

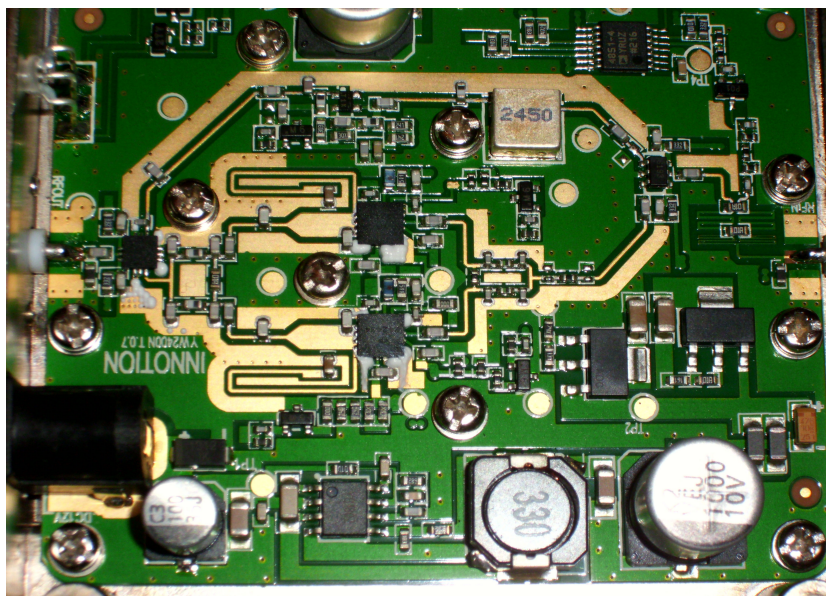


scatterpoint

January 2014

Published by the UK Microwave Group

13cm Power Amplifier
By Roger Ray G8CUB



In this Issue

- 4 Heelweg 2014
- 5 Firsts
 - Airscout
 - Advice needed
- 6 13cm Power Amplifier
- 7 Trophies: Call for Nominations
- 8 International Museums Weekend 2014
Special Event
- 9 UKuG Contests 2014: Rules
- 13 UKuG Microwave Contest Calendar 2014
- 14 Chip bank
 - GM4CXM in The Railway Man
- 15 EME-2014
- 16 UKuG Technical Support
- 17 Contest Results
- 20 Activity News
- 23 Contest calendar
- 24 Events calendar

Don't forget that

**Every Monday evening is
Microwave Activity Evening**

UK Microwave Group Contact Information

<p>Chairman: GW4DGU Chris Bartram</p> <p>Email: chairman @microwavers.org</p> <p>Located: Wales</p> <p>Address: 16 Lôn Ddewi Meidrim CAERFYRDDIN Sir Gâr SA33 5QR</p> <p>Home Tel: +44 (0)1994 230626</p>	<p>General Secretary: G8BHC Martin Richmond-Hardy</p> <p>Email: secretary @microwavers.org</p> <p>Located: Suffolk JO02PA</p> <p>Address: 45 Burnt House Lane Kirton Ipswich Suffolk IP10 0PZ</p> <p>Home Tel: +44 (0)1394 448213</p>	<p>Membership Secretary: G8DKK Bryan Harber</p> <p>Email: membership @microwavers.org</p> <p>Located: Hertfordshire IO91VX</p> <p>Address: 45 Brandles Road Letchworth Hertfordshire SG6 2JA</p> <p>Home Tel: n/a</p>	<p>Treasurer: G4BAO Dr. John C. Worsnop</p> <p>Email: treasurer @microwavers.org</p> <p>Located: Cambridgeshire JO02CG</p> <p>Address: 20 Lode Avenue Waterbeach Cambs CB25 9PX</p> <p>Home Tel: +44 (0)1223 862480</p>
<p>Scatterpoint</p> <p>Editor: G8BHC Martin Richmond-Hardy</p> <p>Email: editor @microwavers.org</p> <p>See above for other contact details</p> <p>NB editor & scatterpoint email addresses go to both Bob and myself</p>	<p>Scatterpoint</p> <p>Activity News: G8DTF Bob Price</p> <p>Email: scatterpoint @microwavers.org</p>	<p>Contest & Awards</p> <p>Manager: G3XDY John Quarmby</p> <p>Email: g3xdy @btinternet.com</p> <p>Located: Suffolk (JO02OB)</p> <p>Address: 12 Chestnut Close Rushmere St. Andrew Ipswich Suffolk IP5 1ED</p> <p>Home Tel: +44 (0)1473 717 830</p>	<p>RSGB Microwave</p> <p>Manager: G6JYB Murray Niman</p> <p>Email: g6jyb @microwavers.org</p> <p>Located: Essex (JO01)</p> <p>Address: 55 Harrow Way Great Baddow Chelmsford Essex CM2 7AU</p> <p>Home Tel: +44 (0)1245 474969</p>

UK Regional Reps

John Cooke	Scotland	GM8OTI	john@marwynandjohn.org.uk
Gordon Curry	NI	GI6ATZ	gi6atz@qsl.net
Tony Pugh	Wales	GW8ASD	gw8asd@gw8asd.co.uk

Assistants

Kent Britain	USA	WA5VJB/G8EMY	wa5vjb@flash.net
Dave Powis	Trophies	G4HUP	g4hup@btinternet.com
Noel Matthews	G8GTZ		noel@noelandsally.net
Tony Pugh	Beacon Coord	GW8ASD	gw8asd@gw8asd.co.uk
Robin Lucas	www.beaconspot.eu	G8APZ	

Editor's corner

Dropbox: Please note that you do NOT have to subscribe to Dropbox in order to download your copy of Scatterpoint.

With my Secretary's hat on: early warning of the UKμG AGM in April. Details next month. Meanwhile, **nominations for the Committee, please.**

If anyone fancies a go at editing Scatterpoint, please let me know, as bit of load-sharing would be helpful.

73s de Martin G8BHC

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, rtf, doc, docx, odt,
Pages

Spreadsheets: Excel, OpenOffice,
Numbers

Images: tiff, png, jpg

Schematics: sch (Eagle preferred)

I can extract text and pictures from pdf files but tables can be a bit of a problem so please send these as separate files in one of the above formats.

Thank you for your co-operation.

Martin G8BHC

UK MICROWAVE GROUP SUBSCRIPTION INFORMATION

The following subscription rates apply.

UK £6.00 US \$12.00 Europe €10.00

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

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

ukug@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!)

Colour codes

Editorial & Events

Activity & Contests

Technical

Nanowaves (optical)

Commentary

Reproducing articles from Scatterpoint

If you plan to reproduce an article exactly as per Scatterpoint then please contact the [Editor](#) – otherwise you need to seek permission from the original source/author.

You may not reproduce articles for profit or other commercial purpose.

Dear OM,

We would like to invite you to the Dutch Microwaves Event on:

Saturday January 18th 2014

This meeting will be the place to exchange ideas with amateurs from Holland, Germany, France, United Kingdom, Belgium, Switzerland and more.

We hope all of you will bring your homebrew equipment which can be measured on performance by our 2013 measuring team operated by:

PA0JEN, PE1BMC, PE1FOD, PA0EHG, PA7JB, PA3CEG, PE1NFE, PA3EXV, PB0AOK, PE0SSB, PA2M, PA0RYL en PA3ACJ .

The following equipment will be available:

- Sweeper 0-26 GHz
- Spectrum analyser up to 26 GHz.
- Spectrum analyser 10KHz - 3.8GHz + Tracking generator
- Generator 10kHz - 3.3GHz (AM, FM, CW, Pulse)
- SWR 5MHz - 3.0GHz (RF-SWR Bridge)
- Spectrum analyser up to 325 GHz
- Spectrum analyser Agilent tot 3GHz.
- Noise meter 24 GHz
- Noise meter 47 GHz
- Power meter up to 76 GHz
- Calibration unit for 24 GHz Filters
- Signal generator from 0 – 18.6 GHz (Mar 2031 / HP8673)
- Spectrum analyzer from 0 – 26.5 GHz + Tracking up to 2.7 GHz.
- AM - 70 cm ATV generator
- Counter 24 GHz rubidium stabilized.
- Power meter to 250 Watt up to 2.5 GHz.
- Rubidium & GPS based frequency standard 10 MHz
- HP 5370 Time Interval Meter
- HP 3336 B Signal Generator
- HP 8405A Vector Voltmeter
- GPIB control software based on KE5FX programs

Do you have a special project to be measured? Please send an email. We may be able to arrange specific equipment.

