsibility in this respect.

The catalogue is on the UKµG web site at www. microwavers.org/chipbank.htm

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Loan Equipment

Don't forget, UKuG has loan kit in the form of portable transceivers available to members for use on the following bands: **Contact Neil G4DBN for more information**

5.7GHz 10GHz 24GHz 76GHz 122GHz

Martin Richmond-Hardy, G8BHC sk

Sadly, I have to report another Silent Key. Martin Richmond-Hardy, G8BHC, died on 5 May 2023.

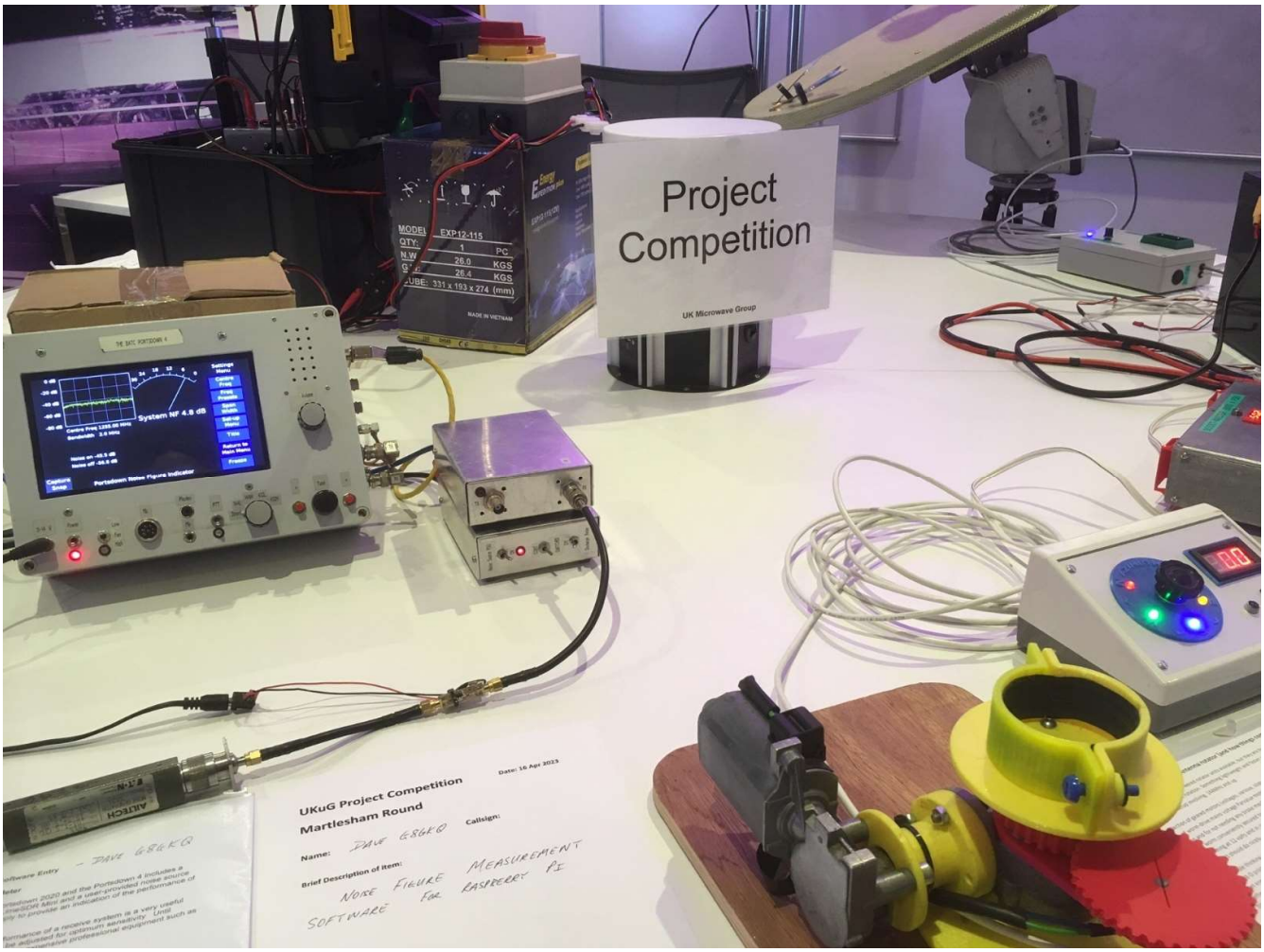
Although most of you will not have worked Martin on the air he has contributed significantly to the Microwave cause. He was on the organising committee of EME2012 which was held in Cambridge; he was an original committee member of Martlesham Radio Society when G4BPO was winning VHF and Microwave contests; he was Editor of Scatterpoint, the UK Microwave Group newsletter for several years and, most recently, he and his wife, Jen, have led the catering team at the Martlesham Microwave Round Tables.

Martin recently installed a 2.3m dish in his back garden for both Radio Astronomy work but also with the intent of working EME. He has supported local radio clubs and has been a long term JOTA supporter. Last, but by no means least, he was a founder member of the Suffolk Coffee group which meets twice a week to solve all microwave and world problems……

We will miss you Martin.

