



scatterpoint

August 2013

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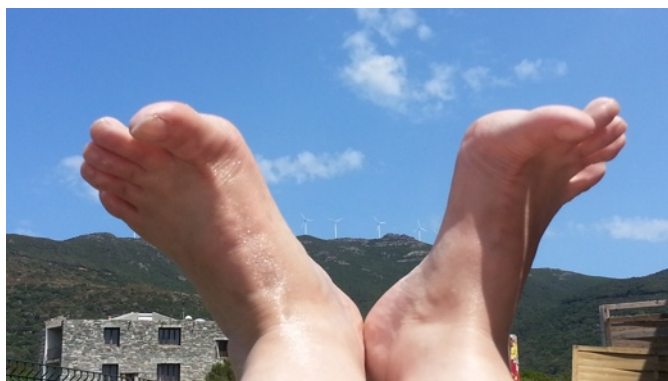
DXpedition Cap Corse

By Michel F1FIH,
XYL Corine & Guy F2CT



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Mystery feed dipole?

STOP PRESS!

[Ofcom consultation document](#) on spectrum sharing.
Implications for 5.7GHz for weak signal work?

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Editor's corner

Well, the sun certainly brought some of you out. The Activity column is probably the longest yet, we have a DXpedition report from France, and former Editor, Peter 'PHO', has emerged from the shadows of moving house. Welcome back!

Thank you for all your articles and reports, I've had to hold some over for next month! But keep 'em coming.

Thank you also to the many who responded to the Ofcom consultation.

73 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](http://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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Surreal 10GHz QSO - report of July 28 event

By Andy Talbot G4JNT



Can there be a more surreal way to have a 10GHz QSO? G0API and myself went along to a site on the Purbeck Hills, Dorset, near Worth Matravers with John's 24GHz equipment, built years ago and practically never used in anger. The aim was to work Keith GJ3TKW/P on Jersey on that band; the Purbeck site has an excellent take off straight over the sea in that direction so the opportunity looked ideal to test out the transverter. Just for a bit of a novelty, I also took along a recently built synthesized JT4G beacon module for 10GHz running 100mW output and a small 19dBi PCB horn antenna (picture opposite). John took along an Octagon LNB and handheld scanner for its 618MHz output – you can see we weren't taking 10GHz seriously!

Keith was already set up on 10GHz and could hear the GB3SCX beacon, so I switched my little beacon source on, taped the horn to the top of a fence, just one metre off the ground and waited. Keith immediately heard it 59+ and relayed the rock-crushing mega signal back on 144MHz. Now... this was a JT4G beacon, with the message stored completely in memory. There was no way of modulating it with custom data. During the odd minute cycle it sends plain carrier and a bit of the fast on-off stuff. John casually placed his hand in front of the horn, and heard the relayed signal replaced by the resulting noise – an

action that must have turned his head. By placing his hand in front of the horn and using the relayed 144MHz signal as a sidetone he sent the "contest exchange" details in CW by using a flapping hand as the 'key'. Signal loss = noise was key down. This Semaphore CW could only be done during the plain carrier periods. While the beacon was sending JT4G the moving tones made it difficult to read the CW bits.

So that was a one-way QSO made at least, but it didn't end there :

The signals over the 150km path were so strong that John then fired up his Octagon LNA built into an old searchlight / torch housing as a monitoring / test Rx. With just its 90 degree beam width horn and using the very ancient AOR scanner, we soon found Keith's 10GHz signal. That Octagon LNB is not very stable with just a straight crystal controlled LO. SSB was going to be tedious, so a request for FM to be sent and the two-way QSO was completed.

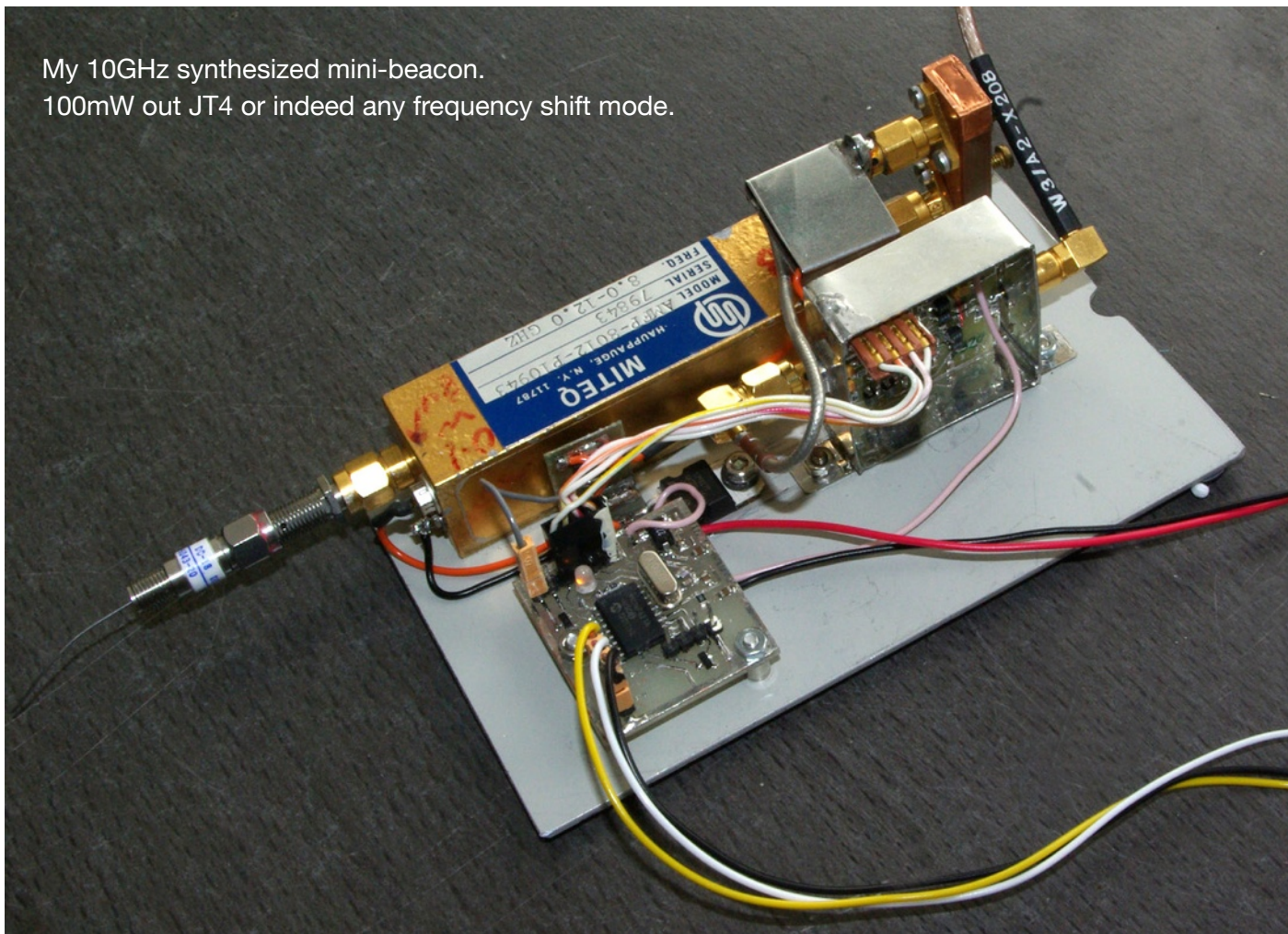
Which qualifies, I think, as one of the weirdest microwave contacts of all time. Semaphore arm waving CW in one direction from a beacon transmitter with a PCB horn tied to a fencepost, and FM on the return link using an LNB and scanner. 150km path, 59+ signals both ways.

