

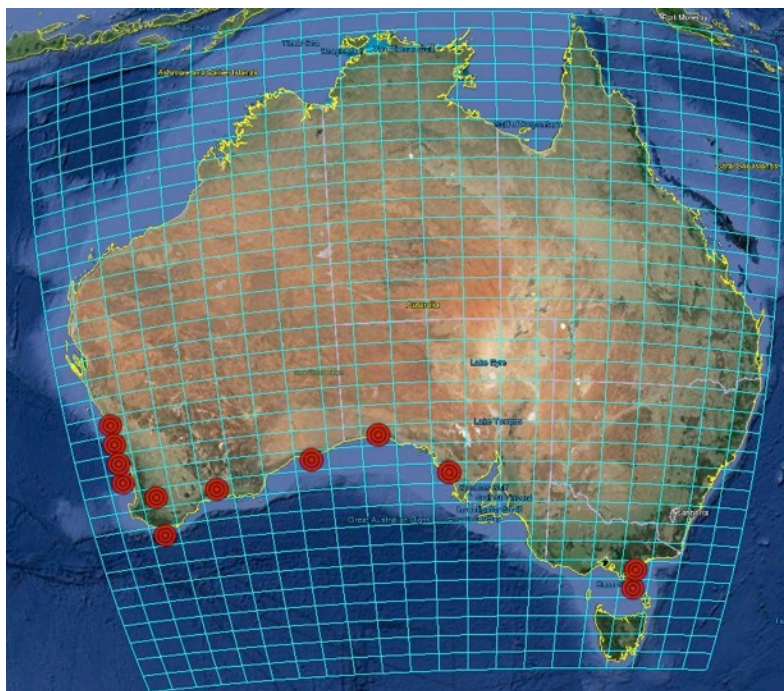


scatterpoint

February 2014

Published by the UK Microwave Group

10GHz EME tests with VK7MO
Charlie Suckling G3WDG



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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

With my Secretary's hat on: early warning of the **UKµG AGM in April**. Meanwhile, **nominations for the Committee, please** (see page 4) and **Award/Trophy recipients** (page 9).

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

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

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UK MICROWAVE GROUP

ANNUAL GENERAL MEETING – SUNDAY 27th April 2014

Notice is hereby given that the 2014 Annual General Meeting of the UK Microwave Group will be held at 10:00am on Sunday, 27 April 2014 as part of the Martlesham Microwave Round Table event which takes place over that weekend.

This will include the election of the officers of the committee and the presentation of the Chairman's, Secretary's and Treasurer's Annual Reports. We are looking for enthusiastic volunteers to join our committee and help shape the future of UKμG.

This year the following Committee officers/members are standing down.

Martin Richmond-Hardy G8BHC, General Secretary

Ray James GM4CXM

We are therefore interested to hear from anyone who would be willing to take on these vital UKμG committee positions. If any UKμG member is interested in the office then please submit your name (and the name of your seconder) to the UKμG Chairman, Chris Bartram GW4DGU, as soon as possible.

Note: the Secretary's task is made less onerous by the fact that there is a separate post of Membership Secretary, currently held by Bryan Harber G8DKK which deals with all day-to-day membership issues.

If you are interested in joining the committee, have any agenda or AOB items for the AGM then please contact the UKμG Secretary,

Martin Richmond-Hardy G8BHC by 31 March 2014 by email to secretary@microwavers.org.

73 Martin Richmond-Hardy G8BHC
General Secretary UK Microwave Group

For Sale

HP5352B Microwave Frequency Counter 10hz - 40GHz. Nice condition, working OK - £750 ovno

HP8620C Microwave sweep oscillator comes complete with 8 plug-ins all with their correct scales. There is also a calibration scale included.

Modules cover 17-22GHz (2 off), 5.9-12.4GHz, 0.1-2GHz, 1.8-4.2GHz, 3.2-6.5GHz, 5.9-9GHz, 1.7-4.3GHz.