HEELWEG MICROWAVE MEETING 2014



SATURDAY JANUARY 18th 2014

LOCATION:



CAFÉ/ZAAL "DE VOS"
HALSEWEG 2
7054 BH WESTENDORP



INFO@PAMICROWAVES.NL

PE1FOT/PA7JB/PA3CEG/PA0BAT

Please watch our website for updates
www.pamicrowaves.nl and our Forum

www.pamicrowaves.nl/website/forum/

Please contact us via info@pamicrowaves.nl

DATE: January 18th 2014

Time 10.00 tot 15.00

73's PA3CEG, PA0BAT, PA7JB, PE1FOT

Firsts

G3WDG							
Band	Country	Station	Date	Time	Mode	Prop	Comment
24GHz	VK	VK3NX	16-Nov-13	1710	JT4F	EME	World record - 16878.8km (WIA figure)
10GHz	VK	VK2ALU	18-Aug-96	1015	CW	EME	
10GHz	VE	VE3ONT	20-Aug-95	1230	CW	EME	
10GHz	I	I4CHY	23-Mar-96	1100	CW	EME	
10GHz	RW	RW3BP	9-Oct-97	615	CW	EME	
10GHz	CT	CT1DMK	28-Mar-99	1845	CW	EME	
10GHz	LX	LX1DB	24-Apr-99	2325	CW	EME	
10GHz	ES	ES5PC	27-Mar-10	1635	CW	EME	
5.7GHz	SP	SP6GWN	9-Dec-12	846	CW	EME	
10GHz	ON	ON6UG/P	3-May-95	2100	SSB	Tropo	
10GHz	GI	GI8GJX	16-Jul-95	1024	SSB	Aircraft scatter	
24GHz	JA	JA6CZD	5-Jan-14	1100	CW	EME	
G4KGC							
10GHz	GD	GD4XUM/P	27-Jul-97	919	SSB	Tropo	

Airscout

By Frank Schmaehling, DL2ALF

Dear friends,

First of all A Happy New Year and my best wishes to you, your families and friends. Hope you all have a great time ahead!

I'd like to inform you about the news concerning the AirScout software.

At the beginning of the new year a new website was started which will contain all AirScout related information.

Please visit www.airscout.eu from now on.

Meanwhile I have uploaded the first (official) release V1.0.0.0 of AirScout as well as a detailed documentation (nearly the same as published in the DUBUS magazine).

The new version contains some minor bugfixes and enhancements and can upload your location info to maintain a location database in the future.

It is recommended to use it instead of the latest BETA version.

Please spread out this information to all other hams.

Your feedback is always appreciated.

Enjoy!

73 de Frank, DL2ALF

Dish Advice needed

David Hilton-Jones, G4YTL

I'm thinking about buying a RFHamdesign 3m dish for 1296 EME. I haven't yet been able to find anybody who is actually using one for this purpose – I would very much like to speak to somebody who is before committing. If anyone is using such a system, please email me.

I don't have the engineering skills or equipment (or time) to contemplate building my own, so I'm looking at commercial possibilities.

73 David, G4YTL

[david.hilton-jones \[at\] ndcn.ox.ac.uk](mailto:david.hilton-jones[at]ndcn.ox.ac.uk)

13cm Power Amplifier

By Roger Ray G8CUB

While at MUD there was talk about using low cost add on WiFi amplifiers for use on 13cm. Going for the highest power unit on offer, I ordered an 8W one from Hong Kong. It arrived in around 20days, having cost me £24.39 plus £8.99 P+P.

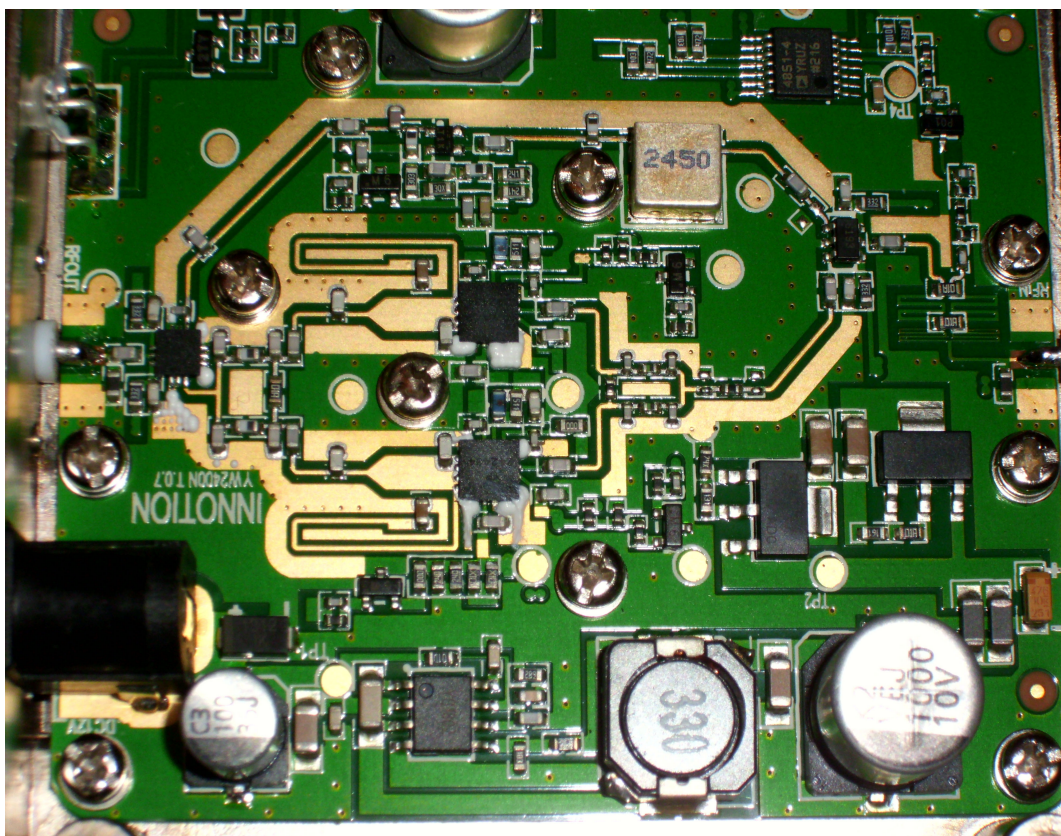
Expectations were not particularly high at that price.

When the unit arrived it was a real surprise. A serious cast case. The first thing I did was remove the base plate, and wow it was a well constructed unit.

A quick sweep of the PA showed a flat response from 2GHz – 2.6GHz. It was carrier sensing with >0dBm needed to trigger it into operation. Gain was 17dB. I was pretty sure that the claimed power would not be realised. Well it did not produce 8W, but at 2.32GHz the 1dB compression was 37.4dBm (5W+). The only modification I made was to change the reverse SMA on the output, for a conventional one.

Devices are a pair of YP242434. Data on the web:
<http://www.uniconic.com/INNOTION/>

YP242434.pdf



From the data they give a claimed 1dB compression of 34dBm. Supply current peaks around 1.15A. There is an on-board switch mode supply, so 10 -14V is fine.

On receive, even with the on board filter, gain was from 2.2-2.6GHz. At 2.32GHz it was less than 1dB down on the peak about 13dB.

Noise figure is yet to be measured, but the board offers the possibility of an easy device swop. There will be the loss of the antenna switch in the equation, but put at the antenna it could give adequate receive performance.

For SSB use it would need some delay on the carrier sensing. That should not be too difficult, as the diode detector goes into a quad op-amp.

A bit of sealing around the LED and power connector should make it suitable for portable use.

This is not an endorsement of this particular product, just an attempt to show there are some potentially useful low cost WiFi products around.

Roger Ray G8CUB

Trophies: Call for Nominations

It's that time again.....

..or almost, anyway. Now that you've munched your way through the mince pies and nadgered all the nuts (technical term made popular by the Goon Show) it's time to look forward to the next great event of the year – the UK Microwave Group Martlesham Round Table!

As always the presentation of Trophies will be a key part of the agenda. Some of our trophies are rightly awarded to the winners of our UKuG contests, but others are awarded for contributions made to the field of amateur microwave communications in other ways. Like several of the Operating awards, these are all 'in memoriam' of notable microwave contributors, now SK. You can see the previous recipients of these contribution awards via the UKuG homepage, which also states the criteria against which each trophy is awarded.

Now it's down to you...

If you think someone fits one of the categories, then please nominate them for that award. It has often ended up just being the Committee nominations that have been taken into account in previous years – but the UKuG is YOUR group, so have your say!

You can make a nomination by e-mail to either

Dave Powis (g4hup@btinternet.com) or to Chris Bartram (gw4dgu@chris-bartram.co.uk) or trophies@microwavers.org

Your nominations should state:

- the name and callsign of the person you are nominating,
- which award you are nominating them for,
- and why you feel they deserve it.

Nominations should be received by the end of February – thanks.

