

UK Microwave Group Report to RSGB Spectrum Forum

Introduction to UKuG

The UK Microwave Group represents the interests of amateur GHz bands 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 22 years old, having been formed at the Martlesham Microwave Roundtable in November 1999 and it is affiliated to the RSGB. Membership at April 2021 was still growing at 563, up by 5 in 7 months since the previous AGM.

Events organised and supported during 2021

- UKuG AGM – Held by Zoom in April
- Roundtables have been suspended during the Covid pandemic.
- A series of online technical talks have been run with assistance from BATC for video streaming .

Club and outreach

The group has members on the Spectrum Forum, Propagation Studies Committee, Contest Committee, EMC Committee, ETC Committee, Examination Standards and Audit Committees, IARU Committee, and one of our members Chairs the Technical forum. The Group membership provided speakers at the RSGB convention.

Technical Support and loan equipment

UKuG members provided technical support as part of our scheme, including beacon repair, construction and advice. We have five "members' loan" transverter systems, covering 5.7, 10, 24 and 76GHz, providing support for beginners and established microwavers.

The forthcoming requirements for stations to have EMF assessments has resulted in work to update and revise EMF guidance provided by the group, and provide support and publicity to the work undertaken by the RSGB on how to comply with the ICNIRP requirements.

Chipbank

The chipbank offers a completely free service to members, and includes a comprehensive selection of chip resistors, capacitors and inductors as well as a good selection of semiconductors and other components. In the nine months to the end of April, 74 requests were received and serviced.

We would like to thank the various companies and other sources that donated components.

Publications UKuG members write two of the regular columns in RadCom, write for Practical Wireless and regularly contribute technical articles and the European activity report for Dubus magazine. Scatterpoint The e-newsletter of the Group, under the Editorship of Roger, G8CUB, is published 10 times a year and continues to attract top-line technical articles as well as being a comprehensive repository of reports of activity. Older issues are available from the UKuG web site

(issues for 2020 will become available at the end of December 2021). An annual index is produced for members. Scatterpoint carries a regular activity report column, compiled by John G4BAO, which has detailed reports from members of their activities on the microwave and millimetre bands, illustrating the breadth of propagation modes and modes of operation in regular use. These reports cover Wideband, Narrowband and Machine Generated Modes (MGM) activity used for both local and DX operations.

Group Web Presence. The UKuG has several GHz related videos on its YouTube video channel, including recordings of the online technical talks run during the past year. The Twitter feed @UKGHZ attracts many likes and retweets, highlighting innovation such as long-distance QSOs on the 47, 76 and 122, 134 and 241GHz mmWave bands. Our main website, microwavers.org, also provides listings for Operating Firsts/DX records, Chipbank stock updates, a regularly updated beacon maps and a rolling events calendar.

- Web: <http://www.microwavers.org/>
- Wiki: <https://wiki.microwavers.org.uk/>
- Twitter: <https://twitter.com/UKGHZ>
- Youtube: <https://www.youtube.com/c/UKMicrowaveGroup>

Our sister site, Beaconsport.eu, created and run by UKuG member G8APZ continues to be very popular with DXers from VHF upwards. It now has nearly 5400 registered users.

Beacons The Group was pleased to see a new 10GHz beacon GB3GCT on the air from Greenham Common. We thank the society for their support with beacons and ask them to continue to progress beacon clearances at the highest level within Ofcom. See http://www.ukrepeater.net/vetting_beacons.php

Operation

Group members continue to support ongoing developments in digital modes applied to weak signal/small ground station EME.

G8AGN has been pursuing some interesting tests at 30THz (Far Infra Red), and has established initial some benchmarks in this area. Very slow CW (QRSS) has been the mode employed, with mechanical switching of a hot source as the transmitter.

The RSGB Fraser Shepherd award went to the Australian mm-wave team led by VK3CV for their innovative 122GHz transceiver based on a car collision avoidance radar chip.

The G3BNL Trophy is presented for innovation or technical development of microwave equipment or techniques, in honour of Les Sharrock G3BNL. This award was not presented in 2021.

The G3EEZ Trophy is presented for contributions to microwave communications, in honour of Alan Wakeman G3EEZ. This award was not presented in 2021.

The G3JVL Memorial Trophy is awarded to a newcomer to microwaves who has made significant progress. This year it was awarded to Ben Nock G4BXD.

The G3VVB memorial trophy is presented for the best microwave home project exhibited at a microwave roundtable, in honour of Cyril James G3VVB. This award was not presented in 2021.

The G3KEU trophy is presented to the leading entry in the 5.7GHz cumulative contests, in honour of Tim Leighfield G3KEU. The 2021 recipient is David Millard M0GHZ.

The G3RPE trophy is presented to the Winner of the 10GHz cumulative contests (Open Section), in honour of Dain S. Evans, G3RPE. The 2021 recipient is John Lemay G4ZTR.

The G3JMB memorial trophy is presented to the Winner of the 10GHz cumulative contests (Restricted Section, 1-Watt max), in honour of Jack Brooker G3JMB. The 2021 recipient is Barry Lewis G4SJH.

The G4EAT trophy is presented to the leading station on 1.3GHz in the UKuG Low Band Championship, in honour of in John Wood G4EAT. The 2021 recipient is John Lemay, G4ZTR.

The two 24GHz trophies, the G0RRJ and 24GHz Trophies were awarded to Martyn Vincent, G3UKV.

The 47GHz Trophy was won by Roger Ray G8CUB.

UKuG Contests and Certificates

Locator squares awards – Gordon G8PNN received the 5 Squares award on 3.4GHz, and John G4BAO 30 squares on 10GHz

The UKuG contest programme for 2020 was largely similar to previous years, but modified as a result of Covid restrictions which limited the number of sessions for some events.

Submitted by G3XDY on behalf of the UK Microwave Group, October 2021