Asking price for all the above - £800 ovno

Would be pleased to answer any questions 07801 799855. Items located near Stowmarket in Suffolk.

Martin G3ZQU



Draft Programme

Saturday 26th April 2014

- 10:00 Truck Stop Breakfast
- 12:00 Doors Open
- Refreshments available from 12:00
(drinks, biscuits & sandwiches)
- 13:00 Welcome & opening
- 13:15 Workshop: Reflow Soldering
Surface Mount Components for
the Radio Amateur
- 16:55 Close
- 19:30 Meet for Dinner at 20:00 at the
Cameo Hotel Ipswich

Sunday 27th April 2014

- 09:00 Doors Open
- 09:50 Welcome & Opening
- 10:00 UKuG AGM – GW4DGU
Trophy presentations
- 10:45 Refreshments
- 11:15 Digital TV update – G8GTZ
- 12:00 Dwingeloo Dish – coming back
on line – PA3FXB
- 12:45 Lunch break
- 13:45 Moglarp Super Station
(SK7MW) SM7EYW
- 14:30 Millimetre Wave Operation in
the UK – G4EAT
- 15:15 UKuG Contest Forum – G3XDY
- 15:45 Close

Testing

Test equipment will be available throughout Sunday, subject to qualified personnel to operate the test and measurement equipment (yes, staff would like to attend the talks too!). Noise figure testing on many bands.

Travel & Accommodation

The talks and testing will be held at BT Adastral Park, Martlesham Heath, Suffolk, IP5 3RE. This is located a few yards off the A12, just east of Ipswich. [CLICK](#) for map.

The evening meal and accommodation will be at:

[Cameo Hotel Copdock](#), London Road,
Ipswich, Suffolk, IP8 3JD, England.

Accommodation costs are similar to last year.

Please contact the hotel on 01473 209988 to book accommodation, quoting code BK62261. Rooms are available at £65 for single occupancy and £70 for double/twin. These rates include breakfast. Booking via this route permits cancellation or amendment of bookings until the day of arrival without penalty. Online bookings may not have any flexibility.

Payment for the meals: Payment for the dinner should be made at the time of booking, by Paypal, at least 1 week before the event. Please send £24 to Martlesham Radio Society (g4mrs@btinternet.com).

Visitors from abroad may pay cash at the dinner by previous arrangement with [John G3XDY](#)

MMRT Dinner Menu Saturday 26 April

Price £24.00 per person

Starters

Roasted Tomato and Vegetable soup
"The Cameo" Prawn Cocktail, Brown Bread and Butter
Duo of Melon, Summer Berry Compote, Lemon Sorbet

Mains

Roast Turkey, Trimmings and pan Gravy
Roasted Topside of Beef, Homemade Yorkshire Pudding,
Rich Pan Gravy
Baked Salmon Fillet, Green Herb Crust, White Wine Sauce
Roasted Bell Pepper Stuffed with Spicy Veg Cous Cous

Desserts

Chocolate Brownie, Chocolate Sauce
Homemade Apple Crumble Tart, Creamy Custard
Selection of Cheese and Biscuits

Going Dutch – again

By Dave Powis G4HUP

A couple of Fridays ago, Sam G4DDK, John G4BAO, and I started what has become our annual trip – attending the Heelweg Microwave day, at the Café Vos in Westendorp, near the German border.

We have been making this journey for a few years now – first by plane, and latterly by ferry, taking one of our own cars. Although it's a bit more expensive this way, we have much more independence in how we move about – last year we were able to take up the invitation to visit the newly re-furbished 25m dish at Dwingeloo. It also means we can both take, and bring back, rather more!

After leaving the ferry refreshed at 07:00 local in Hoek van Holland, the 100 minute drive to Westendorp was relatively uneventful, with the noted exception that my SatNag seemed to have latched onto a different Westendorp. With the experience of having been there before, we survived this – but on our arrival the instrument was telling us we still had another 45 minutes to drive!