Dave Powis, G4HUP
UKuG Trophies Manager

A PS from Murray

Thanks to Dave G4HUP I have just added a 'Roll of Honour' for past recipients to the website for the main 'achievement' trophies as well as recent updates for Records and Firsts.

However it does highlight large gaps in the earlier records, so would earlier recipients please come forward so Dave can fill in his database. trophies@microwavers.org

International Museums Weekend 2014 Special Event

By John O'Toole M0HEM

For well over a decade now, there has been an extremely popular and extremely well supported annual amateur radio special event, by the name of the **International Museums Weekend** (IMW). The majority of those taking part in the event have been in the United Kingdom, but with a few radio amateurs taking part from the rest of the world. For the 2014 IMW, the members of the IMW administration team are hoping to make the event a truly international one, with great deal more participation from beyond the UK's borders.



The basic idea of the event is to set up and operate an amateur radio special event station, from absolutely any type of location which might be broadly classified as a museum. In the UK we have had stations set up in castles, preserved WW2 warships, air museums, railway museums, radio museums, preserved jails, agricultural museums and even doll museums – in fact the event has involved over 270 different museums over the years. The possibilities of finding a suitable venue are almost without limit. The sites have been operated by teams from clubs or just a lone operator. Irrespective of the location, those taking part have always had a great time and the operators were generally invited back for the following years by the museum's curator, pleased with the extra visitors and publicity the event has generated.

Apart from the enjoyment for the operators the event is intended to help spread the word for amateur radio, in some of the regularly visited locations by members of the public - the museums.

The 2014 IMW will take place on the two weekends of the 14th/15th and 21st/22nd June. More details about the event, its history and how to register to take part can be found at www.ukradioamateur.co.uk/imw/ There is absolutely no cost involved for taking part, nor is there any cost for the range of IMW Awards.

73 john m0hem

www.qrz.com/db/m0hem twitter.com/jonm0hem

jonm0hem@hotmail.co.uk

Publicity Officer International Museums Weekends

International Air-ambulance Week www.ukradioamateur.co.uk/iaw/

UKμG Contests 2014: Rules

By John Quarmby G3XDY

Aims and comments:

This year there are a few minor tweaks but no wholesale changes to the contests for 2014.

The new Low Band Championship continues, but with the session that was coincident with the October RSGB UHF Contest moved to coincide with the May event so as not to dilute activity in the RSGB 1.3GHz and 2.3GHz Trophy events.

The 5.7/10/24GHz Cumulatives will continue as five separate events with an overall championship for each band which will determine the trophy awards. As last year, entrants can choose a total operating period of up to 6 hours within a 12 hour overall duration, and this can be split into two sessions, which will facilitate rover operation.

The 24/47/76GHz Trophy Contest in July will continue to include all bands to 248GHz in the 76GHz+ section.

The online log entry system will continue in 2014, and it is expected that results will also be published on the web this year, as well as in Scatterpoint.

As there were few entrants to the radio talkback sections last year, there will be no separate tabulation this year, the leading station using radio talkback only will receive a certificate.

EME contacts are now permitted in all the contests, but subject to a maximum score of 1000 points.

Microwavers in Europe are most welcome to join in our UK contests. There is already a core of French, Dutch and Belgian stations that appear regularly in our summer contests. We would like many more to do the same!

THE RULES listed below are final and binding for 2014 (there are some changes from 2013). The following contests are scheduled for 2014:

- Low Microwave Bands - 1.3GHz/2.3GHz/3.4GHz (5 contest days). An overall championship will be decided on the best three scores out of five.
- 5.7GHz (5 contest days with 3 to count for the championship), on the same days as the 10GHz/24GHz contests.
- 10GHz (5 contest days with 3 to count for the championship), on the same days as the 5.7GHz/24GHz contests.

- 24GHz G0RRJ Contests (5 contest days with 3 to count for the championship), on the same days as the 5.7GHz/10GHz contests.
- 24GHz Trophy.
- 47GHz , 76GHz and up to 248GHz
- 1.3GHz and 10GHz Microwave Field Day

The full contest program and rules are published here and are also available on the Internet on the UKμG website at <http://www.microwavers.org>

General Rules (applicable to all events)

The Contests are open to all comers (you do not have to be an RSGB or UK Microwave Group member). Stations located outside the UK (G, GW, GM, GI, GD, GU, GJ) may enter a contest, and will be tabulated within the overall results tables, but will not be eligible for UK Microwave Group awards.

Contestants are expected to enter in the true spirit of the event and to adhere strictly to any equipment or power restrictions that apply to the particular contest.

Operators may enter as home station or portable (either mixed or separately in the championships) unless specified in the rules for a specific event. In multi-band contests, single-band entries are always acceptable.

Stations: Entrants must not change their location or callsign during the contest, unless the Rover rule is invoked. In multi-band events, all stations forming one entry must be located within a circle of 1000m radius. An operator may reside outside the station's area ("remote station"), connected to the station via a "remote control terminal". In such a case, the Locator for the contest is the Locator of the station's position. An operator may only operate one single station, regardless if it is locally or remotely operated, during the same event.

Contacts: Only one scoring contact may be made with a given station on each band, regardless of suffix (/P, /M, etc) during an individual contest or cumulative activity period, unless the Rover rule is invoked. Contacts made using repeaters or satellites will not count for points. Contacts with callsigns appearing as operators on any of the cover sheets forming an entry will not count for points or multipliers.

Scoring: Contacts are scored on the basis of 1 point per kilometre for full, two-way microwave contacts and at half points for one-way (i.e. crossband) contacts. Any contacts made by EME are scored at 1 point per kilometer up to 1000km, and will be scored at 1000 points above that distance.

Exchanges: Contest exchanges on the microwave bands consist of RS(T) + serial number (starting at 001). In addition, the six (or eight) figure QTH Locator must be exchanged either via the microwave band or on the talkback medium. In multiband contests, the serial number will start at 001 for each band (i.e. a common sequence across the bands is NOT to be used). No points will be lost if a non-competing station cannot provide an IARU locator, serial number, or any other information that may be required. However, the receiving operator must receive and record sufficient information to be able to calculate the score.

Talkback: Talkback can be used to assist in setting up a QSO, but note that the contest exchange must be made via the microwave band. It is not permissible to use the talkback as a means of checking the report or serial number – they must be copied via microwaves – and after the QSO is complete, care should be taken to avoid accidentally repeating the exchange via talkback. For the award of a Radio Talkback certificate, only amateur radio frequencies and technologies can be used for talkback (no internet or mobile phones). For Unlimited Talkback there is no restriction on the talkback methods that can be used – other amateur band, internet, phone, etc. In setting up the QSO, it is also permissible to send back received audio to the other station, for example to help with antenna alignment. An exception is that our contests do allow one way (cross-band) QSOs for half points, and in this case, the other band can be used by one of the stations. Stations not using any form of talkback may enter the Radio Talkback section.

Entries: Contestants are asked to make sure their entries have been scored correctly and that all relevant bonus points and multipliers have been claimed.

All entries must be prefaced with a summary / cover sheet showing: Title of contest, name(s) of operator(s), location(s) of station, section entered, callsign used, band score(s), multipliers or bonus points, final claimed score. The sheet should also detail equipment used, particularly the power output, antenna and receiver for both the microwave band and the talkback. This is very important if the logs are entered in one of the

restricted sections. Where the contest has a 'rover' facility, it is essential that each location used is clearly stated.

Log entries must be submitted via the online log portal at <http://microwave.rsgbcc.org/cgi-bin/vhfenter.pl>. When uploading electronic logs, the format should be one of the following: ASCII text, RSGB Standard Format, Cabrillo, SDV and G0GJV log outputs, and IARU REG1TEST format (preferred). Paper logs may be entered using the online log editor at <http://microwave.rsgbcc.org/cgi-bin/cover.pl>

Awards: Certificates will be awarded to overall contest winners and individual section leaders and their runners up. Additional Certificates of Merit will be awarded to stations in certain categories, as indicated in the rules for each event. With these, as with the logs, the adjudicator's decision is final.

Special Rules: Applicable if called up for the specific contest:

Rover Concept: The 'Rover' concept is to encourage lightweight, low power portable activity. This allows the location of the station to be moved as many times as desired and by a minimum of 5 linear kilometres, at any time during the contest period. From each new location, stations worked from any of the previous locations during the event may be worked again, both stations involved in the contact gaining points. The serial number, however, will not revert to 001 each time a move is made but will carry on consecutively from the previous contact.

Low Band Microwave Contest Rules

First introduced in 2004, these contests aim to encourage operation on the three lowest bands in the amateur microwave allocation, particularly as there is growing UK availability of 2.3GHz and 3.4GHz equipment. For 2014, there are five of these events, in March, April, June, October and November. The March, June, and October events are timed to overlap with UHF/SHF events in some other IARU Region 1 countries. The times for the November event have been shortened to make portable operation more practical.