Oh yes, and the real reason for the trip, testing out that 24GHz signal: We heard Keith's 24GHz quite well but we failed to get our signal over to Guernsey. Its is possible some work on the Tx system may be needed.

Andy G4JNT



My 10GHz synthesized mini-beacon.
100mW out JT4 or indeed any frequency shift mode.



Brian D. Justin, WA1ZMS/4 awarded

the 2013 ARRL Doug DeMaw W1FB Technical Excellence Award

From the July ARRL board minutes:-

22. On motion of Mr. Bodson, seconded by Mr. Norris, the following resolution was ADOPTED (with applause):
WHEREAS, Brian D. Justin, WA1ZMS/4 of Forest VA has demonstrated a distinguished lifelong amateur radio career; and

WHEREAS, he has orchestrated expeditions which garnered the first VUCC on 47 GHz, 76 GHz, 122 GHz, 145 GHz, and 241 GHz; and

WHEREAS he has developed and built several homebrew millimeter wave equipped stations; and

WHEREAS he operates several repeaters from 146 to 1200 MHz;

BE IT HEREBY RESOLVED that Brian D. Justin, WA1ZMS/4 is awarded the 2013 ARRL Doug DeMaw W1FB Technical Excellence Award.

DX PEDITION CAP CORSE

22/29 juin 2013 JN42QX/JN43QA

By Michel F1FIH, XYL Corine & Guy F2CT

Introduction

This year, we decided to activate JN42/JN43 on SHF.

On Friday June 21st we took the ferry *Pascal Paoli* from the harbour of Marseille.

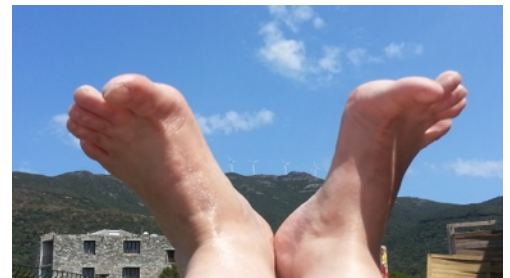


Centuri harbour is a very small fishing harbour, well known for its crayfishes and liches !!! [Liche is a small tuna fish]



Mike F1FIH , Guy F2CT

We arrived at Centuri on Saturday June 22nd early morning and found our rental house located at the top of the village with very nice take off from qtf 250 to qtf 350.



Mike F1FIH , Guy F2CT



XYL Corine

We started on 13 , 6 and 3 cm on Saturday evening during French Jounées d'Activité.

But, unfortunately, sea ducting, tropo ducting and rain scatter were not for us and we only made QSOs up to a distance of 650 km.

On Monday 24th, very high winds blew up to 150 km/h on Capo Grosso in JN43QA; so we decided to repair TK5ZMV 1296 MHz beacon with Patrick TK5EP, its beacon-keeper who spend some days with us.

In the evening we got some Rain Scatter activity to central Italy but distances were in the 300/400km range.

Pat TK5EP went back to Ajaccio on Wednesday morning and planned to reinstall TK5ZMV beacon in JN41JS.

After Pat had gone, we decided to try some DX tests using [Air Scout software](#) because sea ducting and tropo ducting were still not with us !!!

We went back to France on Saturday June 29th in the evening on the ferry *Piana* – very comfortable – along the east coast of Corsica.



TK/F2CT repairing TK5ZMV



F2CT TK5EP F1FIH

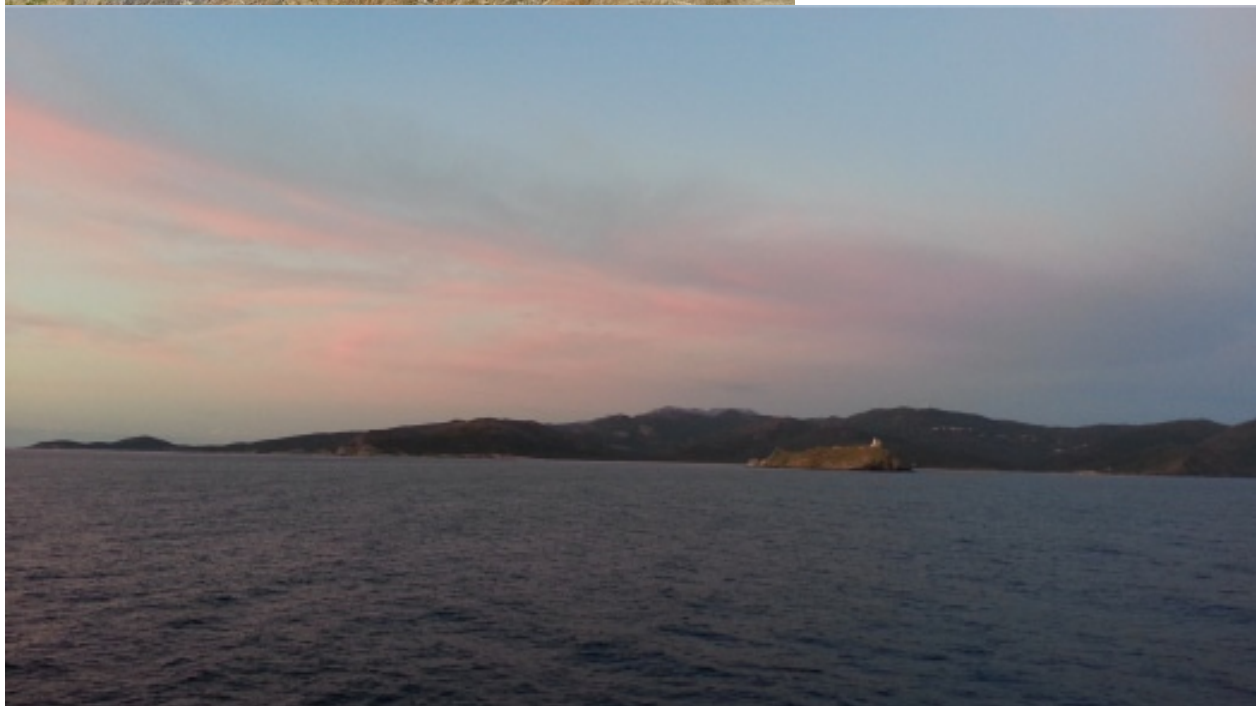


F2CT F1FIH TK5EP

TK5EP + F2CT



Capo Grosso JN43QA
and
Sunset on Capo Grosso



Traffic reports

TK/F1FIH



22/06/2013 JN42QX

10GHz:

15:01	F5AYE/P	JN23WE	286km
17:25	EA3LA	JN12IK	548km
17:30	EA3BSG/P	JN12IK	548km

23/06/2013 JN42QX

10GHz:

08:50	I1PSC	JN44MJ	160km
09:16	F5BOF	JN33KQ	217km
10:31	F5NZZ/P	JN23WE	286km
11:09	EG3SHF	JN11CI	618km
11:40	F6DRO	JN03TJ	630km

24/06/2013 JN42QX

10GHz:

18:12	IK3HHG	JN65DO	373km
18:13	I6XCK	JN63QO	332km
18:14	IK3GHY	JN65DM	366km

2.3GHz

18:41	I5CTE	JN53XG	213km
18:42	IK3GHY	JN65DM	366km
20:59	F6HTJ	JN12KQ	531km

25/06/2013 JN43QA



2,3GHz

10:30	F1VL	JN03RX	648km
11:40	F6HTJ	JN12KQ	532km
12:44	EA3XU	JN11CK	616km

5,7GHz

09:20	TK/F2CT	JN42QX	5
11:00	F1VL	JN03RX	648km
14:15	IK3COJ	JN65BN	358km

10GHz

14:30	F6DRO	JN03TJ	630km
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27/06/2013 JN43QA

10GHz

15:59	EA3XU	JN11CK	616km
16:04	F5BUU	JN03PO	657km
16:48	F6DKW	JN18CS	846km
17:22	F5HRY	JN18EQ	831km

TK/F2CT



TK/F2CT / JN42QX

JA 22-6-2013

2013-06-22	1503	5G7	SSB	F5AYE/P	59	59	JN23WE	286km
2013-06-22	1533	5G7	SSB	F6DRO	51	55	JN03TJ	630km
2013-06-22	1730	5G7	SSB	EA3LA/P	59	59	JN12IK	548km
2013-06-22	1730	5G7	SSB	EA3BSG/P	59	59	JN12IK	548km
2013-06-22	1810	5G7	SSB	F1VL	55	59	JN03RX	649km
2013-06-23	0922	5G7	SSB	F5BOF/P	59	59	JN33KQ	217km
2013-06-23	1035	5G7	SSB	F5NZZ/P	59	59	JN23WE	286km
2013-06-23	1127	5G7	SSB	EG3SHF	52	54	JN11CI	618km