In the last couple of years the event seemed a bit quieter than usual – but it was nice this year to see the hall well occupied – probably the highest attendance recorded. As usual, there were multiple measurement bays set up -10 this year, each with an 'expert' driver, and notice on the board clearly explaining what facilities were available at each station. They all remained busy throughout the day – this is Heelweg's strong point: it is the largest event focussed on measurements that I have seen anywhere. Trading is secondary to the measurements!



Hans PH0V and Sam G4DDK – judging by Sam's expression, he 'wouldn't have done it that way'!

Attendance by UK ops was as strong as we have seen it too – in addition to myself, Sam and John, there was Kevin (also trading!), Ian G4EZP and David GM4OGI, who is currently working in Dusseldorf 'just down the road'.

After the event we went to the traditional Chinese Meal in Varseveld, the local town, at the Fu 'Hing Chinese (I'm sure there's a k missing there, somewhere?). As with the event, this also seems to be getting larger each year, taking up three large tables this time – there were even enough vegetarians to warrant their own table! But not a 2CV in sight (Jasper Carrot, 1970's!)



General view of measurement benches



Kevin G3AAF, Hans PA0EHG, Ruud PE1BTV and John G4BAO deep in discussion.

We elected to stay in an hotel locally and take the Sunday evening ferry back, having made arrangements for Sunday, but it would have been entirely feasible to get back to Hoek van Holland in time to catch the overnight boat, and enjoy Sunday lunch at home.....

See you next year?

73, Dave G4HUP

RAG 2014, National Space Centre, May 17

By Paul Hyde G4CSD

The BAA's Radio Astronomy Group will be holding its 2014 General Meeting at the National Space Centre, Leicester on Saturday 17th May. This has been a popular event in the past with the two previous meetings selling out before the day, showing the continuing interest in amateur radio astronomy. The event will include a range of talks from both professional and amateur speakers on radio astronomy and associated geophysics topics such as Space Weather.

We will be keeping the same format with two keynote speakers supported by a number of presentations from members of the Group. The two keynote speakers this year will be Prof Paul Cannon from the University of



The audience at RAG 2012
Photo by Diane Swan



Birmingham who will talk about the physics associated with solar superstorms and how often they occur. The talk will then go on to describe a number of technological impacts of solar superstorms and assess how much we can mitigate their impact. Dr Klaas Wiersema (University of Leicester) will describe how new radio telescope technology enables the exploration of the "transient" radio Universe, from the mysterious millisecond duration "fast radio bursts" to the energetic afterglows of gamma-ray bursts (GRBs) which are sometimes visible for years. The presentation will show how new technology is allowing us to study afterglows and other transients in a completely new way.

Supporting papers will include: an ultra-low cost Hydrogen Line radio telescope (Peter East); the modelling of our local galactic topology (Gordon Dennis); the design of an Arduino-based magnetometer (Jonathan Rawlinson); making and analysing observations with Starbase (Laurence Newell); some limitations of amateur radio astronomy (David Morgan); and reports on developments at EAARO (Jason Williams) and the Harold Clayton Observatory (Dave James).

Tickets for the event cost £12 for BAA members and £15 for non-members and can be purchased by phone, e-mail or postal application via the BAA office. An order form can be downloaded from the BAA RAG website at <http://www.britastro.org/radio/>. Tickets include free parking at the NSC and free admission to the main attraction, excluding the Planetarium show. Tea and coffee will be provided during the breaks but lunch is not included. Delegates are welcome to bring their own lunch or there is an NSC shop selling a range of sandwiches and other refreshments. It would help the NSC if you could also record the number of people in your party that are likely to use this facility when you book tickets.