1. The General Rules listed above apply except as modified by these rules.
2. There are five contests, one each in March, April, May, June and November. The March, April and June events run from 1000 to 1600 UTC. The May event runs from 0800 to 1400 UTC to coincide

with the RSGB UHF Contest. The November event is from 1000 to 1400 UTC.

3. Entrants in the May event need not start serial numbers from 001 if they are also participating in the RSGB UHF Contest.
4. Each event will be scored and tabulated separately. There will be an overall championship determined by taking the best three normalized scores from each entrant across the five events for each band. An overall champion will also be declared based on the normalized championship scores from each band.
5. For each session, certificates will be awarded to the leading entry plus runner-up on each band, the overall leading entry and runner-up across the three bands, plus for each band the leading stations in each of the following categories: home station, portable station, station running less than 10 watts output. Championship certificates will be awarded to the winners and runners up for each band, and to the overall championship winner and runner up. There will be a certificate for the leading station using radio talkback only.

5.7GHz Contest Rules

The 5.7GHz, 10GHz and 24GHz contests are being run concurrently to grow activity on 5.7GHz and 24GHz. Although they are on the same days, they are completely separate contests. Any band or all bands can be used on any of the 5 days.

1. The general rules shown above apply.
2. There are five, monthly, events from May to September inclusive, and the events run from 0600 to 1800 UTC on a Sunday. Entrants can operate for a period of up to six hours during each event, either as a single period or two separate periods with a minimum off time of 1 hour between.
3. Logs for all events entered should be submitted in the two weeks after each session.
4. There are two sections, Radio Talkback and Unlimited Talkback, in addition the leading fixed, portable and low power (<1W) stations will be awarded certificates.
5. Moving location during the contest is allowed - the Rover concept is applicable.
6. Certificates will be awarded to the leading station and runner-up in each section.
7. The G3KEU Memorial Trophy will be awarded to the leading entry in the championship, determined from the best three normalized scores during the series of events.

10GHz Contest Rules

The 5.7GHz, 10GHz and 24GHz contests are being run concurrently to grow activity on 5.7GHz and 24GHz. Although they are on the same days, they are completely separate contests. Any band or all bands can be used on any of the 5 days.

1. The general rules shown above apply.
2. There are five, monthly, events from May to September inclusive, and the events run from 0600 to 1800 UTC on a Sunday. Entrants can operate for a period of up to six hours during each event, either as a single period or two separate periods with a minimum off time of 1 hour between.
3. Logs for all events entered should be submitted in the two weeks after each session
4. Contestants may submit logs for any one of the following sections:

Open

No power or antenna restrictions (other than those laid down in the amateur licence) on either 10GHz or on the talkback band.

The 'Rover' concept does not apply to this section.

Restricted

10GHz transmit output not to exceed 1.0 watt to the antenna.

Moving location during the contest is allowed - the Rover concept is applicable.

5. Certificates will be awarded to the leading station and runner-up in each section, and to the leading portable and fixed stations.
6. The 10GHz championship will be determined based on the best three normalized scores from each entrant over the five sessions. In addition to winners and runners-up certificates for each section, the following certificates/trophies will be awarded:
 - Leading entry in the Open section - The G3RPE Memorial Trophy
 - Leading entry in the Restricted section - The G3JMB Memorial Trophy
 - Certificates to the leading home station and portable station in each section.
 - Certificate to the leading station using radio talkback only.

24GHz G0RRJ Contest Rules

The 5.7GHz, 10GHz and 24GHz contests are being run concurrently grow activity on 5.7GHz and 24GHz. Although they are on the same days, they are completely separate contests. Any band or all bands can be used on any of the 5 days.

1. The general rules shown above apply.
2. There are five, monthly, events from May to September inclusive, and the events run from 0600 to 1800 UTC on a Sunday. Entrants can operate for a period of up to six hours during each event, either as a single period or two separate periods with a minimum off time of 1 hour between.
3. Logs for all events entered should be submitted in the two weeks after each session
4. Moving location during the contest is allowed - the Rover concept is applicable.
5. Certificates will be awarded to the leading station and runner-up in each section, plus the leading home and portable stations, and the leading station using radio talkback.
6. The G0RRJ Memorial Trophy will be awarded to the leading entry in the championship, determined from the best three normalized scores during the series of events.

24GHz Trophy Rules

The 24GHz Trophy contest coincides with the 47GHz and 76GHz - 248GHz events

1. The general rules shown above apply.
2. The contest will run from 0900 to 1700 UTC on a Sunday.
3. Moving location during the contest is allowed - the Rover concept is applicable.
4. Certificates will be awarded to the leading station and runner-up, and the winner will receive the 24GHz Trophy.

47GHz Contest Rules

The 47GHz contest coincides with the 24GHz Trophy, and 76GHz – 1000GHz events.

1. The General Rules listed above apply.
2. The contest will run from 0900 to 1700 UTC on a Sunday.
3. Moving location during the contest is allowed - the Rover concept is applicable.
4. Certificates will be awarded to the leading station and runner-up.

76GHz – 248GHz Contest Rules

The 76GHz – 248GHz contest coincides with the 24GHz Trophy, and 47GHz events

1. The General Rules listed above apply.
2. The contest will run from 0900 to 1700 UTC on a Sunday.
3. Moving location during the contest is allowed - the Rover concept is applicable.
4. The overall score will be determined by adding together the normalized scores from all bands entered.
5. Certificates will be awarded to the leading station and runner-up.

Microwave Field Day

1. The General Rules listed above apply.
2. The contest will run from 0900 to 1700 UTC on a Sunday.
3. Portable stations may enter either the Open or Restricted sections. Fixed stations may enter the Fixed section.
4. The contest will be on the 1.3GHz and 10GHz bands. Talkback can be on any band.
5. Contestants may submit logs for either of the following sections:

Open

No power or antenna restrictions (other than those laid down in the amateur license) on 1.3GHz, 10GHz or on the talkback band.

The 'Rover' concept does not apply to this section.

Restricted

1.3GHz GHz transmit output not to exceed 10 watts to the antenna.

10GHz GHz transmit output not to exceed 1 watt to the antenna.

Moving location during the contest is allowed - the Rover concept is applicable.

Fixed Station

No power or antenna restrictions (other than those laid down in the amateur license) on 1.3GHz, 10GHz or on the talkback band.

6. Contacts between portable stations will attract a multiplier of three. Fixed to portable contacts will have a multiplier of two. Fixed to Fixed contacts will have a multiplier of one. Multipliers will be determined during adjudication, so logs should be submitted with no multipliers applied. An overall score will be derived from the normalized scores

on 1.3GHz and 10GHz where a station enters the same section on both bands.

7. Certificates will be awarded to the leading station and runner-up in each section, on an overall basis and for each band.

Other Microwave Contests

The first weekend of May sees the RSGB 432MHz -248GHz Multiband Contest staged in parallel with the RSGB UHF/SHF Contest. The 10GHz Trophy is run in parallel by the VHF Contest Committee on the Saturday of that weekend, and the rules can be found in the RSGB VHF contest rules.

The first weekend in July is The RSGB Centenary VHF National Field Day which includes 1.3GHz as one of the bands.

The first weekend of October sees the RSGB 432MHz -248GHz Multiband Contest staged in parallel with the Region 1 IARU UHF/SHF Contest. The 1.3GHz Trophy and the 2.3GHz Trophy are run in parallel by the VHF Contest Committee on the Saturday, and the rules can also be found in the RSGB VHF contest rules.

The RSGB also runs a cumulative UK Activity Contest on 1.3GHz on the third Tuesday from 2000-2230 local time, and on 2.3GHz – 10GHz on the fourth Tuesday of every month, from 2000 – 2230 local time.

In addition there are other Continental UHF/SHF Contests held during the year and interested UK microwavers are urged to be active during these. Their details may be found on the Internet.