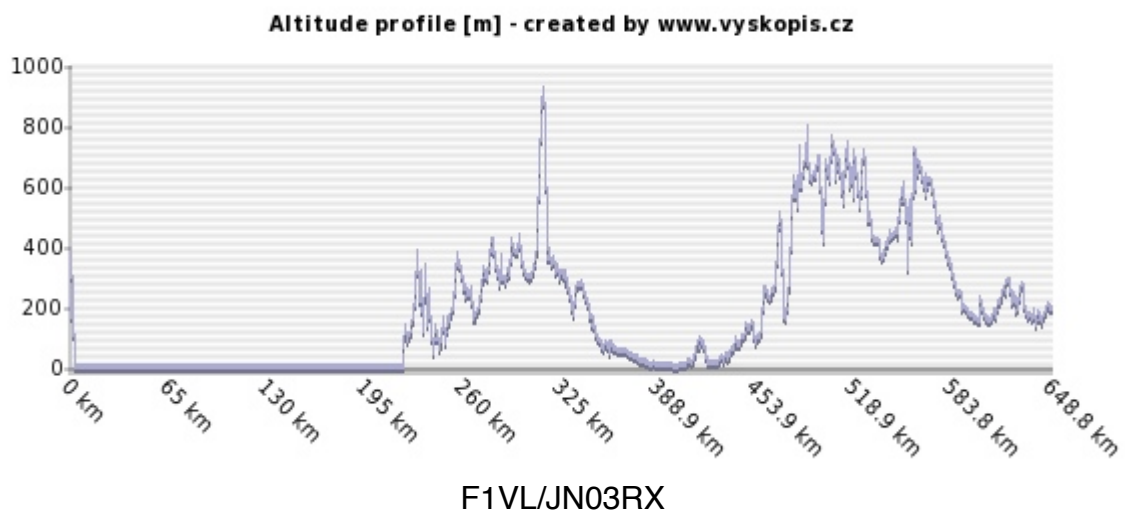
JN42QX

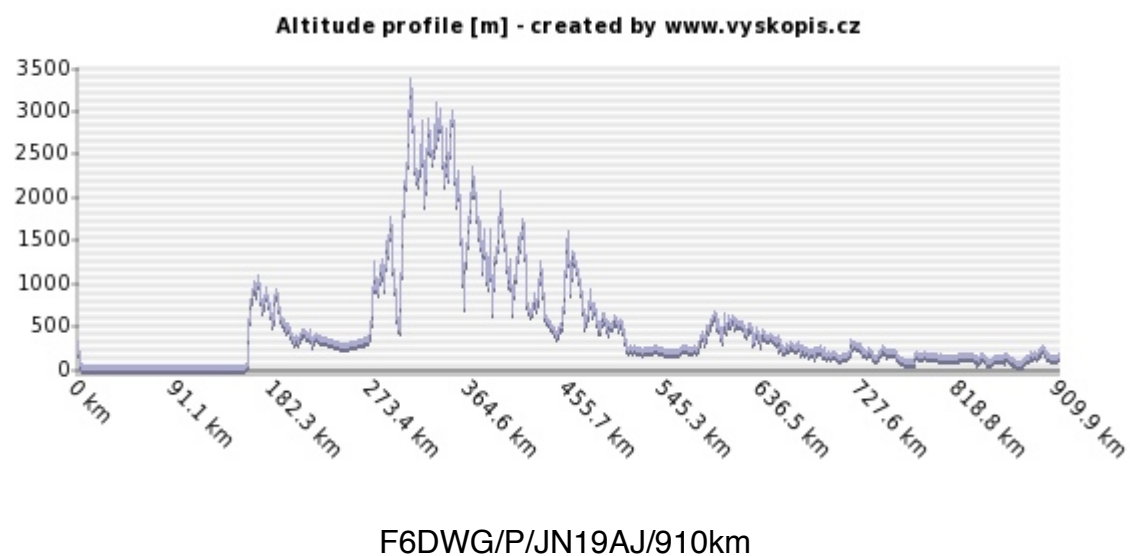
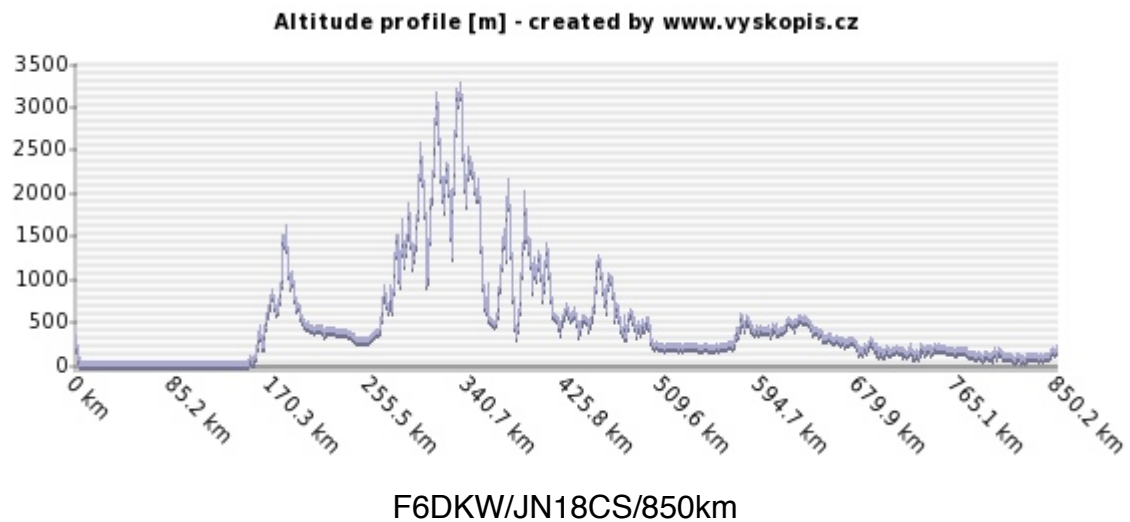
2013-06-24	17:58	10G	SSB	IK3GHY	59	59	JN65DM	366km		
2013-06-24	18:13	10G	SSB	I6XCK	59	59	JN63QO	332km		
2013-06-24	18:15	10G	SSB	IK3HHG	58	57	JN65DO	373km		
2013-06-24	18:32	2,3G	SSB	I5CTE	59	59	JN53XG	213km		
2013-06-24	18:36	2,3G	SSB	IK3GHY	59	59	JN65DM	366km		
2013-06-25	06:42	2,3G	SSB	F6HTJ	52	55	JN12KQ	531km		
2013-06-25	07:54	2,3G	SSB	F1VL	51	51	JN03RX	649km	ODX	2G3
2013-06-25	08:46	2320	SSB	EA3XU	55	55	JN11CK	615km		
2013-06-25	09:28	5700	SSB	TK/F1FIH	59	59	JN43QA	5km		
2013-06-25	10:25	10G	SSB	F1VL	52	55	JN03RX	649km		
2013-06-25	11:10	10G	SSB	TK/F1FIH	59	59	JN43QA	5km		
2013-06-26	06:21	1,3G	SSB	F1VL	55	51	JN03RX	649km		
2013-06-26	06:38	1,3G	SSB	F5BUU	53	53	JN03PO	658km		
2013-06-26	06:48	1,3G	CW	F6HTJ	529	559	JN12KQ	531km		
2013-06-26	07:03	1,3G	SSB	EA3XU	51	53	JN11CK	615km		
2013-06-26	07:36	1,3G	CW	F6DKW	529	559	JN18CS	850km	ODX	1G3
2013-06-26	07:45	1,3G	SSB	F5ELL/P	55	55	JN13RH	482km		
2013-06-27	06:53	5G7	CW	F1PYR/P	519	529	JN19BC	881km		
2013-06-27	07:54	5G7	CW	F6DWG/P	559	559	JN19AJ	909km	ODX	5G7
2013-06-27	08:05	5G7	SSB	EA3XU	55	56	JN11CK	615km		
2013-06-27	10:00	1,3G	CW	F5HRY	519	519	JN18EQ	835km		
2013-06-27	10:24	1,3G	CW	IZ1DYE/B	599		JN35PA	282km		
2013-06-27	10:25	1,3G	CW	F5ZAN	599		JN12LL	527km		
2013-06-27	10:25	1,3G	CW	F5ZAK	599		JN23MM	357km		

JN43QA

2013-06-25	16:56	10G	SSB	I6XCK	59	59	JN63QO	331km		
2013-06-25	17:04	10G	SSB	IK3HHG	59	59	JN65DO	370km		
2013-06-25	17:07	10G	SSB	IK3GHY	59	59	JN65DM	363km		
2013-06-25	17:09	10G	SSB	IK0HWJ	59	59	JN61JT	311km		
2013-06-28	06:47	1,3G	SSB	F5BUU	51	51	JN03PO	657km		
2013-06-28	06:56	1,3G	SSB	F1VL	51	51	JN03RX	648km		
2013-06-28	07:07	1,3G	CW	F6DKW	559	559	JN18CS	846km	ODX	1G3
2013-06-28	07:52	1,3G	SSB	EA3XU	52	52	JN11CK	616km		
2013-06-28	09:42	1,3G	CW	LX1DB	519	519	JN39CO	772km		
2013-06-28	16:44	2,3G	CW	F6DRO	559	559	JN03TJ	630km	ODX	2G3
2013-06-28	17:40	2,3G	SSB	IK3GHY	59	59	JN65DM	363km		

Profiles of the DX stations





Synopsis

Without any sea ducting and tropo ducting we got very nice results via Aircraft Scatter using Air Scout soft from DL2ALF.

1296 and 2320 GHz were easy to complete specially with Maurice F6DKW @ 850 km ;

On 5G7 and 10 GHz QSOs up to 910km were completed only on Wednesday June 26th with the help of sea ducting at the end of the morning and the end of the afternoon.

5G7 sigs from André F1PYR/P from Marco F6DWG/P @ 910 km were received all the time up to 559. On 10GHz it was much more difficult but QSOs were completed with F6DKW and F5HRY in CW @ 850km.

However no test nor QSO on 24 GHz.

We do hope to come back same location in 2014 from June 15 to June 30th.

Many thanks to all for tests even when they were negative but distances from Cap Corse are very long !

Toulouse JN03 @ 650km, Paris/JN18 @ 850km, Bordeaux/IN94 @ 827km, Barcelone/JN11 @ 620km, Jean Noël F6APE/IN97 was at 921km!!!

Good luck and many DX on SHF

Kind regards from Michel F1FIH , Corine and Guy F2CT

Microwave Update

Oct 18–19 Morehead, Kentucky

Greetings All:

Just a quick reminder that the date for Microwave Update is coming up fast.

www.microwaveupdate.org/

But at the moment we are looking for items for the Proceedings.