Paul Hyde G4CSD

radiogroup@britastro.org

Trophies: Call for Nominations

This is for the second time of asking

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

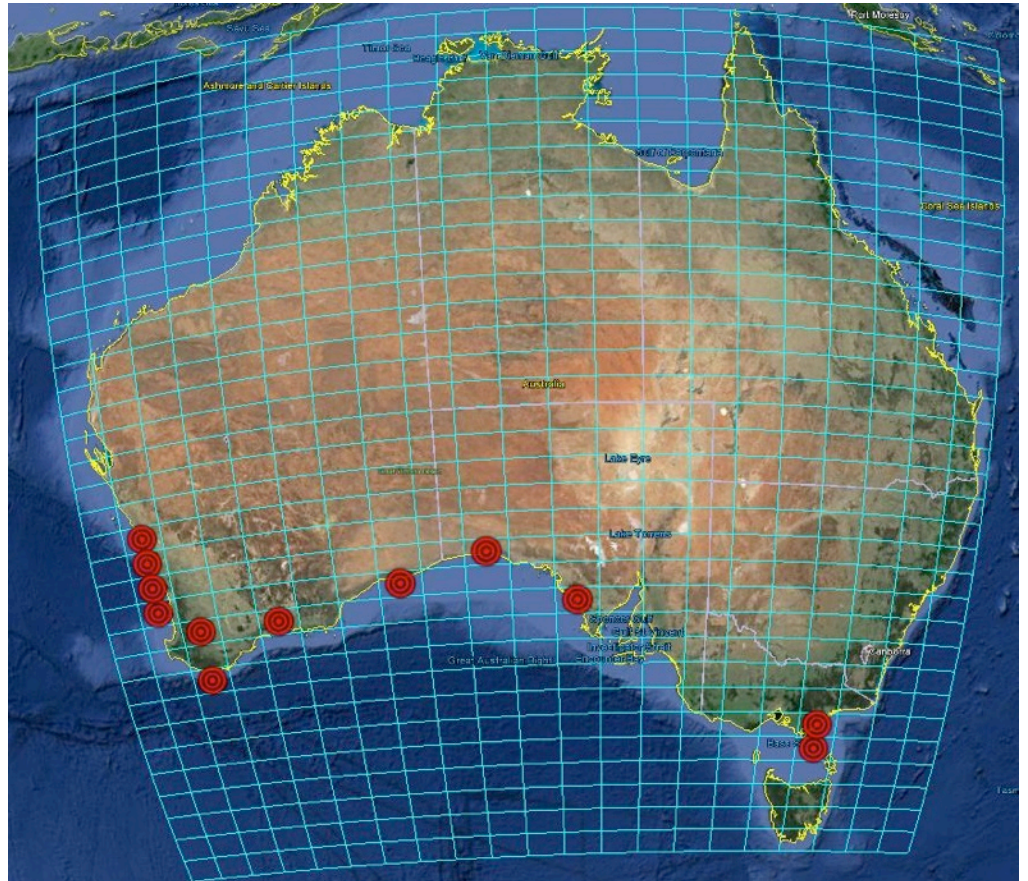
Thanks to Dave G4HUP I have just added a 'Roll of Honour' for past recipients to the website for the main 'achievement' trophies as well as recent updates for Records and Firsts.

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

By Charlie Suckling G3WDG

The same equipment was used by Rex for terrestrial and EME : – 45W to a 77cm dish.



Some photos of his different operating locations are attached.

We were running a new homebuilt 50W SSPA into our 3m dish, and 0.9dB NF WDG004 preamps. Horizontal polarization was used our end, to be compatible with Rex's set-up.

The operating mode used for all the EME activity was JT4F. All the stations participating have the capability for automatic compensation for Doppler shift. This is not absolutely necessary as manual compensation can be used successfully, as recently tested by OK1KIR and G3WDG, but certainly eases the workload and is probably beneficial with very weak signals. VK7MO and G3WDG use VK1XX.'s software in conjunction with WSJT. Current procedure is for one station to do the compensation for both ends by adjusting both TX and RX frequencies to allow the other station to operate on one frequency. Frequency setting accuracy achieved is generally in the order of better than 20-30Hz.