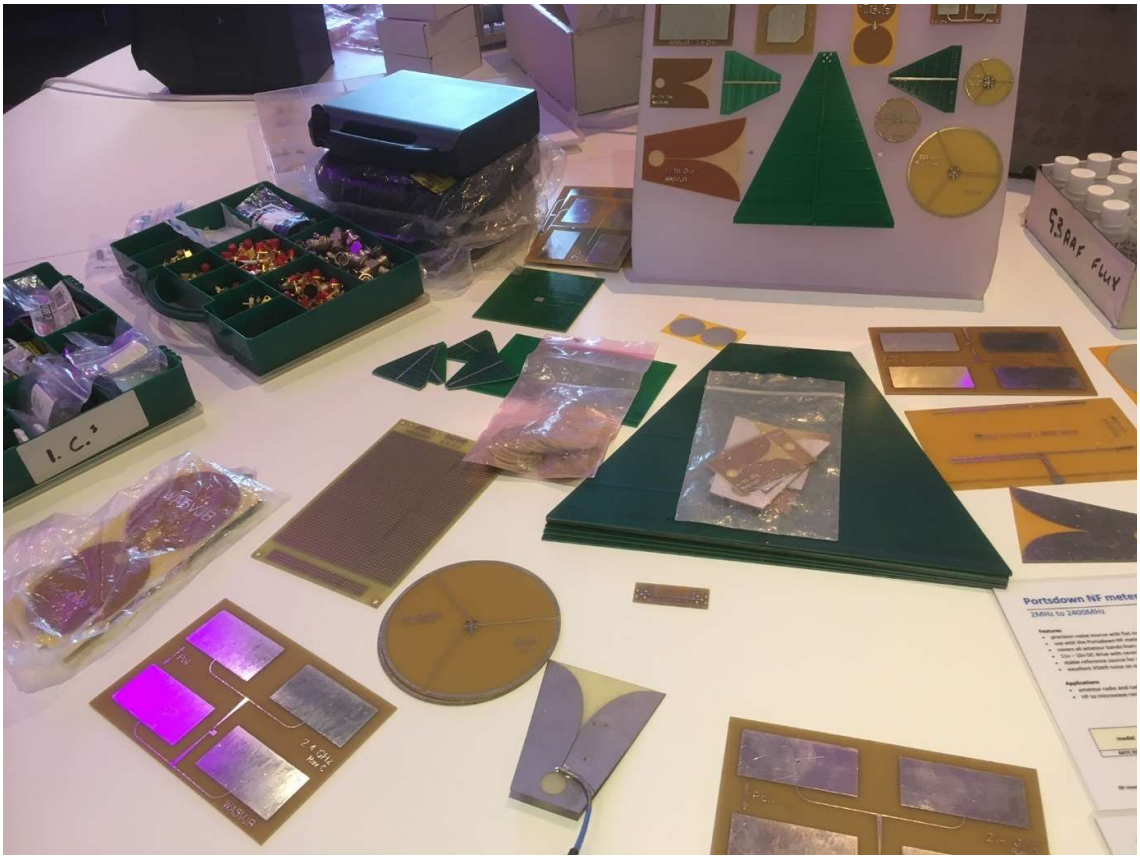
Graham Murchie, G4FSG

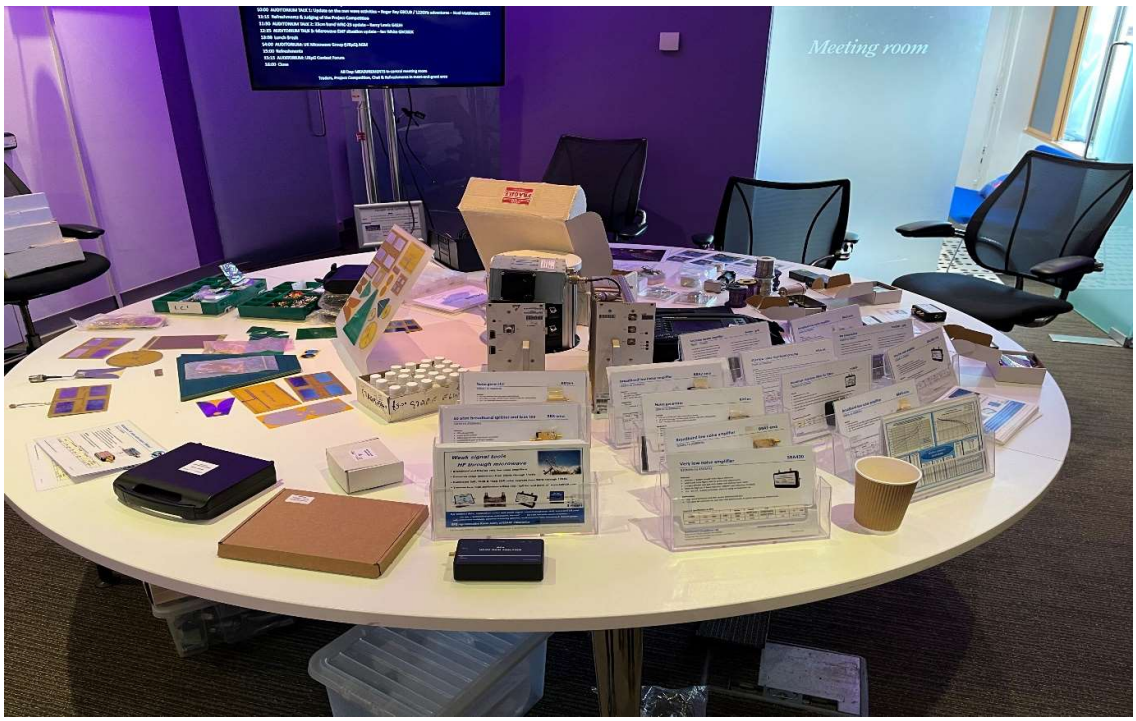
Martlesham Round Table 2023 Report in Pictures