One page mods are very welcome, as well as more in depth papers.

A good opportunity to share your latest project with the microwave community.

Personally I like the short 'Hints & Kinks'.

Kent WA5VJB/G8EMY

Crawley Microwave Round Table Program

Sunday 8th September 2013

As usual we will be running the UK Microwave Group annual construction contest for the G3VVB trophy. Please do bring along your constructed equipment and enter the contest. Entries do not necessarily need to have been constructed during the last year. Last years winner was Jeff G4HIZ – this year it might be you that carries away the trophy!

The program this year offers the microwaver something different – come along and support the construction contest and hear the talks.

Below is a provisional timetable:

10:00 Venue opens

12:00 Construction contest judging commences

13:00 Lunch (rolls, sandwiches etc and tea/coffee available)

14:00 Opening address by **Derek G3GRO** and the results of the construction contest

14:15 A 21st Century Approach to a Transverter for the Low-bands: **Chris Bartram GW4DGU**

15:00 An experimental Alford slot antenna for 9cm: **Mike G3LYP**

15:30 Break (tea and coffee available)

16:00 Practical demo of using Microwave Data modes: **Andy G4JNT**

16:30 End of meeting

The venue is the Crawley Amateur Radio Club's hut and directions can be found at:

www.carc.org.uk/find_us/directions.shtml

UKμG Chip Bank

A free service for members

The catalogue is now on the UKμG web site See

www.microwavers.org/?chipbank.htm

Non members can join the UKuG 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, that is, Jiffy bags, small plastic bags for individual component values, and Large letter 2nd class postage, currently 69p.

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. We have asked Mike to check with the Chairman (or designated officer) if any individual is making excessive requests, and we will ensure that the service is only available to members.

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!!)

Following the Finningley RT, I came home with a large box of reels of chip components kindly donated by Kevin Avery.

I have now sorted through these and added them to the chipbank catalogue on the UKμG's website. This donation has considerably expanded the stock of both 0805 and 1206 resistors as well as capacitors, inductors, diodes and transistors.

I plan to bring the stock to the Crawley RT next month, but in the meantime, I am happy to accept e-mail requests as usual.

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

73, Mike, G3LYP

Contest Results

By John Quarmby G3XDY

5.7GHz Contest June 2013

Activity was rather low again this month. Conditions were described as "OK" or "poor".

Congratulations to G1EHF/P as the winner, and G4LDR as runner up in this event. The overall table for the championship to date has been updated with the scores from this event.

10GHz Contest June 2013

Most entrants judged conditions as average for this event.

Congratulations go to G4GSB/P who won the Radio Talkback section. In the Unlimited section GW3TKH/P was the winner, with G4LDR second and leading fixed station. The leading Restricted section entrant was G1EHF/P.

The championship table shows the positions for the Open and Restricted sections after two events.

24GHz Contest May 2013

Only GW3TKH/P and G4LDR submitted entries, and only worked each other, so are joint winners this month. GW3TKH/P is in the leading position for the G0RRJ Trophy at present.

73 de John G3XDY, UKuG Contest Manager

5.7GHz							
Pos	Callsign	Locator	QSOs	Score	ODX Call	ODX km	Talkback
1	G1EHF/P	IO91GI	6	629	G3LRP	251	Unlimited
2	G4LDR	IO91EC	4	504	G3XDY	223	Unlimited
2	G4WYJ/P	JO00AU	2	181	G3XDY	157	Unlimited
3	G4WGE/P	JO01BB	1	24	G4WYJ/P	24	Radio

10GHz							
Radio Talkback only							
Pos	Callsign	Locator	QSOs	Score	ODX Call	ODX km	Section
1	G4GSB/P	IO82WM	7	917	G0OLX/P	225	Restricted
2	G4EML/P	IO90SV	9	660	GW3TKH/P	205	Open
3	G4WGE/P	JO01BB	5	162	G4EML/P	45	Restricted
Unlimited Talkback							
Pos	Callsign	Locator	QSOs	Score	ODX Call	ODX km	Section
1	GW3TKH/P	IO81LS	13	2217	G3ZEZ	287	Open
2	G4LDR	IO91EC	13	1955	F6DKW	378	Open
3	G1EHF/P	IO91GI	14	1898	G8DTF	251	Restricted
4	G4WLC/P	IO81RU	11	1790	F6DWG/P	424	Restricted
5	G1MPW/P	JO00AU	12	1561	F6DKW	279	Open
6	G4WYJ/P	JO00AU	10	1317	F6DKW	279	Restricted
7	GW4HQX/P	IO81LS	9	1069	G1MPW/P	238	Restricted
8	G8CUB/P	JO01EP	10	1014	M0GHZ	181	Open
9	G8DTF	IO83SM	4	895	G4LDR	275	Open
10	M0DTS/P	IO94MJ	4	856	G4WLC/P	302	Open
11	G0EHV/P	IO94ET	2	268	GM0USI/P	204	Restricted

24GHz						
Unlimited Talkback						
Pos	Callsign	Locator	QSOs	Score	ODX Call	ODX km
1=	G4LDR	IO91EC	1	124	GW3TKH/P	124
1=	GW3TKH/P	IO81LS	1	124	G4LDR	124

5.7/10/24GHz Championship Tables				
After 2 events				
5.7GHz				
Pos	Callsign	26/05/2013	30/06/2013	TOTAL
1	G4LDR	568	801	1369
2=	G3ZME/P	1000	0	1000
2=	G1EHF/P	0	1000	1000
4	GW3TKH/P	502	0	502
5	G4SJH/P	317	0	317
6	G4WYJ/P	0	288	288
7	G4WGE/P	0	38	38
10GHz Open				
Pos	Callsign	26/05/2013	30/06/2013	TOTAL
1	G4LDR	948	882	1830
2=	G3ZME/P	1000	0	1000
2=	GW3TKH/P	0	1000	1000
4	G8DTF	527	404	931
5	G1MPW/P	0	704	704
6	G8CUB/P	0	457	457
7	M0DTS/P	0	386	386
8	M0DTS/P	342	0	342
9	G8KMH/P	304	0	304
10	G4EML/P	0	298	298
11	GW4NOS/P	96	0	96
10GHz Restricted				
Pos	Callsign	26/05/2013	30/06/2013	TOTAL
1	G4WLC/P	1000	943	1943
2	GW4HQX/P	781	563	1344
3	G1EHF/P	0	1000	1000
4	G4SJH/P	960	0	960
5	G4WYJ/P	0	694	694
6	G4GSB/P	164	483	647
7	GM8OTI/P	518	0	518
8	G0EHV/P	322	0	322
9	G0EHV/P	0	141	141
10	G4WGE/P	0	85	85
24GHz				
Pos	Callsign	26/05/2013	30/06/2013	TOTAL
1	GW3TKH/P	920	1000	1920
2	G4LDR	718	1000	1718
3	G8KQW	1000	0	1000