JT4F was used to great effect on 28 Nov during a demonstration of 10GHz EME by VK7MO at the VHF Group of Western Australia in Perth. After working VK7MO on sked, members of the group worked us using Rex's equipment under their own callsigns during the following 45 mins – VK6KZ, VK6KW, VK6LV, VK6ZLT, VK6ZAF all completed QSOs with us. None of these callsigns were known to us beforehand, or announced on the HB9Q logger, or existed in the callsign database!

JT4's ability to send plain text messages up to 13 characters in length under very weak signal conditions was used a few times during the expedition. On one occasion Rex used it to send his location. Moon elevation was very low at G3WDG at the time (about 2 degrees) , and the added ground noise and local hedge blockage reduced signal level so that averaging 2 frames was needed to decode the signal:

094800	5	-16	1.9	57	42 *
095000	3	-17	1.8	59	46 *
095000	1	2/2	COCKLEBIDDY	1	0

Rex received the following "texts" from us shortly afterwards during the same QSO:

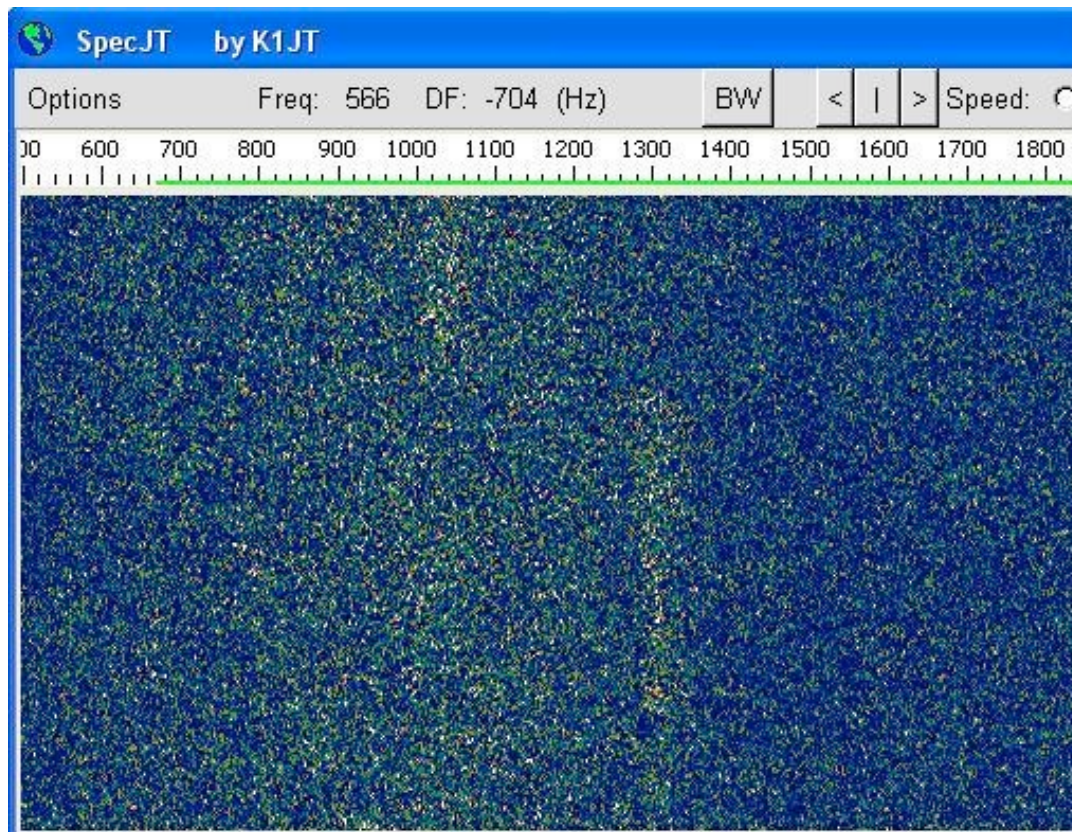
095700	7	-14	2.4	-103	48 *	WHAT LOC 6DIG	1	0 C
100100	8	-13	2.5	-98	50 *	SKED TMRW OK	1	0 B
100300	7	-13	2.4	-103	48 *	TNX SAFE TRIP	1	0 C