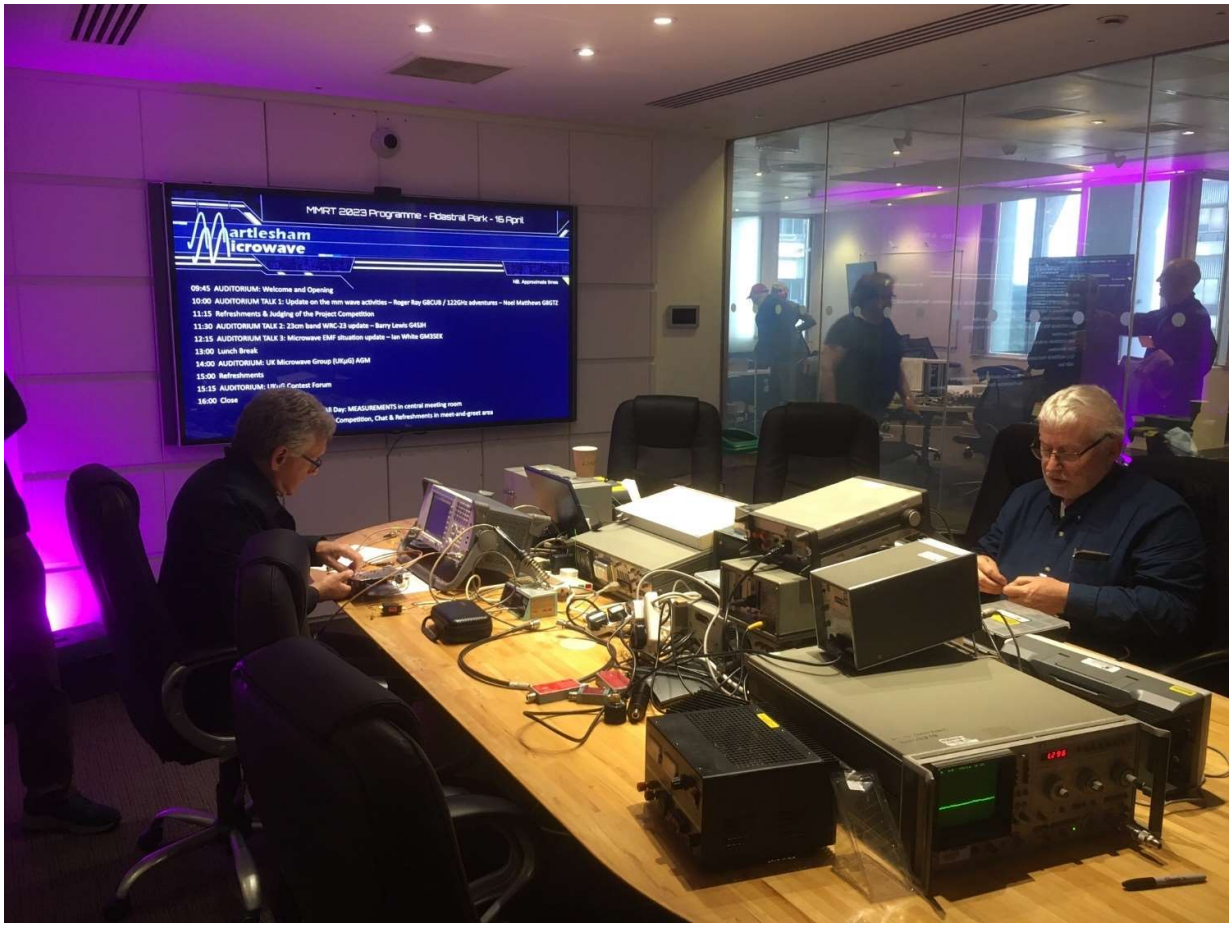


The quality of the construction competition entries can be seen in the photo

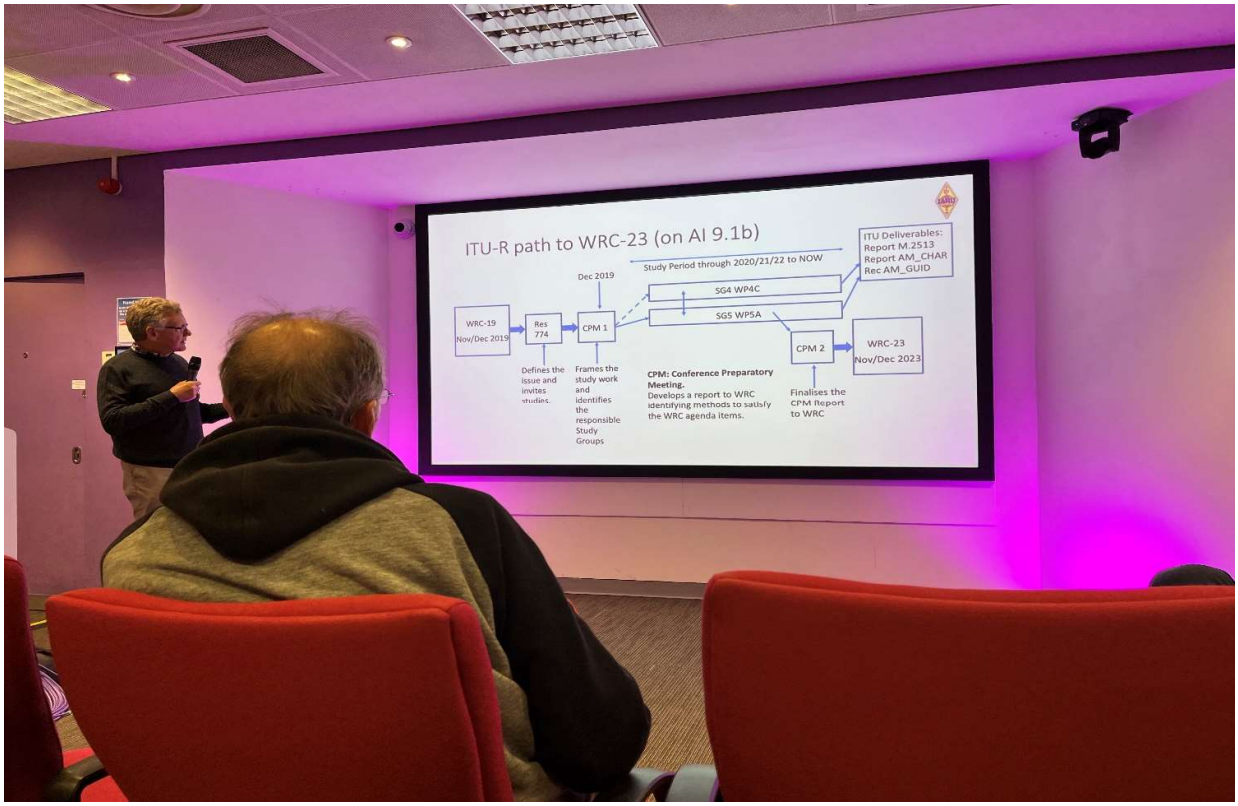
Bargains in the junk sale were there to be found