UKuG Microwave Contest Calendar 2014

Dates	Time UTC	Contest name	Low Band#	Certificates
2-Mar	1000 - 1600	Low band 1.3/2.3/3.4GHz	1	F, P,L,R
13-Apr	1000 - 1600	Low band 1.3/2.3/3.4GHz	2	F, P,L,R
4-May	0800 - 1400	Low band 1.3/2.3/3.4GHz	3	F, P,L,R
25-May	0600 - 1800	1st 5.7GHz Contest		F, P,L,R
25-May	0600 - 1800	1st 10GHz Contest		F, P,L,R
25-May	0600 - 1800	1st 24GHz Contest		F, P,R
8-Jun	1000 - 1600	Low band 1.3/2.3/3.4GHz	4	F, P,L,R
29-Jun	0600 - 1800	2nd 5.7GHz Contest		F, P,L,R
29-Jun	0600 - 1800	2nd 10GHz Contest		F, P,L,R
29-Jun	0600 - 1800	2nd 24GHz Contest		F, P,R
20 -Jul	0900 - 1700	24GHz Trophy / 47 / 76-1000 GHz		
27 -Jul	0600 - 1800	3rd 5.7GHz Contest		F, P,L,R
27 -Jul	0600 - 1800	3rd 10GHz Contest		F, P,L,R
27 -Jul	0600 - 1800	3rd 24GHz Contest		F, P,R
3 -Aug	0900 - 1700	Microwave Field Day		F, P,L
31 -Aug	0600 - 1800	4th 5.7GHz Contest		F, P,L,R
31 -Aug	0600 - 1800	4th 10GHz Contest		F, P,L,R
31 -Aug	0600 - 1800	4th 24GHz Contest		F, P,R
28 -Sep	0600 - 1800	5th 5.7GHz Contest		F, P,L,R
28 -Sep	0600 - 1800	5th 10GHz Contest		F, P,L,R
28 -Sep	0600 - 1800	5th 24GHz Contest		F, P,R
23 -Nov	1000 - 1400	Low band 1.3/2.3/3.4GHz	5	F, P,L,R

Key:	F	Fixed / home station
	P	Portable
	L	Low-power (<10W on 1.3-3.4GHz, <1W on 5.7/10GHz)
	R	Radio Talkback only

UKμG Chip Bank – A free service for members

Happy New Year to all!

A note to say that the chipbank catalogue has just been updated.

The main addition results from the donation of an almost complete 1206 resistor kit. All E24 values from 10 Ohms to 1Meg and E12 values from 1 – 10 Ohms and 1 – 10Meg are now available while stocks last.

There are a few additions, deletions and corrections to the other files in the catalogue on the website.

73, Mike, G3LYP

The catalogue is now on the UKμG web site See www.microwavers.org/?chipbank.htm

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 a component on the site will not be a guarantee of availability of that component.

The service is run as a free benefit to all members and the UK Microwave Group will pick up the cost of packaging and postage.

Minimum quantity of small components supplied is 10. Some people have ordered a single smd resistor!

The service may be withdrawn at the discretion of the committee if abuse such as reselling of components is suspected.

There is an order form on the website with an address label which will slightly reduce what I have to do in dealing with orders so please could you use it.

Also, as many of the components are from unknown sources, if you have the facility to check the value, particularly unmarked items such as capacitors, do so, and let me know if any items have been miss labelled. G4HUP's [Inductance/capacitance meter](#) with SM probes is ideal for this (Unsolicited testimonial!!)

Don't forget it is completely free, you don't even have to pay postage!

73, Mike, G3LYP

GM4CXM in *The Railway Man*

I appear in 6 scenes plus one bit of dialogue in *The Railway Man* starring Colin Firth, Nicole Kidman and Stellan Skarsgard.

This was made whilst I was working as a Supporting Artist but the upgrade in my appearance level by the director and encouragement from other actors convinced me to take acting up seriously and receive professional training.

Here's a pic of me and Nicole Kidman with both of us in costume for the PoW veterans scenes.

73 Ray GM4CXM





EME-2014

Pleumeur-Bodou, France
23–27 August

From Guy Gervais F2CT



Outline programme

- Saturday 23 August : arrivals
- Sunday 24 August : tour with visits to Telecom Museum, Planetarium, Granit-Rose coast and 7 islands
- **Monday 25 August : 1st conference day**
- **Tuesday 26 August : 2nd conference day with gala dinner**
- Wednesday 27 August : departures
- 27 – 30 August : extras for those interested by visiting Brittany and south west France.
- After the Conference 3 extensions stays will be proposed

1 Leisure stay at Belambra TREGASTEL

- August 27 to 30 in half board arrangement

2 Discover SAINT MALO- MONT SAINT MICHEL and others famous places at spa NOVOTEL DINARD

- August 27 to 30 transfer by bus and on half board arrangement
- Airport Rennes
- Train to Paris

3 Come with us to discover BASK COUNTRY – Transfer by bus from TREGASTEL

- 27 to 31 of August
- Stop overnight in LA ROCHELLE August 27
- Stop for lunch in the Bordeaux vineyard August 28
- 3 nights and 2 full days for discovering Bask country, with Corine, F2CT and other EME Hams,
- tapas diner in Spain and others many typical surprises
- Full board arrangement
- Airport Biarritz direct to Paris

All information and prices will be given with the conference program.

The web site is on line www.eme2014.fr/

See also [this link](#) which currently has more information.

UKμG Technical support

Another free service for members!

While many of you will have taken advantage of the “test equipment rooms” that we run at the Round Tables, sometimes that project just cannot wait for the few occasions per year when we hold them. 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, more importantly, 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 email john@g4bao.com

The current list is available at www.microwavers.org/tech-support.htm

Region	TechSupp. volunteer	Facilities
NW England, N Wales	David Wrigley G6GXX 07811776432	Spectrum Analysis to 24GHz Power measurement to 76GHz Freq Measurement to 26GHz Freq sources to 47GHz
Wales	Chris Bartram GW4DGU	NF Measurement to 10GHz Antenna Test range to 24GHz
NE England Yorks and Humberside	Peter Day G3PHO microwaves@blueyonder.co.uk	Available from Spring 2013 Spec Analyser to 24GHz Power measurement to 24GHz (up to 5W on 24GHz), RF sources to 24GHz, direct freq measurement to 3GHz. Setting up/tuning up transverters, etc + general advice.
S and SW England	Brian Coleman G4NNS Paul Marsh M0EYT pjmarsh@uhf-satcom.com	Spectrum analyser to 24GHz Power measurement to 26 GHz Scalar Network analyser and sweeper 2 to 15GHz Antenna test range 2.3, 3.4, 5.7, 10 and 24GHz Waveguide directional couplers for 10GHz and 24GHz Coax couplers 1.3 – 26GHz. Power measurement to 12GHz High power dummy load @ 10GHz (500W) Frequency measurement to 22GHz Spectrum analysers to 6 and 18GHz Frequency generation to 18GHz.
SE England and London	Allan Wyatt G8LSD allan@virtual-museums.org	not known
East Anglia, Essex & Suffolk	Sam Jewell G4DDK sam@g4ddk.com	Spectrum analysis to 24GHz Power measurement to 24GHz Direct frequency measurement up to 3GHz
Herts.	Bryan Harber G8DKK Letchworth, Herts	VNA to 3GHz RF sources to 24GHz
West Anglia East Midlands	John Worsnop G4BAO john@g4bao.com	Spectrum analysis to 24GHz Power measurement to 24GHz Direct frequency measurement up to 18GHz VNA to 1.3GHz RF sources to 24GHz High current PSUs at 12, 28 and 48V
W Midlands	Richard Bown G8JVM richard@g8jvm.com	power measurement to 18 GHz Sig gen to 1.3 GHz but can mix up to 3cms SA to 1.3 GHz but can down convert from 3 cms and probably other lower bands , check NF to 3 cms with IFs of 144 and others , check Freq measurement to 18 GHz, Rb standard
Scotland	John Cooke GM8OTI gm8oti@gmail.com	Lot of mutual assistance in GM via GM microwave reflector including David Anderson GM6BIG and Ian Ropper GM0UHC
N Ireland	Gordon Curry GI6ATZ	

Contests

By John Quarmby G3XDY

The results of the November Low Band suffered from a transcription error on the 2.3GHz table. This has been corrected, and the overall Low Band Championship tables recalculated. My apologies to entrants for this - I need to do more checking next time!

November 2013 Low-band Contest Results

The November Low Band event saw the highest number of entries in the series in 2013, just behind last years entry level. Conditions were unexceptional, but a few new calls appeared in the logs to help maintain interest.

1.3GHz

Congratulations go to Tony Collett G4NBS as the winner on 1.3GHz after a competitive tussle with Mike G8CUL, higher points per contact eventually deciding the outcome. A range of GM, GD and F appeared in the best DX column, mostly worked by aircraft scatter.

2.3GHz

The Combe Gibberlets in the form of G4SJH/P won this band, with Tony G4NBS in runner up slot. G4KCT in York was the best DX for most entrants.

3.4GHz

On this band David & Pete Millard (G8NEY) wrested top place from the Combe Gibberlets group (G4SJH/P) by a small margin, with generally low activity on the band.

Overall

Congratulations to G8NEY as the leading station overall this time, underpinned by winning 3.4GHz, with Neil G4LDR as runner up. The Combe Gibberlets were the leading portable station.

