

UK Microwave Group Report to RSGB Spectrum Forum



Introduction to UKuG

The UK Microwave Group represents the interests of amateur microwave radio enthusiasts in the UK. Its Committee is an elected body representing the interests of UK amateur microwave enthusiasts. The UKuG is open to membership for both UK and overseas microwavers.

UKuG is now 12 years old, having been formed at the Martlesham Microwave Roundtable in November 1999 and it is affiliated to the RSGB. Membership has grown by 7% since the last report.

Events organised and supported during 2011

- Martlesham Microwave Roundtable with UKuG AGM - April
- Microwave Roundtable and 8th Beginners Workshop organised by the Finningley Club - July
- Microwave Roundtable with Construction contest organised by the Crawley Club - September
- Exhibited at RSGB Convention – October
- First Scottish Microwave Roundtable, Burntisland near Dunfermline - November
- There was also a Microwave Roundtable organised by the Harwell Club at Rutherford Appleton Laboratories in August that we were not fully able to support due to delays booking the venue, but we hope to rectify that next year. Thanks should go to the organisers for making that one happen despite this.

New Group Callsign G3EEZ

With the support of his surviving family, the group has taken over the callsign of Microwave pioneer Alan Wakeman G3EEZ as its club callsign. We express our thanks to Alan's daughters for their kind permission to do this.

EME Conference 2012

Preparation for the UKuG – sponsored 2012 International EME Conference to be held in Cambridge between the 15th and the 19th August 2012 is well underway. We are pleased to have obtained the sponsorship of a major UK Amateur Radio supplier. Details of the Conference are published on the EME2012 web page, <http://www.eme2012.com>

Local RSGB members are supporting the event as one of the largest and most important international events for some time.

Newsletter

Scatterpoint, the Newsletter of the Group, is now under the new Editorship of Martin, G8BHC and published 10 times a year. It continues to attract top-line technical articles; topics this year have covered projects up to 134GHz, as well as providing a comprehensive report of activity during the previous period.

Scatterpoint is now exclusively an e-newsletter downloadable from the Yahoo site

Beacons

Like last year, 2011 has been frustrating in terms of progressing beacon licences. No microwave beacon licences have been issued by Ofcom, despite a number being in the pipeline, and with equipment and sites waiting for licences. Progress is particularly frustrating for beacons in shared bands such as 2.3GHz. It is deemed unlikely that any progress will be made until after the Olympics.

Several of these beacons have been sponsored with financial aid and donation of parts from the Group, only one, G3LPC on 3.4GHz is operating as a personal beacon, others lie unused in people's shacks.

Reverse DDS (RDDS) control kits, are still made available through the Group, and allow current and future beacons to be locked to high stability 10MHz or other sources. The Reverse DDS solution provides for MGM modulation facilities, if required. Odd frequency offsets, used by many beacons, can be accommodated.

Beaconspot.eu is the most up to date source of real time VHF/Microwave beacon data currently available and is fully integrated with the DX Cluster. VHF bands are also included in addition to the microwave bands. On the 6th of April, it achieved its 1000th registered user.

Spectrum news

Terrestrial

1296 and 10368MHz continue to be the most popular terrestrial microwave bands, but there is increasing activity on 2.3GHz, boosted by availability of cheap QRO amplifiers and the SHF UKAC contests. Tests have been carried out in the South of England on 134GHz and a number of people are making plans to activate this band. There is some activity on 24GHz mainly in the contests and activity periods.

EME

On Moonbounce, activity on the lower microwave bands continues to rise, 1296 being the most notable, but as with terrestrial, the availability of cheap RF power is rapidly making 2320MHz the band of choice for very small (<2m) dish systems.

Easy availability of SSPAs with moderate to high output power and the reduced requirements on tracking accuracy are driving an increase in interest in 5.7GHz operation.

The first amateur 76GHz EME echoes are still proving elusive, showing that the step from 47GHz is not going to be as easy as was first envisaged. 76GHz EME is really at the limit of Amateur capability, but we are all convinced that it is only a matter of time.

UKuG Awards

Four "Firsts" have been awarded since the last report. PA0EHG received an award for the first PA-G contact on 24GHz with G3LQR, back in March 1995. The other three awards went to Ralph G4ALY, for the first G-GJ on 3.4GHz for a contact with GJ4ISM/P, and for more recent contacts on 5.7 and 10GHz with

Spain, now that country has access to the higher bands.

The UKuG took over the Microwave Squares Awards from the RSGB and the following awards have been made since late 2010:

1.3GHz: 10 squares to G3WKZ, 20 squares to G0EWN, 60 squares to G4NBS, 105,110,115,120,125 squares to WW2R (G4FRE).

2.3GHz: 55, 60 squares to WW2R.

3.4GHz: 25, 30 squares to WW2R.

10GHz: 5 squares to DL3MR, 10 squares to G0EWN.

The distance awards for microwaves are planned to be relaunched in 2012.

UKuG Contests

This year's Low Band contests on 1.3/2.3/3.4GHz have seen a 50% increase in entries, at least partially due to the adoption of an improved online log entry system cloned from the RSGBCC web site courtesy of G4CLA. Entries for the 5.7/10/24GHz Cumulatives appear to be up on the lower two bands and steady on 24GHz this year, the results will be adjudicated shortly. The 24GHz Trophy contest had twice as many entries this year, but we again had no entries for the 47 and 76GHz bands. Again, presentation of trophies for microwave events has not been well co-ordinated, the RSGB presented its awards for 2010 on the same date as the Martlesham Microwave Round Table in April 2011, a clash which could have been avoided.

Submitted by G4BAO on behalf of the UK Microwave Group, October 2011