I. C.
Portsdown NF meter

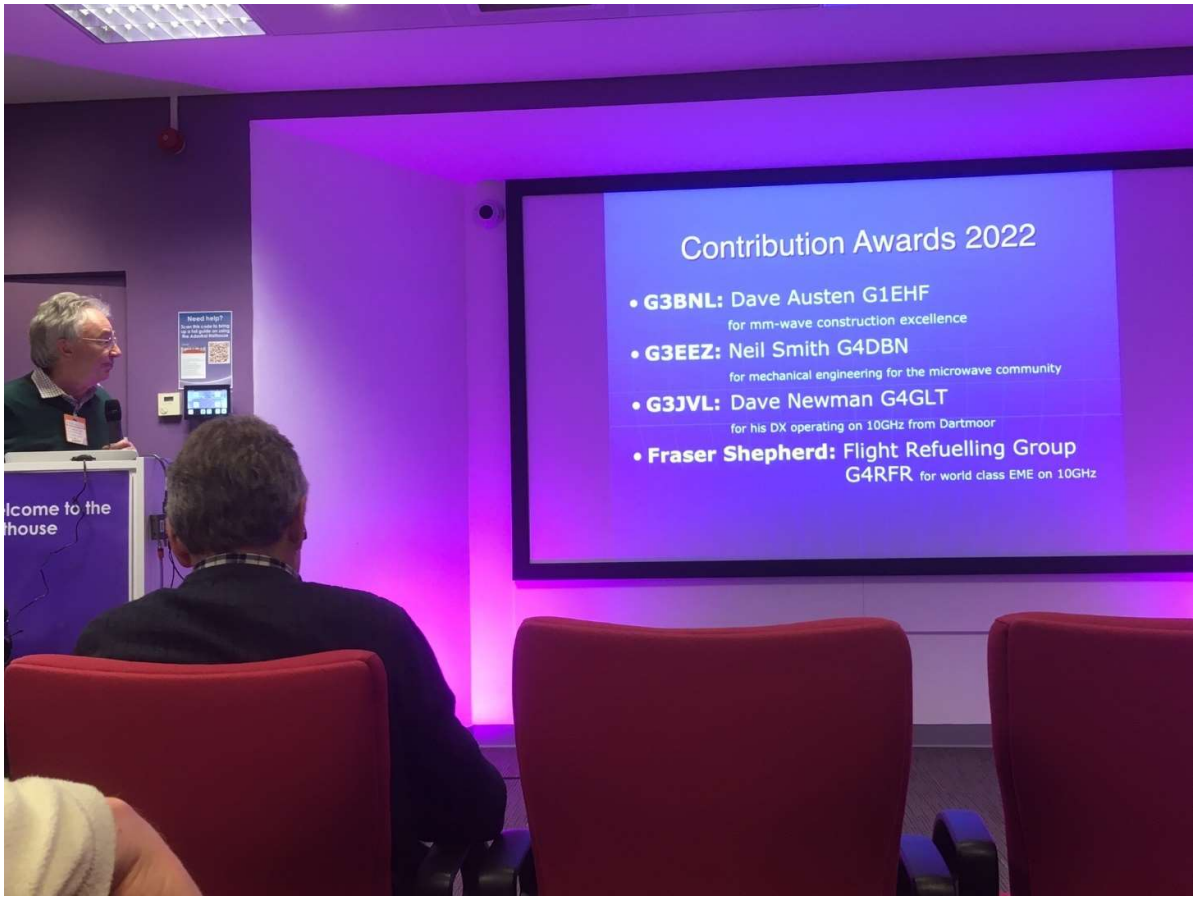

Meeting room



The test equipment was proving to be very useful



The theatre for the talks was excellent – Barry G4SJH updating on the 23cm situation



John G3XDY presided over the AGM and 2022 Awards

UKuG Hall of Fame Trophies

Year: 2023
Merit Awards
Fraser-Shepherd Trophy Flight Refuelling Group G4RFR
G3EEZ Trophy Neil Smith G4DBN
G3BNL Trophy Dave Austen G1EHF
G3VVB Trophy Mark Hughes GM4ISM
G3JVL Award Dave Newman G4GLT

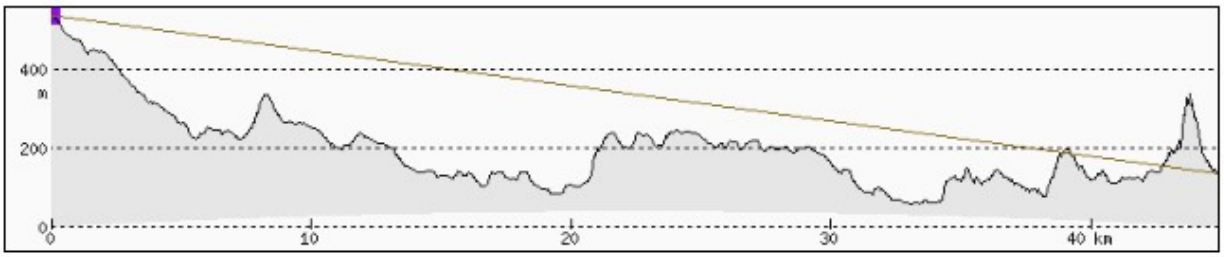
Contest Awards
G4EAT Trophy - 1.3GHz Combe Gibberlets M0HNA/P
G3RPE Trophy - 10GHz John Lemay G4ZTR
G3JMB Trophy - 10GHz Barry Lewis G4SJH/P
G3KEU Trophy - 5.7GHz Telford &DARS G3ZME/P
G0RRJ Memorial Trophy - 24GHz Martyn Vincent G3UKV/P
24GHz Trophy Roger Ray G8CUB/P
47GHz Trophy Roger Ray G8CUB/P

Thanks to Murray for providing the pictures

24GHz experiment with a Passive manmade reflector

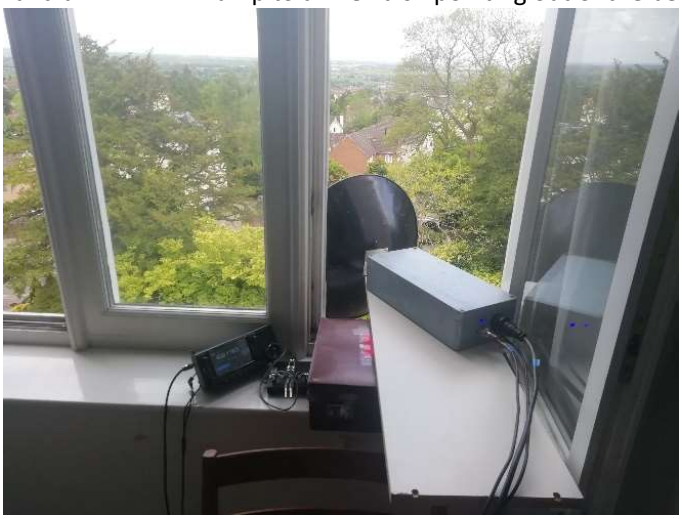
Dave G4FRE

My takeoff from home to the north is severely resticted by the obstruction called the Malvern Hills. I have in the past worked stations in Shropshire and mid Wales by using the 700' 198kHz masts at Wychbold as a reflector. This has been tried up to 9cm with sucess. During the recent 24GHz contest I thought I would give that band a try, especially as G3UKV/P seemed to be running out of QSOS
The direct path profile is as follows (Brown Clee on the left).



With both stations pointing at IO82WH the path length increases from 45 to 62km but signals were loud enough to support an SSB QSO.

I use a DB6NT XV and a W2PED 2W amp to an 18" dish pointing out of the bedroom window:-



Millimetre Operating Frequencies

Roger G8CUB

- 47GHz 47,088.200
- 76GHz 75,976.200 (76,032.200)
- 122GHz 122,400 (122.256)
- 134GHz 134,400
- 241GHz 241,020
- >275GHz 288,000

Above is a list of suggested operating frequencies for the millimetre bands. These have been developed over time. Nothing is fixed of course.
The 76GHz frequency in brackets, is the one used in Europe
The 122GHz frequency in brackets is paired with 122.400 in the VK systems with 144MHz IF.

RAL MICROWAVE ROUND TABLE 2023

Harwell ARS are pleased to announce that they will be hosting the RAL Microwave Roundtable on Sunday 18th June 2023 at Chilton Village Hall (just off the A34).

The location is Chilton Village Hall, Chilton, Oxfordshire, OX11 0SR from 10am - 4pm and there is ample parking. Click for directions to Chilton Village Hall (Google)

Please register your interest by emailing the secretary using the button below, including your name and whether you would like a sandwich lunch or not (to help with catering).