November 2013 Low Band Contest						
Overall						
Pos	Callsign	1.3GHz	2.3GHz	3.4GHz	Overall	
1	G8NEY	736	616	1000	2352	
2	G4LDR	476	846	699	2021	
3	G4SJH/P	0	1000	990	1990	
4	G4NBS	1000	899	0	1899	
5	G8CUL	953	834	0	1787	
6	G3UKV	448	351	798	1597	
7	G3TCU	798	0	0	798	
8	G3TCT/P	521	0	0	521	
9	M5MUF	420	0	0	420	
10	G0NFH	86	0	0	86	
11	GM8IEM	79	0	0	79	
1.3GHz						
Pos	Callsign	Locator	QSOs	Score	ODX Call	ODX km
1	G4NBS	JO02AF	20	3923	GM0USI	497
2	G8CUL	IO91JO	22	3738	F6DKW	398
3	G3TCU	IO91QE	16	3129	G4KCT	308
4	G8NEY	IO81VK	18	2889	G4KCT	289
5	G3TCT/P	IO80NV	10	2044	F6DKW	435
6	G4LDR	IO91EC	11	1868	G4KCT	318
7	G3UKV	IO82RR	12	1758	G3XDY	265
8	M5MUF	IO92JP	11	1648	GD8EXI	284
9	G0NFH	IO81QM	4	336	G4NBS	200
10	GM8IEM	IO78HF	1	310	GM3WIL	310
2.3GHz						
Pos	Callsign	Locator	QSOs	Score	ODX Call	ODX km
1	G4SJH/P	IO91GI	11	1757	G4KCT	289
2	G4NBS	JO02AF	10	1579	G3UVR	245
3	G4LDR	IO91EC	9	1486	G4KCT	318
4	G8CUL	IO91JO	10	1466	G4KCT	260
5	G8NEY	IO81VK	7	1083	G4KCT	289
6	G3UKV	IO82RR	4	616	G4LDR	192
3.4GHz						
Pos	Callsign	Locator	QSOs	Score	ODX Call	ODX km
1	G8NEY	IO81VK	5	677	G3XDY	246
2	G4SJH/P	IO91GI	5	670	G4ALY	216
3	G3UKV	IO82RR	4	540	G4SJH/P	170
4	G4LDR	IO91EC	4	473	G4ALY	195

Low Band Championship 2013

This year sees the first time that an overall Low Band Championship has been tabulated from the results of the five contributing events. An extra event was added in October this year, but will be moved to May next year to fit better with the coincident RSGB events.

Entry levels overall were down on 2012, showing some recovery in the last event of the year.

Conditions were unexceptional, with the best DX achieved in the events that coincided with major European contests in March, June and October. The extra activity from the continent appears to be a welcome bonus.

1.3GHz

The “Combe Gibberlets”, named after their portable location, appeared under several different callsigns during the year, and won two sessions and were runners up in a third to claim overall victory on the band. Tony Collett G4NBS was in the runner up spot also with two wins and a second place, making for a tight finish.

2.3GHz

Positions were reversed on this band, with Tony G4NBS winning three sessions to gain an unassailable lead from the “Combe Gibberlets” who won one session and were runners up in three others.

3.4GHz

The “Combe Gibberlets” take the top spot on 9cm with two session wins and two runners-up spots. Runner up is Martyn G3UKV with one win and two second places.

Overall

Top of the overall table is the “Combe Gibberlets” group with a substantial lead over Tony Collett G4NBS, who was the only entrant active in all five sessions, and managed to take the runner up position using only two of the three bands available.

Congratulations to the winners and runners up mentioned above, who will all receive certificates for their achievements. tion this time out but won 2.3GHz and came second on 3.4GHz.

73 John G3XDY
UK Microwave Group Contest Manager

Low Band Championship 2013							
	Final tabulation, the best three events count towards the total						
Overall							
Pos	Callsign	3/3/13	4/21/13	6/2/13	10/6/13	11/24/13	TOTAL
1	Combe Gibberlets	2541	2744	0	2799	1990	8084
2	G4NBS	1855	1557	1689	2000	1899	5754
3	G3UKV	495	1895	2293	0	1246	5434
4	G4LDR	1538	1463	0	870	2021	5022
5	G4BRK	0	779	3000	1102	0	4881
6	G8CUL	0	0	0	1805	1787	3592
7	G8NEY	0	0	0	0	2352	2352
8	GW8ASD	827	0	0	0	0	827
9	G3TCU	0	0	0	0	798	798
10	G3TCT/P	0	0	0	0	521	521
11	G8AIM	0	507	0	0	0	507
12	M5MUF	0	0	0	0	420	420
13	G8DTF	66	0	0	245	0	311
14	M1MHZ	0	286	0	0	0	286
15	G8CQA/P	0	99	0	0	0	99
16	GW3TKH/P	0	88	0	0	0	88
17	G0NFH	0	0	0	0	86	86
18	GM8IEM	0	0	0	0	79	79
19	G6GVI	53	0	0	0	0	53
20	G7SKR	0	29	0	0	0	29

1.3GHz							
Pos	Callsign	3/3/13	4/21/13	6/2/13	10/6/13	11/24/13	TOTAL
1	Combe Gibberlets	1000	1000	0	896	0	2896
2	G4NBS	855	557	867	1000	1000	2867
3	G4BRK	0	246	1000	438	0	1684
4	G8CUL	0	0	0	835	846	1681
5	G3UKV	192	380	664	0	448	1492
6	G4LDR	444	480	0	160	476	1400
7	G3TCU	0	0	0	0	798	798
8	G8NEY	0	0	0	0	736	736
9	GW8ASD	585	0	0	0	0	585
10	G3TCT/P	0	0	0	0	521	521
11	M5MUF	0	0	0	0	420	420
12	M1MHZ	0	286	0	0	0	286
13	G8AIM	0	140	0	0	0	140
14	G8CQA/P	0	99	0	0	0	99
15	G0NFH	0	0	0	0	86	86
16	GM8IEM	0	0	0	0	79	79
17	G6GVI	53	0	0	0	0	53
18	G7SKR	0	29	0	0	0	29
19	GW3TKH/P	0	11	0	0	0	11
2.3GHz							
Pos	Callsign	3/3/13	4/21/13	6/2/13	10/6/13	11/24/13	TOTAL
1	G4NBS	1000	1000	822	1000	899	3000
2	Combe Gibberlets	541	828	0	903	1000	2731
3	G3UKV	303	515	946	0	351	1812
4	G8CUL	0	0	0	970	834	1804
5	G4LDR	421	303	0	367	846	1634
6	G4BRK	0	218	1000	290	0	1508
7	G8NEY	0	0	0	0	616	616
8	G8DTF	66	0	0	245	0	311
9	GW8ASD	242	0	0	0	0	242
3.4GHz							
Pos	Callsign	3/3/13	4/21/13	6/2/13	10/6/13	11/24/13	TOTAL
1	Combe Gibberlets	1000	916	0	1000	990	2990
2	G3UKV	0	1000	683	0	798	2481
3	G4LDR	673	680	0	343	699	2395
4	G4BRK	0	315	1000	374	0	1689
5	G8NEY	0	0	0	0	1000	1000
6	G8AIM	0	367	0	0	0	367
7	GW3TKH/P	0	77	0	0	0	77



Activity News : December

By Bob Price G8DTF

Please send your activity news to:

scatterpoint@microwavers.org

Introduction

This month we have some reports from December of a lift on the 11th/12th as well as the final session of the 23cm UKAC contest and there was no SHF UKAC this month. Some pretty bad weather has limited activity this month.

Beacons and Reverse Beacons

From Máximo EA7FGJ IM67

EA2TZ/B is on the air again, at the same location, same aerial and a little more of power.

The nominal frequency is 1296.855 MHz.

From John G3XDY JO02

EA2TZ was heard here in JO02OB (1009km) at 16:25 on the 12th December peaking just above the noise, but positive ID on callsign and locator. Frequency at the time was 1296851.5 but it was slowly drifting HF whilst I was listening.

Congratulations on a fine beacon, I'm looking forward to listening for the 13cm one soon.

From Bob G8DTF IO83

I am finding the reverse beacons really useful in monitoring conditions. There are three now that I am aware of Mow Cop and Alicante on 3cm and SUWS on 70cm and 23cm.

On the 11th of December the SDR at Mow Cop was showing a number of strong beacons GB3SEE, GB3SCX, GB3CCX, GB3KBQ as well as the normal GB3XGH and GB3LEX. Unfortunately I was not able to get on the air because of other activities.

From John G0API IO80

I was in the shack during parts of the recent tropo lift over 11 and 12th December.

Heavy ground fog visible and classic high with a few millibars decent. According to the paper this was Radiation fog - "thermal radiation means heat leaves the ground and rises high up cooling the air close to the surface and making the moisture within the air condense as fog".