Antenna range tests – Finningley RT 14 July 2013

By David Wrigley G6GXX

Band: 2.32 GHz					
Antenna description	Reading	Range	Total	Relative Level dB	Gain dBi
Reference Horn	-1.8	40	-41.8	0	12.7
G3LYP	-9.5	30	-39.5	2.3	15
G0DJA Mesh Dish	-9.5	30	-39.5	2.3	15
G0DJA Feed Only	-7.5	40	-47.5	-5.7	7
Band: 3.40 GHz					
Antenna description	Reading	Range	Total	Relative Level dB	Gain dBi
Reference Horn	-1.4	50	-51.4	0	12.7
G3LYP Alford Slot	-7.5	50	-57.5	-6.1	6.6
G3LYP Alford Slot -short	-11	50	-61	-9.6	3.1
G3LYP IONICA Panel	-4.3	40	-44.3	7.1	19.8
G3LYP Wimo	-7.5	40	-47.5	3.9	16.6
M1EGI Panel	-4	40	-44	7.4	20.1
Band: 5.76 GHz					
Antenna description	Reading	Range	Total	Relative Level dB	Gain dBi
Reference Horn	-2.2	50	-52.2	0	12.7
G4MVU 45cm Dual feed	-8.2	30	-38.2	14	26.7
G3LYP Panel	-6	40	-46	6.2	18.9
G6GXX Horn feed	-5.6	50	-55.6	-3.4	9.3
Band: 10.368 GHz					
Antenna description	Reading	Range	Total	Relative Level dB	Gain dBi
Reference Horn	0	40	-40	0	17.2
G4MVU 45cm dual feed	-7.5	20	-27.5	12.5	29.7
G0ATW RCA slotted array panel	-4.3	40	-44.3	-4.3	12.9
G4TNX AN1211 panel	-1.2	30	-31.2	8.8	26
G4TNX RCA slatted array panel	-4.5	40	-44.5	-4.5	12.7
G3AFF Ref Horn	-8	30	-38	2	19.2
Band: 24.048 GHz					
Antenna description	Reading	Range	Total	Relative Level dB	Gain dBi
Reference Horn	-5.5	50	-55.5	0	13
G4DDK prime focus	-1.8	40	-41.8	13.7	26.7
G4DDK BSB offset dish rect horn feed	-9	30	-39	16.5	29.5

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	Ray James GM4CXM	Lot of mutual assistance in GM via GM microwave reflector
N Ireland	Gordon Curry GI6ATZ	



Activity News : July

By Bob Price G8DTF

Please send your activity news to:

scatterpoint@microwavers.org

Introduction

A bumper Activity Report this month, with many reports received. I was missing for the week of the SHF UKAC as I was on holiday in IO61. There was no room in the car this trip for radio gear because of all the camping gear.

In some areas it seems conditions were good on the 6th to the 9th of July. There also seemed to have been quite a bit of activity outside the contest periods this month. It is good to see a report on 3cm ATV as well as other activity.

Beacons

From Gordon G16ATZ

On Thursday 25th July we also installed a new 10 GHz beacon GB3NGI at IO65VB. The 10GHz beacon is on 10368.895 MHz with an ERP of 3dBW. The antenna is a slotted waveguide

From Alan GM0USI

I thought I might try a few other locations in Central Scotland today listening with an 88cm dish for GB3NGI on 10368.895 starting with a small slightly elevated car park just to the NW of my home QTH at IO75uv – it's about 70mASL and manages to see Goatfell on the Isle of Arran – as suspected the beacon was there varying with QSB from 52 to 549 at 152km.

In the afternoon returning from Livingston I popped up to Cairnpapple near Bathgate in West Lothian IO85EW – it's about 250m ASL with a pretty good take to SW and W – the high ground where the Blackhill TV

transmitters are fairly near, but I did locate the beacon although weaker at 51 to 529 at 188km.

Finally I thought for a bit of a daft test whilst at my sister's flat, also in IO75UV, I would set the dish up indoors at the bay window (See picture) – which does face the right way – again Goatfell in Arran is normally visible – amazingly GB3NGI was peaking S8 down to S6 although I could detect a whiff of RS on the signal.

It does show though that the beacon site at Slieveanorra IO65VB at 504m ASL is very good indeed certainly to the central belt – I imagine it will be audible on my trips to Skye IO67/77 which will be useful.



From Ralph G4ALY

On the 6th of July ED1YAQ/B 3cm for 24hr very good.! (829km).

On the 7th of July ED1YAQ/B 3cm 24hr again today still very good.!

From Mark M0UFC

Microwave TV on Winter Hill



It was only my second outing doing ATV, having bought some used 3cm equipment from G0DPS. It was a splendid day on Winter Hill with no need to guy the dishes, and for company, 11 other members from Bolton Wireless club operating in the Practical Wireless 144MHz Contest. We had pre-arranged an ATV contact in the BATC Summer Fun Contest with Denis G3UVR on the Wirral and upon viewing his live streams on BATC, during the preceding week I opened an account and enjoyed a guided tour of Denis's UHF shack over the internet. My first attempt at a transmission to Denis on 3cm from Winter Hill back in May during the RSGB UHF contest was successful, but I didn't have a portable 3cm receiver so Denis instructed me how to view my signal through his live stream on my mobile phone. That didn't work – not because I couldn't get a signal, as is usual on hill-tops, but I hadn't got Flash installed. So for Summer Fun (in addition to using Ross G6GVI's 3cm receiver and mini TV), I installed the Foton Browser for Android and also tethered the phone to my laptop, both of which worked well, apart from the difficulty of viewing in bright conditions. Ross also made valid ATV QSOs with Denis on 13cm and 23cm.

I never thought that I would get interested in ATV, but the bug has 'bitten and I've now borrowed the club's 13cm ATV TX!

Millimetre Bands

From Mans 9H1GB

I am pleased to inform you that today July 19th 2013 the first ever QSO on 24GHz was made between 9H and IT9. At 17:21 GMT IT9ARO (Johnny) heard my (9H1GB) signal on 24.048200GHz+/- Immediately I switched to USB and the QSO was completed with a 51 52 exchange of reports.

Two other friends were with me Joe 9H1VW and Joe 9H1CG completed the QSO at 17:47 53 53 report and 17:48 with 58 59 report respectively After which I called Johnny again at exchanged a 58 59 report.

We were all ecstatic with the contact made, over a distance of 206km from JM7EV to JM77LQ (Mt Etna). and were also very pleased to have help a new radio amateur, still waiting for his call, Trevor to made the 24 and 10GHz as his first ever QSO, not a bad way to start.