The Technical Talks

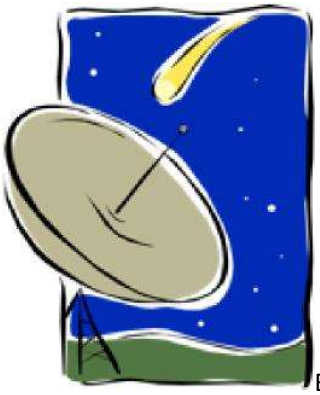
- Gareth, G4XAT - My Blue-box approach to 24GHz
- Dave, M0GHZ - My experiences on 24GHz with the Wavelab Transverter
- Barry, G4SJH - 23cm Update
- LUNCH
- John, G4BAO - Moving up to 24GHz EME. (So you think 24GHz is just "3cm and a bit"? Three years and counting - Pitfalls and issues on the rocky road to my first 24GHz EME QSO)
- Mike, G8CUL - TBA
- Andy, G4JNT - GB3SCS Beacon (How to use and abuse direct up-conversion)

Project competition

Flea Market

Refreshments

Activity News May 2023



By John G4BAO

Please send your activity news to: **scatterpoint@microwavers.org**

From Keith GW3TKH

Currently receive only on 10GHz EME, I'm using a 1.2m offset dish, horn, 150mm of WG16, wave guide switch, MKU LNA 102S-EME bolted to the port of the wave guide switch. The test certificate says: 0.71dB NF, Gain 22.6dB. There is about 80mm of RG402 from the LNA to the i/p of the transverter, NF 1.2dB MKU 10 G3 Transverter, to an IC9700 via about 15m coax, 11m of which is FSJ1-50 the rest PSF1/6M. Moon noise measured with I0NAA program 0.43dB on average.

My dish is only 1.5m above ground in a small suburban garden surrounded by trees (not mine). The lowest elevation it can see from azimuth 87deg to azimuth 213deg, is 20-21 deg. So very much limited. In winter with no leaves, I can occasionally see an horizon of around 10deg elevation 70-80deg azimuth if the moon is rising in the 'right' place.

From John G4BAO

My late April / early May activities were made up of 10GHz EME and QO-100. Inspired to check out the QO-100 system to work the GS3PYE DXpediton to Islay, a few CQs brought SSB QSOs on the 5th of May with EA1IQ, IN52PF, GW8TIX, IO81IR, DH7IF, JN49IL and finally GS3PYE, IO65VS.

I run SDR Console with a Lime SDR and a PA with about 20 Watts to a “Scottish” 70cm Sky dish with a POTY Feed and a locked LNB.

On 10 GHz EME I worked two new initials on Q65 digimode (worked station report first) namely Michael SA6BUN in JO78, -13 -32 (!) DG5CST, JO60DS -20 -19, plus G4RFR, IO90AS -06 -18 and IK6CAK, JN72DJ -21 -24, All these QSOs were made close to Moon Apogee so path losses were at their highest. I now have 38 “initials on 10GHz EME with my small system, but a 2 way CW QSO still evades me!

I run 25W to a 1.2m offset dish and a 0.7 (ish) dB NF preamp.

From G4RFR

John, G0API reports from Flight Refuelling ARS.

G4RFR have been active again on 10GHz EME during April. The month started with 3 QSOs with Japan: JA4BLC, using a 2.4m dish and 40W, JA8ERE using a 4.5m dish and 50W and JA1WQF.

This involved a new RX LO, designed, and built by Andy G4JNT, which allows selection of conventional RX operation on 10368 MHz or 10450 MHz, as used in JA.

All contacts were on Q65D and CW. We received a SWL report from BG6LQV.

On Sunday 23/04/2023 we had the first QSOs on our new 1.8m offset dish, mounted on the rear of our normal 3.65M Prime Focus Dish. It took us 5 months to design and fabricate the mounting for the small dish, which allows us to reach down to 0 degrees EL over a wide arc from NW to SSE, areas where the larger dish is blocked locally. The QSOs were with Richard VK7ZBX at 07:18 UTC at - 20 sent / -9 received in QE37PH, using a 1.8m dish and 20W and Rex, VK5MO @ 07:36 Hrs with -16 sent and -12 received in QE37PC. We used vertical linear polarisation for these contacts and both stations are located near Hobart, Tasmania. These are the most Southerly contacts made so far by G4RFR. There is one station listed on 10GHz EME in ZL .....

The VK contacts were followed on the small dish by OE1VRL @ 08:10 UTC at -16 /-6 received. The performance of the small 1.8m dish was: Ground noise 3.9dB, Moon 0.8dB, Sun 10.3dB and our Echoes at 6.0dB, using the 200W TWT and 0.7dB NF LNA.
We returned to the 3.7m dish and worked PE1CKK -10 /-1, G0OLX -19 /-1, CT2GUR -18 / -5, LZ4OC -14 /-2 received and G4YTL using Q65E at -10 /-2 Libration effects made David's CW just too weak to read. On 26/4/2023 we worked SA6BUN -7 /-1, CF2GUR -19 /-6, GI7UGV -16 / -7, G4YTL -13 /-2, IU4MES -18 /-4, G4BAO -18 /-6, IZ4BFA -15 /-2 and CT2GUR -19 /-5.

Picture shows the small 1.8m dish mounted at 180 degrees offset to the Large, 3.65m prime focus dish. The feed and associated waveguides have been transferred back to the large dish in this photo.

From Chris G4SDG

I've squeezed some more out of my 10GHz EME receive system recently just before the moon went below my declination limit, I was seeing the DL0SHF beacon at a steady -7dB and sometimes -6dB, although some gain will be improved path loss. My LNB is a standard one with the horn sawn off, and the LNB circular waveguide inserted into a 22mm copper tube. I've soldered a flange onto the other end of the 22mm pipe which fits into the feed of the dish. I assume that the step-change from the LNB neck (~19mm OD) to the copper tube (22mm OD) isn't ideal and it would be better if it was a gradual change. What are everyone's thoughts?
I was watching beacon reports from other stations, and I've not seen anyone reporting signals a good as Keith GW3TKH's with comparable sized antennas.

At the other end of antenna requirements, I've had a few FT8 contacts over QO100 using just an LNB and an SG Labs transverter with a log periodic pointing through the window!

From David M0GHZ

I took part in the 24GHz contest on May 14th with my Wavelab transverter and PA0MHE interface and was delighted to have my first QSOs on the band. Thanks to Maarten for publishing his design and for his support. I had hoped to see more activity since there a lot of others building the PA0MHE boards so how about an update from you all?
The next 24GHz event is in July so loads of time to get them up and running

Comments received

I wanted to point out that "what is probably the first detection by citizen scientists of the thermal noise from planet Venus." is incorrect (*March 2023 Scatterpoint*). This was done quite some time ago by Sergei RW3BP.