Six beacons were seen on 10GHz from IO80XS - GB3LEX, SEE, KBQ, SCX, CCX and best DX PI7ALK, which was audible over 36 hours and at times peaking at 30db above noise in a 6Hz bandwidth on SDR-IQ. At one stage I could see CCX back scattering from the East whilst peaked on GB3SEE/PI7ALK - I had 4 beacons on screen. (CCX is due North of me ...and I use a 60cm offset dish@ 5m agl).

PI7ALK is my best terrestrial 10GHz DX in last 20 years and I now realise it was this beacon that I heard in rapid QSB over a misty sea path in excess of 200km using my torch body mounted, hand held barefoot Octagon LNB and scanner, from Cromer North Norfolk this September - it's some way off nominal frequency at 10368.9018MHz (10368.930MHz shown on BeaconSpot).

On 23cm there were 9 beacons seen over the 2 day period - GB3FM and MHL were very strong - in excess of 40db above noise floor, with even the carrier from what I think is the old GB3FRS at 30db. In total I heard MHL, FRS, FM, PI7ALK, DB0VC(941km), OZ5SHF(973km), PI7QHN(very weird FSK!), PS and DUN.

December 23cm UKAC

From John G3XDY JO02

17/12/13 The 1.3GHz UKAC/NAC saw the following highlights on aircraft scatter:

DL3YEE	JO50LX
DG5ACX/P	JO52IJ
DL2ALF	JO50IW
DL0VV	JO64AD
OZ1FF	JO45BO
DJ5AR	JN49CV
F8BRK	IN99VF
GM4JR	IO85FB
GI6ATZ	IO74AJ
DJ5BV	JO30KI
OZ9KY	JO45VX

Plus of course your good self, G8DTF in IO83SM and a few other IO83 stations.

A total of 43 stations in 22 locator squares were worked during the evening.

From Tony G4NBS JO02

Last 23cm UKAC was a bit of a challenge here as once again my system was being overloaded making the preamp unusable resulting in me being somewhat deaf. Signals also seemed down anyway and it was hard to even hear any activity when tuning around, resulting in my worst score since Feb 2012, even then I still had 37 QSO in 14 different Locators. Best DX was Ray GM4CXM with nice A/S signal enabling greetings to be exchanged on SSB even with my deaf RX! Despite hearing G3VCA in IO93 at the start I never worked that square or JO03 so the score could have been somewhat different...

Initial tests seem to indicate that HD DTV channels switched on, on the 12th of December have been the final straw for my RX so looks like I was lucky the lift was the previous day!

Bit late reporting - 13cm November UKAC was blessed with what I thought were the worst conditions I'd found on the band - plenty of activity so 18 QSO in 10 Locators, but usually workable signals were just not audible, with others very much a struggle. It was nice to work G4WLC/P in IO81 and G4EAT in JO01 off the back of my aerial first time on 13cms.

The November LO Band activity on 24th seemed to have conditions slightly up, with good activity from IO81 on 23cms. Considering I forgot the clocks had changed (hour late switching on....) and not linked to a major contest I thought activity was good, with 21 QSO including several new (to me) stations. Best DX was GM0USI.

13cms made 10 QSOs, best DX being G3UVR. Good to work G3LRP for 1st time on 13cms.

From Bob G8DTF IO83

I was on for the 23cm for the UKAC on the 17th December. Something has happened to my PA (which never worked very well in the first place). I used to have about 3.5W output, but this seems to have dropped to 1.5W during the November 23cm UKAC. I will have to replace it with something better.

I did manage to work quite a few active stations in IO83 (G4MVU, G1SWH, G3REQ, G8HXE/P, G3UVR, M1DDD/P, G7ROM, G3TDH, M0UFC/P, G4JLG, GW8ASD, G6GVI and G4NTY). I also managed to work GW4BVE/P, G6WRW/P and G3SMT in IO82, G8OHM in IO92, G8BUN in IO93, G8CUL and G0MJW in IO91, G3VKV in IO81 and to my great surprise G3XDY in JO02 for my best DX of the evening at 296km. I heard others including Ray GM4CXM, but my 1.5W was just not making it happen.

Other activity

From John G3XDY JO02

Some very nice tropo over the past couple of weeks, here is the pick of the crop worked here:

1.3GHz

3/12/13		
DL7QY	JN59BD	
OZ6OL	JO65DJ	
SP1JNY	JO73GL	
F6CIS	IN94WL	
OE5VRL/5	JN78DK	1013km
11/12/13		
SM7GVF	JO77GA	1021km
DC6UW	JO44VJ	
OZ3ZW	JO54RS	
SP4MPB	KO03HT	1313km
LY2FN	KO14XV	1533km New #
SP1JNY	JO73GL	
DC7QH	JO62QN	
YL3AG	KO06WK	1424km
SP5QAT	KO02LB	1348km

Beacons heard included SK4BX (JO79LJ) 1184km, and on 12th Dec EA2TZ (IN93BF) 1009km

2.3GHz

3/12/13		
DL7QY	JN59BD	
11/12/13		
OZ3ZW	JO54RS	
SP4MPB	KO03HT	1313km New # and DXCC
DJ8MS	JO64AC	
12/12/13		
F5DQK	JN18GR	
DK2ZF/P	JO43WJ	

3.4GHz

11/12/13		
OZ6OL	JO65DJ	59++

5.7GHz

11/12/13		
OZ3ZW	JO54RS	

10GHz

11/12/13		
SM6AFV	JO67GQ	957km
OZ1LPR	JO44UW	

Tests were also undertaken with other stations, but signals were just too weak to complete QSOs with SP5XMU and LY2BJ on 23cm.

Despite good signals on 23cm, nothing was heard from SP1JNY on 13cm.

Many beacons were very loud, but a few with not so good signals, e.g. modulation from SMPS ripple at

several 10's of kHz resulting in sprogs at that spacing spreading over 100kHz or more of the band, audible from over 600km away in one case.

From Graham G3TCT IO81

Just a few reports from here in the wild West (very wild today!) in IO81QC. Not much compared with East coast stations.

All 1296MHz

3/12/13 1544z	HB9EME/b	529	823km
3/12/13 1605z	DB0LTG/b	529	715km
11/12/13 1407z	DK1VC	wkd JO31rg	702km
11/12/13 ~1500	DB0LTG/b	529	715km
12/12/13 0918z	HB9EME/b	549	823km

From Tony G4NBS JO02

Seasons' Greetings - not been as active as would like here, but finally coincided with good conditions on 11th December.

Turned on at 1925 to find SP1JNY (JO73) calling CQ on 1296.2 (new sq)

Then SP4MPB (KO03) in CW for new square and new ODx for me at 1383km

DK5WO (JO30)

PA0GRB (JO23) 59 off back of his beam!

OZ6OL (JO65)

SM7ECM (JO65)

OZ3ZW (JO54) new Square

DL1SUZ (JO53) on CW

and SP1FJZ (JO84) also CW & new Square (no 88) for my last 23cm QSO at 2155 although 70cms was still active for another hour.

Only 13cm QSO was with SM7ECM making square no 31.

I did listen on 3rd after 2M UKAC, but couldn't hear any of the DX that John XDY had worked....

From Guy F2CT IN93

On Thursday morning 12th December, I conducted reception tests of different 13cm, 6cm and 3cm beacons in increments of 200m.

09:00utc : 200m asl

13cm	GB3SCS/IO80	529
6cm	GB3SCC/IO80	559
3cm	GB3SCX/IO80	519

The F1ZAP/IN88 beacons 3cm and 6cm F1ZAO/IN88 were 599+

09h30utc : 1000m asl

The GB3 beacons were received at 599+, but the one on 5760.905 was the strongest. The duct was well over 800m along the IN93/IO80 axis. Ralph G4ALY/IO70 was very strong on all three bands.

11h00utc

The axis of the duct had shifted slightly to the East.

13cm : QSO with G4EAT/JO01 559/539 with 5w! QRB 1000km

6cm : ditto

Tests at more than 1000km with G4BAO on 3cm and DL7QY on 3 bands were negative.

I dismantled the station and went back to work at 13h00utc. The GB3 beacons in IO80UU were still QRO, but the duct was rather more favourable for G towards Scandinavia and Eastern Europe.

From Ralph G4ALY IO70

The Tropo here was first noticed at 1407 on 11th of December by receiving the 23cm beacon F5ZAN/B in JN12 at 1044km for the first time.

23cm

F1VL

F6APE IN97QI 435km

3cm

F6DRO JN03TJ at 903km

F6AJW/P IN93GX at 807km

F6APE IN97QI

F9OE IN87QG

F2CT/P IN93ID 845km

6cm

F2CT/P IN93ID 845km

F6APE IN97QI 435km

13cm

F2CT/P IN93ID 845km

F6APE IN97QI 435km

Absolutely nothing heard to the East or Northeast.