Johnny was using 18dBm (70mW) into a 45cm dish and I was using 23dBm (200mW) after the filter into a 60cm dish. I am hoping to make links to audio file for these QSO soon.

From John G8ACE

21st July saw the 24G and up activity and two new paths at least were worked in the south by G8KQW and G8ACE. Of particular interest I think was Buster to Povington on 76GHz which although is not a UK distance record for 76GHz is now the longest known all over land path worked at 92km distance. Another southern station had calculated yesterdays atmospheric absorption losses for 76GHz at 0.6dB/km so it should be realised this was a particularly challenging contact given the very low TX power available and poorer RX performances so it did take a while to complete as dish alignment had to be absolutely precise. One degree change in dish alignment vertical as well as horizontal losing the signal. 47GHz was also worked on this path for the first known time (until challenged) where with more power this was easily accomplished and 24GHz took a matter of moments to complete. The activity postings didn't indicate any 47 or 76GHz being offered north of Watford and the primary interest with these contacts yesterday was to learn more about advancing our millimetric experience than racing through stationary holiday traffic to use other sites. The overall activity level in any case was not conducive to roving operation. Maybe the rules need changing if the sole object is to just complete as many contacts as possible.

For the technically minded my 24GHz equipment had no new technical innovations so could be regarded and criticised as using the same old kit. 47GHz I used an injection locked 150mW Birkett Gunn diode mounted in an ex BT parametric amp pump source and this was the first DX use for this QRO equipment. 76GHz used a beam lead diode TX doubler with a DB6NT LNA on RX with both 76GHz equipments using 30cm Cassegrain antennas.

VHF NFD 6th and 7th July

From John G3XDY

Here is a resume of recent activity here which may be of interest for activity reports in RadCom/Scatterpoint.

Saturday 6th July

During the morning prior to VHF NFD I had some good contacts down into Southern France, with F1VL (JN03) worked on 23 and 13cm, and F2CT/P in JN26 worked on 13cm and 6cm.

VHF NFD 6/7th July

We had spectacular conditions for this year's event, with TM7G loud on 23cm from IN93 throughout the 24 hours and the band open everywhere except the far Northwest. Some highlights were:

23cm: TM7G IN93 59, EI9E/P IO62 59, LA0BY/P JO38, EA2DR/1 IN83, OZ1ALS JO44, EA2AGZ IN91 59 at 1152km, and a new square, DK2ZF/P JO43, SK7MW JO65, DL0GTH JO50 59, OZ5W JO55, OK2A JO60, OK1KUO JO80, DG0ST JO64, DL5YWM JO61, DL0HTW JO60, DJ8MS JO63, OL4K JO70, SM7ECM JO65, SM7DTE JO75

13cm: TM7G IN93 (new square), OZ1ALS JO44, DK2ZF/P JO43, OZ5W JO55, DL0GTH JO50 59, SM7ECM JO65, SM7DTE JO75 (new square), DF9IC JN48

9cm: DL0GTH JO50, SM7ECM JO65, SM7DTE JO75 (new square)

6cm: DK6JL JO31, DL4BBU JO31, DK2MN JO32, PI4GN JO33, SM7ECM JO65

3cm: DF0MU JO32, DK7QX JO42, DL4BBU JO31, DL0GTH JO50, DK2MN JO32

Just after the contest I worked EA1BLA/P in IN53 on 2.3GHz for a new country and square on that band, at a distance of 1156km, and later in the evening on Sunday SM7LCB (JO86) was worked on 1.3, 2.3 and 3.4GHz at 1100km.

Conditions were still good to the North East on the 8th July, with LA0BY/P active from rare square JO37 on 1.3GHz. OZ1LPR (JO44) was worked on 10GHz SSB, followed by a run through all bands from 2.3GHz to 10GHz with OZ9PP in JO47, for new squares on 9,6, and 3cm.

The following morning (9th July) still had good tropo to the East, with DL0VV (JO64) worked for a new square on 13cm, and also contacted on 3cm. Phew! Lots of DX this month.

From Ralph G4ALY

6th July before the two day contest

23cm EA2TZ/B (825km) Heard for the 1st time on 23cm F5BUU,

6cm F6DRO, F9OE.

3cm F6DRO,(903km)

6th. 23cm

F1VL, F6CBC, F6AJW/P F9OE, and EA2TZ/P
13cm F6DRO, F6AJW/P (807km). F1VL (840km).
6cm F6DRO, F6CBC, F2CT/P 798km), and F1PYR
Heard:

3cm F1VL, F6CBC, F6DRO, F6AJW/P.

6 July CONTEST

(conditions changed tks M. Murphy).

23cm EI9E/P, F9OE, TM7G.

13cm TM7G (830km)

6cm F1VL

3cm TM100TF (890km)

7 July CONTEST

23cm F4BUC/P, EA2DR/1, F5ICN, PI4Z (579km),

PL6NL (605km) F5ELY/P

13cm TM100TF, F6DRO, F5BUC/P, F9OE

6cm NIL

3cm TM7G, F9OE (F5BUU not Contest 890km)

6 July

G3LRP 6cm

7 July

G2AS/P 23cm G3ZME/P 23cm G2BQY/P 23cm

Conditions generally to the north were extremely poor
from this location and has been for about 14 days.

Daily Tests with G3LRP have been very difficult
throughout that period even with aircraft.

From Tony G4NBS

VHF NFD – seemed yet again to be in the wrong place
for conditions. Together with deliberately avoiding KST
and not being allowed to call CQ limited what I was
able to work somewhat.

It seemed that a lot of stations were unable to work on
one band and successfully transfer the information
across to enable an attempt for a QSO on a different
band. Several possible contacts were missed as a
result.

I did make 32 QSO's in 20 locators on 23cm (15 with
UK/Portables). Best DX was TM7G (IN93) at 1002km,
but in my old age forgot to try with them on 13cm
when they were a lot stronger later in the weekend...)

I almost made a QSO with EA2DR/1 (IN83) – info
exchanged, but no Rs which would have been my first
EA on 23cm. Talkback on a lower band (or KST) would
have secured the QSO I think.

I also had 4 QSO on 13cm – F5ELY/P(IN99), PA6NL,
PI4Z & PI4GN – again without using KST so not easy
to find activity as it wasn't supported in the UK.

From Eddie G0EHV

Just a line re VHF NFD. M0NFD/P was active from
North Yorks, Gordon G8PNN did a great job manning

the station and made 36 QSO's. Hard work due to
shortage of stations to work, but some nice DX
worked, best being TM7G at 1238 Km.

July 23cm UKAC 16th July

From Tony G4NBS

The 23cm UKAC on 16/7 was in flatter conditions, but
with much higher activity. My RX seemed to behave
this time round and looks like the RF is now getting out
of the 55ele. 51 QSO, 19 UK mults + JO11/21 made it
my best session since returning to the band. It was
very good to work GI4SNA for new square (84 now –
65 since Oct 2010!).