This does not diminish the accomplishment...very well done!

Best 73
Barry VE4MA

I just got my RadCom today and was very sorry to read in your column that Simon G3LQR is no longer with us.

I have a pedantic correction for you about his original callsign. It was G3LQR/T and not with the G6 prefix as those were not used for TV callsigns until 1964.

My first callsign, which was issued in 1962, was G3RAX/T when I was living in Wimbledon. Amongst many others I used to enjoy QSOs with Simon on 70 cms and with Peter G3LTF who was also in that direction from where I was. All new TV callsigns were then issued in the G3 series with the /T added.

In 1964 they changed my callsign to G6RAX/T and did the same with the others. We kept the original suffix for the callsign. New TV callsigns then started to be issued from G6AAA/T. At the same time I was issued with an early Class B licence as G8AAZ.

In 1968 I moved down here and became GC6RAX/T and GC8AAZ. TV was included in the main licence in 1977 and they changed my prefix so I was then GJ8AAZ. In 1979 I finally passed my Morse test and was given back my original callsign in the present form as GJ3RAX.

I cannot find an early enough copy of the RSGB callbook but I have still got a copy of the “Radio Amateur Callbook Magazine, Foreign Section” dated Spring/Summer 1961 and it does list Simon as G3LQR/T.

I hope that will help a bit with the history of that type of callsign.

73, Lawrence GJ3RAX

Editors Comments

I was very saddened to learn of the passing of Martin G8BHC. I took over from Martin as the editor of Scatterpoint, initially on a temporary basis. I have certainly struggled to try and match the presentation that he achieved. He continued be involved, archiving annually the newsletter. Something that I will now need to learn. Thanks for all your help Martin – RIP

Also my very best wishes to Barry G8AGN. Barry had a serious fall a month ago, while doing a 30THz test. I trust your recovery continues to make good progress.

As always Scatterpoint can only be as good, as the input received. It must be the first one for a long time, without a construction article.
Any interesting articles gratefully received, before the next issue…..

Your chance to work VK on 24 and maybe 47 & 76GHz! Doug VK4OE will be operating in the July cumulative contest, as M/VK4OE/P.

Roger G8CUB

Questionnaires sent to French Microwave stations

David Newman G4GLT

Around the time that I went to Seigy, I thought that it would be good to know what some of the French microwave operators thought about a variety of topics.
A questionnaire was sent to a number of amateurs, and five were received back.
Their replies are below. A big thank you to all the stations who took the trouble to contribute.

1. Do you have a favourite band?

No, as far as the microwave bands are concerned. (F1VL)
10GHz (F5AYE)
10GHz (F5BUU)
10GHz (F6DKW)
Yes, 3cm. (F6DRO)

2. Is there a reason for this?

Each band has its own peculiarities. (F1VL)
Activity, several modes of propagation, easy to build and many stations in the radius of coverage. (F5AYE)
Easy to find components (waveguide, source, dish, switch) and the most popular across Europe (F5BUU)
Many modes possible : RS/Tr/AS. (F6DKW)
Best activity, more rewarding results. (F6DRO)

3. Is there anything you would like to say to amateurs in the U.K.?

Communications traffic; be on the air and occupy the frequencies. (F1VL)
Beam dish to the south! (F5BUU)
When there is an opening in the morning, very few UK stations QRV.. (F6DKW)
Yes, activity is too low, and it looks like DX RS is not widely used or known. (F6DRO)

4. How would you like to see the microwaves develop?

I am a bit pessimistic. (F1VL)
More stations QRV, more activity during the winter, and take the stations out of the cupboards. (F5AYE)
Increased activity using rain scatter. (F5BUU)
More home stations QRV. (F6DKW)
More activity. (F6DRO)

5. Do you have good relations with your regulatory organisation?

Me no, but REF yes. (F1VL) (REF = Réseau des Émetteurs Français-National member society)
Yes. (F5AYE)
Yes. (F5BUU)
No problems. (F6DKW)
In fact, I don't know. (F6DRO)

6. Good long-distance conditions are rare.
Is there anything that can be done to make the most of these openings?

To be on the air, to try, try and try. (F1VL)
Invite operators to stay tuned on clusters, chats… (F5BUU)
Climate makes the weather very unstable: It's mandatory to check beacons and watch weather maps to avoid missing too rare openings. (F6DKW)

Activity, activity, activity. (F6DRO)

7. What do you think about portable operation as opposed to a home station?

Two different things and complementary. When portable one is able to choose a favourable place with height clearance, and with a fixed station one can be frequently active. Using rain-scatter one is able to work DX as a fixed station. (F1VL)
Home stations are rare in France, and no problem with the two. (F5AYE)
More efficient, and best driver to develop activity. (F5BUU)
Very challenging activity and much less comfortable versus home station. (F6DKW)
Portable is very interesting to work rare locations. In France too many people believe it is not possible to work good QSO from an only medium take off station, it is wrong. (F6DRO)

8. Do you think portable operation is enjoyable?

That depends on the operator and their preference, and sometimes it is the only solution if it is not possible to be active from home. No possibility of an antenna for example. (F1VL)
Very enjoyable, and QSO's more numerous and more distant. (F5AYE)
Of course, especially as a team. (F5BUU)
For sure with friends on a good site. (F6DKW)
Yes. (F6DRO)

9. Do you think portable operators have an unfair advantage in contests?

Not inevitably. (F1VL)
No, portable operations are difficult, and we must reward the operator who does this.
No, they just give themselves the conditions to do better. (F5BUU)
No, they have to have a good set-up and means having a hard job to do. (F6DKW)
No. (F6DRO)

10. What aspects of the microwaves give you the most enjoyment?

Improving my understanding of propagation. (F1VL)
Home-made electronics and micro-mechanics, correspondents are almost all friends, QSO's are not easy and no 59 73. (F5AYE)
Complete QSO when signal is just above the noise level. (F5BUU)
Making my own equipment and getting good results with it. (F6DKW)
10 and 24GHz rainscatter. (F6DRO)

11. What have been your best achievements on the microwaves?

The next QSO that I make; the distance would not always be the sole objective. (F1VL)
Van equipped with 1296, 5760, and 10368 MHz with quick deployment antennas and the comfort of a home station on wheels. (F5AYE)
Some DX expeditions in southern Europe (EA, EA6,EA8,CT,TK, IS0,…) making contacts over 1000 km. (F5BUU)
Working all French Departments and locators and some nice DX on 10GHz (SM4) and European tropo record with DL7QY on 24GHz. (F6DKW)
902 km RS to G4ALY and several 800km plus to ON, all on 3cm. (F6DRO)