... and finally

I want to encourage you get on the air as often as possible and report your activity to clearly document use of the amateur microwave bands. This means not just DX, but also local activity with low power or WB equipment. Good DX in 2014.

Please send your reports to

Scatterpoint@ukmicrowaves.org, remember the deadline is the 1st of the month.

73

Bob Price G8DTF

Please note that John Worsnop G4BAO will be dealing with Activity News while Bob is indisposed. We send Bob 73s.
[Ed.]

RSGB & UKμG Contests 2013

Month	Contest name	Certificates	Date 2014	Time GMT	Notes
Jan	1.3GHz Activity Contest	Arranged by RSGB	21-Jan	2000 - 2230	RSGB Contest
Jan	2.3GHz+ Activity Contest	Arranged by RSGB	28-Jan	2000 - 2230	RSGB Contest
Feb	1.3GHz Activity Contest	Arranged by RSGB	18-Feb	2000 - 2230	RSGB Contest
Feb	2.3GHz+ Activity Contest	Arranged by RSGB	25-Feb	2000 - 2230	RSGB Contest
Mar	Low band 1.3/2.3/3.4GHz	F, P,L,R	2-Mar	1000 - 1600	First 4 hours coincide with IARU event
Mar	2.3GHz EME	Arranged by DUBUS	8-Mar to 9-Mar	0000 - 2359	DUBUS EME Contest
Mar	1.3GHz Activity Contest	Arranged by RSGB	18-Mar	2000 - 2230	RSGB Contest
Mar	2.3GHz+ Activity Contest	Arranged by RSGB	25-Mar	2000 - 2230	RSGB Contest
Apr	5.7GHz EME	Arranged by DUBUS	5-Apr to 6-Apr	0000-2359	DUBUS EME Contest
Apr	Low band 1.3/2.3/3.4GHz 2	F, P,L,R	13-Apr	1000 - 1600	
Apr	1.3GHz Activity Contest	Arranged by RSGB	15-Apr	1900 - 2130	RSGB Contest
Apr	2.3GHz+ Activity Contest	Arranged by RSGB	22-Apr	1900 - 2100	RSGB Contest
May	10GHz Trophy	Arranged by RSGB	3-May	1400 - 2200	Saturday, to coincide with IARU
May	432MHz & up	Arranged by RSGB	3-May to 4-May	1400 -1400	RSGB Contest
May	3.4GHz EME	Arranged by DUBUS	3-May to 4-May	0000 - 2359	DUBUS EME Contest
May	Low band 1.3/2.3/3.4GHz 3	F, P,L,R	4-May	0800 - 1400	Aligned with RSGB/IARU event
May	1.3GHz Activity Contest	Arranged by RSGB	20-May	1900 - 2130	RSGB Contest
May	10GHz & Up EME	Arranged by DUBUS	24-May to 25-May	0000-2359	DUBUS EME Contest
May	5.7GHz/10GHz/24GHz	F, P,L,R	25-May	0600-1800	
May	2.3GHz+ Activity Contest	Arranged by RSGB	27-May	1900 - 2130	RSGB Contest
May/Jun	1.2GHz EME	Arranged by DUBUS	31-May to 1-Jun	0000 - 2359	DUBUS EME Contest
Jun	Low band 1.3/2.3/3.4GHz 4	F, P,L,R	8-Jun	1000 - 1600	Aligned with some Eu events
Jun	1.3GHz Activity Contest	Arranged by RSGB	17-Jun	1900 - 2130	RSGB Contest
Jun	2.3GHz+ Activity Contest	Arranged by RSGB	24-Jun	1900 - 2130	RSGB Contest
Jun	5.7GHz/10GHz/24GHz	F, P,L,R	29-Jun	0600-1800	
Jul	VHF NFD (1.3GHz)	Arranged by RSGB	5-Jul to 6-Jul	1400 - 1400	RSGB Contest
Jul	1.3GHz Activity Contest	Arranged by RSGB	15-Jul	1900 - 2130	RSGB Contest
Jul	24GHz - 248GHz Contest	O	20-Jul	0900 - 1700	
Jul	2.3GHz+ Activity Contest	Arranged by RSGB	22-Jul	1900 - 2130	RSGB Contest
Jul	5.7GHz/10GHz/24GHz	F, P,L,R	28-Jul	0600-1800	
Aug	Microwave Field Day	O,L	3-Aug	0900 - 1700	
Aug	1.3GHz Activity Contest	Arranged by RSGB	19-Aug	1900 - 2130	RSGB Contest
Aug	2.3GHz+ Activity Contest	Arranged by RSGB	26-Aug	1900 - 2130	RSGB Contest
Aug	5.7GHz/10GHz/24GHz	F, P,L,R	31-Aug	0600-1800	
Sep	1.3GHz Activity Contest	Arranged by RSGB	16-Sep	1900 - 2130	RSGB Contest
Sep	2.3GHz+ Activity Contest	Arranged by RSGB	23-Sep	1900 - 2130	RSGB Contest
Sep	ARRL Microwave EME	Arranged by ARRL	27-Sep to 28-Sep	0000 - 2359	ARRL EME 2.3GHz & Up
Sep	5.7GHz/10GHz/24GHz	F, P,L,R	28-Sep	0600-1800	
Oct	1.3 & 2.3GHz Trophies	Arranged by RSGB	4-Oct	1400 - 2200	RSGB Contest
Oct	432MHz & up	Arranged by RSGB	4-Oct to 5-Oct	1400 - 1400	IARU/RSGB Contest
Oct	1.3GHz Activity Contest	Arranged by RSGB	21-Oct	1900 - 2130	RSGB Contest
Oct	ARRL EME 50-1296MHz	Arranged by ARRL	25-Oct to 26-Oct	0000 - 2359	ARRL EME Contest
Oct	2.3GHz+ Activity Contest	Arranged by RSGB	28-Oct	1900 - 2130	RSGB Contest
Nov	ARRL EME 50-1296MHz	Arranged by ARRL	15-Nov to 16-Nov	0000 - 2359	ARRL EME Contest
Nov	1.3GHz Activity Contest	Arranged by RSGB	18-Nov	2000 - 2230	RSGB Contest
Nov	Low band 1.3/2.3/3.4GHz 5	F, P,L,R	23-Nov	1000 - 1400	
Nov	2.3GHz+ Activity Contest	Arranged by RSGB	25-Nov	2000 - 2230	RSGB Contest
Dec	1.3GHz Activity Contest	Arranged by RSGB	16-Dec	2000 - 2230	RSGB Contest

Key:	F	Fixed / home station
	P	Portable
	L	Low-power (<10W on 1.3/2.3/3.4GHz, <1W on 5.7/10GHz)
	R	Radio Talkback

Main changes from 2013 calendar

1. ARRL/DUBUS EME updated
2. Low Band event moved from October to May
3. No separate radio talkback sections

73 John G3XDY, UKUG Contest Adjudicator

[UKuG Contest Portal](#)

The latest [EME calendar](#) is available from DL7APV's website

Events calendar

2014

Jan 18	Heelweg	www.pamicrowaves.nl/
Feb 15	GHz-Tagung Dorsten	www.ghz-tagung.de/
Apr 12	CJ-2014, Seigy	cj.ref-union.org/
April 26-27	Martlesham Round Table	mmrt.homedns.org/
May 16-18	Hamvention, Dayton	www.hamvention.org/
Jun 22	RAL Roundtable	
Jun 27-29	Ham Radio, Friedrichshafen	www.hamradio-friedrichshafen.de/
July 1	Scatterpoint 10th Anniversary	www.scatterpoint.org/
July ??	Finningley Round Table	
July 25-27	AMSAT Colloquium, Holiday Inn, Guildford	www.amsat-uk.org/colloquium/
July 23- Aug 3	Commonwealth Games, Glasgow	www.glasgow2014.com/
August 23-26	EME2014, Pleumeur-Bodou near Lannion	www.eme2014.fr
September ??	Crawley Round Table	
Sept 19-21	59.UKW Tagung, Weinheim	www.ukw-tagung.de/
Sept 26-27	National Hamfest	www.nationalhamfest.org.uk/
Oct 6-9	European Microwave Week, Rome	www.eumweek.com/
Oct 10-12	RSGB Convention	www.rsgb.org/rsgbconvention/
Oct 18-19	Microwave Update, Rochester, New York	www.microwaveupdate.org/

2015

Apr 11	CJ-2015, Seigy	cj.ref-union.org/
May 15-17	Hamvention, Dayton	www.hamvention.org/
Sep 28 – Oct 2	European Microwave Week, Paris	www.eumweek.com/

2016

May 20-22	Hamvention, Dayton	www.hamvention.org/
Oct 4-7	European Microwave Week, London	www.eumweek.com/