Single tones are commonly used in conjunction with JT4 to signify for example to the QSO partner when to start sending messages. During the expedition, Rex introduced a new tone. In the figures below, Rex's initial 1270Hz tone changed to 1000Hz midway through a period to signify that he was receiving our 1270Hz initial tone and was ready to receive messages. This removes any need for "talkback" during a test.

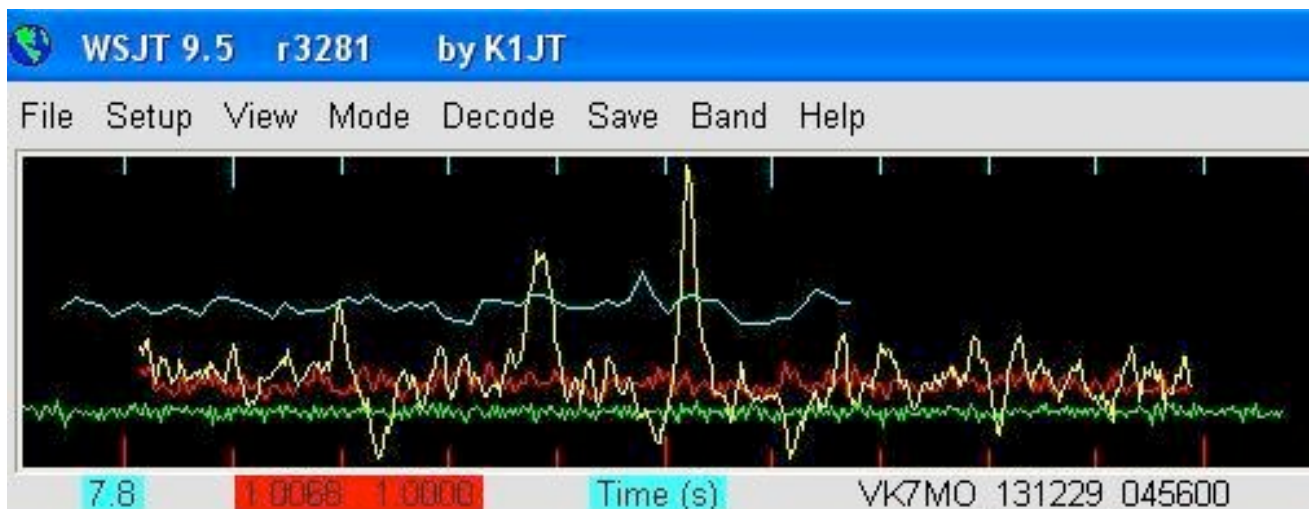
WSJT9 provides assistance via a 48 second average of the waterfall to improve visibility of weak signals. This is a yellow trace that appears in the main JT window when "Plot average JT4 spectrum" is selected from Setup.

WA VHF Club Demo





Waterfall showing VK7MO's 1270Hz tone changing to 1000Hz (signifying please send messages)



Average JT4 spectrum (yellow) of above waterfall showing 1270 and 1000Hz tones

While not strictly part of Rex's expedition results, we also carried out a test with VK6DZ who was able to detect our signal with a 60cm dish.

Operators at G3WDG were G4KGC and G3WDG.