12. How can we encourage newcomers to the microwaves?

Invite them, explain to them, and above all show your passion. (F1VL)
Presentations to radio clubs, with the provision of a small 10GHz station for testing.
(I do it !), invitation to portable operations. (F5AYE)
Invite them to join in with portable operation. (F5BUU)

For me, they have to find a neighbour who can help them to understand how things work, with advice and even measuring equipment. (F6DKW)
Report activity and QSO in our local email reflector. (F6DRO)

13. With ready-made modules, do you think that something has been lost in the process?

No, not everyone is a technician and competent. There are two aspects to radio (at least), the technical part and the operating part. (F1VL)
Yes, but for some it is not easy to do it. (F5AYE)
No, it allows one to spend more time on optimization and to be on the air. (F5BUU)
With ready-made modules, do you think that something has been lost in the process?
-Sure! But for many microwave hams it is the only way to be on the air. (F6DKW)
No, there is room for builders and operators only. What I don't like is using poor equipment
like synthesizers with 50dB worse phased noise and spurs than crystal multipliers only because it is simpler. Same with some very poor SDR transmitters like Pluto, full of spurs. (F6DRO)

14. With all the predictions of conditions, do you think that they are a reliable guide?

Not 100%, but by taking into account and improving the analysis by the operator . (F1VL)
Yes. (F5AYE)
It helps, but the best is to try. (F5BUU)
It's a valuable help, but far from perfect. Cannot be a reason to not switch on the radio and monitor the beacons. (F6DKW)
Yes, but don't trust it 100%. (F6DRO)

15. Concerning ON4KST, do you have any comments on how this does or doesn't work for you?

It is a well-used complement, because less and less people are on a calling frequency (144.390 MHz for example). KST is omni-directional, which an antenna is not. (F1VL)
A friend who does not want to use KST makes on average 5 times less QSO's than me. (F5AYE)
The best activity support currently available. (F5BUU)
Very useful tool. During contests with too many sked requests it is rather difficult! (F6DKW)
It is perfect for me. (F6DRO)

16. Do digital modes interest you?

YES, of course. It is the future. (In fact for a long time) F1VL)
No. (F5AYE)
No, I don't have fun when my PC is making contacts for me. (F5BUU)
No interest at all!! (F6DKW)
No, I sometimes use it, but how boring it is. (F6DRO)

17. Do you think that digital modes have a place in the setting of new records on the microwave bands?

Of course, it is THE solution. (F1VL)
Yes, in a separate classification. (F5AYE)
It depends whether we talk about human records or technical records. (F5BUU)
No, A 'QSO?' between two computers cannot count as a real ham radio contact. (F6DKW)
No, in fact we don't know what is happening in the software. In the past it could be proved that JT65 was cheating. The programmers claimed it was a bug but I am not sure about this. (F6DRO)

18. Is there any concern in France regarding the loss of microwave allocations?

Yes, like everywhere in the world. (F1VL)
Yes for 23cm. (F5AYE)

Yes, about 23cm band. (F5BUU)
-As everyone in the EU, the possible loss of 1296 MHz which is a fine band, to see if conditions could be fine on higher bands (Tr) (F6DKW)
Yes, 23cm is close to be lost, 13cm is QRM by phones and wifi, 6cm is QRM by wifi so ???
(F6DRO)

19. Is it easy to set up microwave beacons in France?

Yes. (F1VL)
Yes, very easy, but the administration wants the person in charge to have a remote control to stop the beacon in the event of a problem. (F5AYE)
Till now, yes. (F5BUU)
Looks difficult due to security restrictions. (F6DKW)
I'd say only a partial yes. It is difficult to stay on sites where professional equipment is sharing the location, also more and more security norms are making it difficult to manage maintenance work. (F6DRO)

20. What do you think about remote stations on the microwave bands?

Another way of being on the air. (F1VL)
A solution for hams like me who live in a deep valley. (F5AYE)
A nice project for a team and then comfortable operation with an efficient station. (F5BUU)
Could be a good way for home station with poor take-off or without possibility of setting up a microwave antenna on the roof. (F6DKW)
No problem as long as the claimed location for the QSO is really the remote location, not operator location. (F6DRO)

I would like to acknowledge Pierre (F4CKV) who distributed and collected the questionnaires for me.

Dave (G4GLT) May 2023.

UKuG MICROWAVE CONTEST CALENDAR 2023

Dates, 2023	Time UTC	Contest name
28-May	0600 - 1800	1st 5.7GHz Contest
28-May	0600 - 1800	1st 10GHz Contest
4-Jun	1000 - 1600	4th Low band 1.3/2.3/3.4GHz
25-Jun	0600 - 1800	2nd 5.7GHz Contest
25-Jun	0600 - 1800	2nd 10GHz Contest
9-Jul	0900 – 1700	2nd 24GHz Contest
9-Jul	0900 – 1700	2nd 47GHz Contest
9-Jul	0900 – 1700	2nd 76GHz Contest
30 -Jul	0600 - 1800	3rd 5.7GHz Contest
30 -Jul	0600 - 1800	3rd 10GHz Contest
27-Aug	0600 - 1800	4th 5.7GHz Contest
27-Aug	0600 - 1800	4th 10GHz Contest
10-Sep	0900 - 1700	3rd 24GHz Contest & 24GHz Trophy
10-Sep	0900 - 1700	3rd 47GHz Contest
10-Sep	0900 - 1700	3rd 76GHz Contest
24 -Sep	0600 - 1800	5th 5.7GHz Contest
24 -Sep	0600 - 1800	5th 10GHz Contest
15 -Oct	0900 - 1700	4th 24GHz Contest
15 -Oct	0900 - 1700	4th 47GHz Contest
15 -Oct	0900 - 1700	4th 76GHz Contest
12 -Nov	1000 - 1400	5th Low band 1.3/2.3/3.4GHz

UKuG MICROWAVE CONTEST CALENDAR 2023

Month	Contest name	Certificates	Date 2023	Time GMT	Notes
Jan	1.3GHz Activity Contest	*Arranged by RSGB*	17-Jan	2000 - 2230	RSGB Contest
Jan	2.3GHz+ Activity Contest	*Arranged by RSGB*	24-Jan	1930 - 2230	RSGB Contest
Feb	1.3GHz Activity Contest	*Arranged by RSGB*	21-Feb	2000 - 2230	RSGB Contest
Feb	2.3GHz+ Activity Contest	*Arranged by RSGB*	28-Feb	1930 - 2230	RSGB Contest
Mar	REF/DUBUS EME 3.4GHz	*Arranged by REF/DUBUS*	4-Mar to 5-Mar	0000 - 2400	REF/DUBUS EME 3.4GHz
Mar	Low Band 1296/2300/2320/3400MHz	F, P,L	5-Mar	1000 - 1600	First 4 hours coincide with IARU
Mar	1.3GHz Activity Contest	*Arranged by RSGB*	21-Mar	2000 - 2230	RSGB Contest
Mar	2.3GHz+ Activity Contest	*Arranged by RSGB*	28-Mar	1930 - 2230	RSGB Contest
Jun	REF/DUBUS EME 2.3GHz	*Arranged by REF/DUBUS*	25-Mar to 26-Mar	0000 - 2400	REF/DUBUS EME 2.3GHz
Apr	Low Band 1296/2300/2320/3400MHz	F, P,L	2-Apr	1000 - 1600	
Apr	1.3GHz Activity Contest	*Arranged by RSGB*	18-Apr	1900 - 2130	RSGB Contest
Apr	REF/DUBUS EME 1.2GHz	*Arranged by REF/DUBUS*	22-Apr to 23-Apr	0000 - 2400	REF/DUBUS EME 1.2GHz
Apr	2.3GHz+ Activity Contest	*Arranged by RSGB*	25-Apr	1830 - 2130	RSGB Contest
May	*432MHz & up*	*Arranged by RSGB*	6-May to 7-May	1400 -1400	RSGB Contest
May	*10GHz Trophy*	*Arranged by RSGB*	7-May	0800 - 1400	Sunday, to coincide with IARU
May	Low Band 1296/2300/2320/3400MHz	F, P,L	7-May	0800 - 1400	Aligned with IARU event
May	24GHz/47/76GHz		14-May	0900-1700	
May	1.3GHz Activity Contest	*Arranged by RSGB*	16-May	1900 - 2130	RSGB Contest
May	REF/DUBUS EME 10GHz & Up	*Arranged by REF/DUBUS*	20-May to 21-May	0000 - 2400	REF/DUBUS EME 10GHz & up
May	2.3GHz+ Activity Contest	*Arranged by RSGB*	23-May	1830 - 2130	RSGB Contest
May	5.7GHz/10GHz	F, P,L	28-May	0600-1800	
Jun	Low Band 1296/2300/2320/3400MHz	F, P,L	4-Jun	1000 - 1600	Aligned with some Eu events
Jun	1.3GHz Activity Contest	*Arranged by RSGB*	20-Jun	1900 - 2130	RSGB Contest
Jun	5.7GHz/10GHz	F, P,L	25-Jun	0600-1800	
Jun	2.3GHz+ Activity Contest	*Arranged by RSGB*	27-Jun	1830 - 2130	RSGB Contest
Jul	VHF NFD (1.3GHz)	*Arranged by RSGB*	1-Jul to 2-Jul	1400 - 1400	RSGB Contest
Jul	24GHz/47/76GHz		9-Jul	0900-1700	
Jul	REF/DUBUS EME 5.7GHz	*Arranged by REF/DUBUS*	15-Jul to 16-Jul	0000 - 2400	REF/DUBUS EME 5.7GHz
Jul	1.3GHz Activity Contest	*Arranged by RSGB*	18-Jul	1900 - 2130	RSGB Contest
Jul	2.3GHz+ Activity Contest	*Arranged by RSGB*	25-Jul	1830 - 2130	RSGB Contest
Jul	5.7GHz/10GHz	F, P,L	30-Jul	0600-1800	
Aug	ARRL Microwave EME	*Arranged by ARRL*	12-Aug to 13-Aug	0000 - 2359	ARRL EME 2.3GHz & Up
Aug	1.3GHz Activity Contest	*Arranged by RSGB*	15-Aug	1900 - 2130	RSGB Contest
Aug	2.3GHz+ Activity Contest	*Arranged by RSGB*	22-Aug	1830 - 2130	RSGB Contest
Aug	5.7GHz/10GHz	F, P,L	27-Aug	0600-1800	
Sep	ARRL Microwave EME	*Arranged by ARRL*	9-Sep to 10-Sep	0000 - 2359	ARRL EME 2.3GHz & Up
Sep	24GHz/47/76GHz		10-Sep	0900-1700	
Sep	1.3GHz Activity Contest	*Arranged by RSGB*	19-Sep	1900 - 2130	RSGB Contest
Sep	5.7GHz/10GHz	F, P,L	24-Sep	0600-1800	
Sep	2.3GHz+ Activity Contest	*Arranged by RSGB*	26-Sep	1830 - 2130	RSGB Contest
Oct	*432MHz & up*	*Arranged by RSGB*	7-Oct to 8-Oct	1400 - 1400	IARU/RSGB Contest
Oct	*1.3 & 2.3GHz Trophies*	*Arranged by RSGB*	7-Oct	1400 - 2200	RSGB Contest
Oct	24GHz/47/76GHz		15-Oct	0900-1700	
Oct	1.3GHz Activity Contest	*Arranged by RSGB*	17-Oct	1900 - 2130	RSGB Contest
Oct	2.3GHz+ Activity Contest	*Arranged by RSGB*	24-Oct	1830 - 2130	RSGB Contest
Oct	ARRL EME 50-1296MHz	*Arranged by ARRL*	28-Oct to 29-Oct	0000 - 2359	ARRL EME Contest
Nov	Low Band 1296/2300/2320/3400MHz	F, P,L	12-Nov	1000 - 1400	
Nov	1.3GHz Activity Contest	*Arranged by RSGB*	21-Nov	2000 - 2230	RSGB Contest
Nov	ARRL EME 50-1296MHz	*Arranged by ARRL*	25-Nov to 26-Nov	0000 - 2359	ARRL EME Contest
Nov	2.3GHz+ Activity Contest	*Arranged by RSGB*	28-Nov	1930 - 2230	RSGB Contest
Dec	1.3GHz Activity Contest	*Arranged by RSGB*	19-Dec	2000 - 2230	RSGB Contest

EVENTS 2023

June 18	RAL Microwave Roundtable	www.g3pia.net
June 23-25	Ham Radio, Friedrichshafen	www.hamradio-friedrichshafen.de
July 8/9	Finningley Roundtable	g0ghk.com
August 6	BATC Convention, Midlands Air Museum, Coventry	www.batc.org.uk
September 8-10	68.UKW Tagung Weinheim, Germany	www.ukw-tagung.de
September 17	Crawley Round Table	carc.org.uk
September 17-22	European Microwave week, Berlin	www.eumweek.com
November11	Scottish Round Table	www.gmroundtable.org.uk
November 20 -Dec 15	ITU WRC 23, Dubai	rsgb.org/wrc-23
December 2	Midlands Roundtable, Eaton Manor, SY6 7DH	eatonmanor.co.uk/midlands-round-table-event/

80m UK Microwavers net

Tuesdays 08:30 local on 3626 kHz (+/- QRM)

73 Martyn Vincent G3UKV