Charlie Suckling G3WDG



Nullarbor



OF79qb



OF86



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 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

EME 2014 travel offer

August 2014 sees the EME conference in Brittany. One way to get there from the UK is by car using ferry or tunnel. We have a house in Normandy and are now members of Brittany Ferries 'Club Voyage'. If anyone decides to use Brittany Ferries, which can take you into Brittany or Normandy, using our Club Voyage reference number will give you a small but useful discount on the ferry crossing.

If anyone is interested, please contact me at mike_stevens@btinternet.com and I can pass over the details.

73, Mike,
G8CUL

Contests

Due to John dealing with a family illness and a bereavement there is no Contests column this month.

We send him our deepest sympathies for the loss of his brother.

Martin G8BHC

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 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	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	



Activity News : February

By John Worsnop G4BAO

Please send your activity news to:

scatterpoint@microwavers.org

Introduction

The Activity column comes temporarily from the Fen Edge this month while we wish usual scribe, Bob G8DTF, a speedy recovery from his recent hospital visit. I plan to soon be back on the "low bands" with 150 watts to a shiny new 44 element Wimo Yagi and on 2.3GHz with 100 Watts from a homebrew transverter to an old G3JVL 40 element quad loop which I inherited from the estate of local microwaver, Ron, G8GRT who sadly passed away last year.

Conditions in January were pretty flat with the Hepburn Tropo maps showing no "colour" over Western Europe for days on end. Few terrestrial QSOs over 600km were spotted on 1.3GHz and even fewer over any distance on the higher bands, with only Ralph, G4ALY (IO70VL) continuing his successful daily multiband sked over 247km with F9OE (IN78QJ) of any note. Andy G4JNT continues his beacon experiments with JT modes on 1.3GHz, and Neil, G3RIR emailed me to express his thanks to Andy for putting up the personal beacon on 1296. Over the weekend 18/19th January he spent a couple of hours monitoring the JT65C2 from Andy. Neil reports that he had an average decode of about 25% from IO92jl at 176km. His system is a 35 ele beam with a mast-head pre-amp with the tower down so only about 7m agl.

January SHF UKAC

Ray GM4CXM (IO75TW) reported "pretty dire conditions" on 2.3GHz" and I, and many others echoed this for the higher bands. Ray had just seven contacts in six squares and nothing from the IO8x line. His best DX was again OZ1FF (JO45BO) at 782km via aircraft scatter, and best UK station, G8CUL (IO91JO) at 525km.

On 10GHz I had 5 QSOs in 4 squares, 3 of which were local with only G4WLC/P (IO81WU) and G4LDR (IO91EC) of any note. G4LDR was very weak indeed whereas he is usually a good signal with his 25 watts. I was copied by Denis G3UVR up on the Wirral (IO83kh) but for once I heard nothing of his 250mW. Denis will soon be running much more power on 3cms.

EME

Tony G4CBW (IO83UB) reported hearing the new DL0SHF EME beacon on 10368.025MHz which was easily copyable on a 1.1m dish. This beacon runs QRO, so I hope a few of you will try to look for this while it's still operating. It was a pretty quiet time for me on 2.3GHz EME as well in January. My one QSO was with ES5PC (KO38HJ) who was loudspeaker copy on CW.

Beacon news

In December, Ofcom issued the NoV for the GB3PKT 10368.945 beacon at St Osyth nr Clacton (JO02MT). Tony G0MBA reports that he has the beacon ticking away in the workshop and is just waiting for an improvement in the weather. He is confident that the next month or two it will be installed and working. Dave G4FAW tells me that the slotted waveguide antenna he was making for the 2.3GHz GB3BSS beacon (IO81SR) has now been finished and has been shipped to the beacon keeper, Tony, G3CJZ. Tony tells me that the site owners have two commercial antennas to fit in the next few weeks and dependent on weather conditions hope to install the GB3BSS antennas at the same time.

... 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

John Worsnop G4BAO

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

RSGB & UKμG Contests 2014

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	27-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

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 12-13	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 21	Crawley Round Table [date tbc]	
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/