Nice QSO with GM0USI very strong on CW for my
token contact and finished off on SSB. Pleasing effect
of activity/conditions is that use of KST is now down to
1/3rd of QSOs made.

From Eddie G0EHV

The 23cm UKAC event (IO94ET) was best described
as "Average" for me. Conditions were not good with
QSB being an issue at times, activity however was
really good.

Site noise was also very evident, with noise peaks
around all points of the compass, I think this is
probably due to proximity of Pontop Pike DTTV station.
34 QSOs and 12 multipliers and 2 QSOs > 400Km.

No equipment issues, everything worked for a change!

July SHF UKAC 23rd July

From GM4CXM

Conditions were average for the SHF UKAC though an
aircraft reflection schedule made with OZ1FF identified
that some coastal tropo remained though despite
trying, no other continental stations could be heard.

Stations worked:

G0EHV/P	IO94ET	215km
G8PNN	IO95EF	190km
G4CBW	IO83UB	348km
G4NBS	JO02AF	504km
G4ODA	IO92WS	448km
OZ1FF	JO45BO	782km
G8CUL	IO91JO	525km
G3VKV	IO81XV	475km
G1SWH	IO83QO	283km
G8OHM	IO92AJ	425km
G8NVI	IO91JO	525km

From Tony G4NBS

The 13cm UKAC on 23/7 was also my best QSO and
points total to date, working 20 stations and 10
locators, but as only 7 were multipliers other scores
were higher! Conditions only seemed marginally
enhanced inter UK but again it meant less reliance on

KST and 5 QSOs resulted from my calling CQ, including G8PNN and G4JLG/P.

Best DX was OZ1FF. Heard Kjeld when he was working GM4CXM, but wasn't able to attract his attention. After using KST to advise him to alter his heading it was obvious he had his own personal duct across the N Sea with 59 SSB. Two other attempts with OZ stations met with no path. Signals to PA were also at normal marginal strength with me.

From John G3XDY

I was on for the UKAC/NAC SHF contest on 23rd July, with continuing good conditions to the East.

Contacts of note on 2.3GHz included SK7MW JO65, OZ1FF JO45 (worked on the side of his dish), DC6UW (JO44), OZ3ZW (JO54) on aircraft scatter, DF9IC JN48, and a partial with GM4CXM by aircraft reflection.

3.4GHz wasn't working (10MHz reference switched off by mistake!), but on 5.7GHz good signals were exchanged with OZ1FF, DC6UW, G3ZEZ, and G4LDR.

10GHz benefited from some rainscatter to the West, so in addition to OZ1FF, DC6UW and PA0S I worked G3ZEZ, G4LDR, G4WLC/P, and was called on random by G4RGK. Last, but not least was G4ODA, newly on the band with 250mW.

From Eddie G0EHV

The 13cms UKAC (IO94ET) was fun this month, conditions were up and some new ones worked. 4 new squares and 4 new countries for me – DI, PA, OZ and GW (maybe – I think I completed with Tony, GW8ASD).

Although I worked 10 squares, 7 of which were multipliers, there was no activity this month from my own IO94. Another multiplier and I may have given G8OHM a scare!

Highlight was being called by DC6UW near the end on CW, I was calling CQ to the South, turning the beam his way resulted in best DX of the contest at 736km.

Activity was good, I had 17 QSOs, but given a bit more time maybe could have worked a few more who were active.

RF side worked fine but problems again with KST dropping out due to loss of mobile network, sorry if I appeared to ignore anyone.

July 5.7/10/24GHz Microwave Group Cumulative Contest

From Keith GW3TKH

Attached pictures courtesy of David Bailey, G4NKT.

Pete, G4HQX and I were on Jersey with the Bristol Contest Group for the IOTA contest. As it coincided with the UKuW group Cumulative contest we took along our 10 & 24GHz gear. At our site in IN89WG, a quick test on Friday afternoon showed S9+ signals from GB3MCB & GB3SCX on 10GHz and GB3SCK at S2 with QSB, at 181km, my ODX for a 24GHz beacon! A contact with G4ALY confirmed 3cm was working.

On Sunday morning after a call from G0API & G4JNT, we set up our 2m talkback station, but were immediately shut down by a lightning storm followed by torrential rain. After problems at both ends we eventually heard Andy's 10GHz JT4 beacon at S7–9, hand modulated CW QSO's were soon completed! Tests on 24GHz showed no sign of GB3SCK this day, but John was copying me at 54,9 but I heard nothing, so after many adjustments we settled for a one way at 150.3km.

Our best DX was F6DKW in JN18CS at 321km on 3cm.

More thunder, lightning and heavy rain shut us down for good.

Many thanks for the QSO's and tests, hopefully next year Jersey weather will be back to normal.



From John G0API

To add to Andy's earlier note on our recent "two go mad in Dorset /P" foray yesterday, (inspired by the recent excellent DX on 47/76GHz between G8ACE/p and G8KQW/p from nearby on the Purbeck Hills) ,it should be noted that our "hand keyed" 10GHz exchanges were with GJ3TKH/P and GJ4HQX/P. Both stations were worked at excellent strength over the 150km path.

The WX at the GJ end was such that a delay of over half an hour was needed due to the extreme conditions induced by a passing thunder cell .The view over the English Channel from Dorset was of heavy mist and large gathering Nimbus.

My 10GHz Octogon LNB was in its standard form (non-hacked into), but was shielded within a large plastic torch body and embedded in a chunk of polystyrene foam – the glass front window was replaced with 6mm thick perspex , so it helped to maintain the LNB Xtal stability after allowing for a 20 min "warmup". SSB could be read easily with T9 note on CW and any residual drift trimmed on the RIT on my AOR8000 handheld scanner (its LO phase noise being the weakest link).

It is not often that I get the chance to go /P on 10GHz and be able to rotate myself and the equipment and copy signals throughout almost 360 degrees – over a 150km distance.

To repeat what Andy mentioned, the LNB had no antenna other than the standard moulded on feedhorn, designed to illuminate the normal domestic 60cm standard sort of offset dish – these Xtal LO based LNBs are VERY good, the best RX sensitivity I have used yet and that includes previous generation HEMPT front ends used on EME.

If you do the 27MHz Xtal locking mods, and machine the output to take a waveguide flange, for approx £14 you get something special on RX.

Even better make up a GPS referenced synth LO to feed an SBL1 mixer and you have all you need for high sensitivity, stable frequency, narrowband RX capability.

From Peter G3PHO

Like a Phoenix Rising from the Ashes ... I'm back!

A report on the July 2013 24GHz Trophy Contest and the 10GHz Cumulative.

After many months of self imposed hibernation on the microwave band (like a phoenix rising from the ashes!), I have finally managed to extricate some of my gear from the many, as yet unpacked, boxes following my change of QTH last November. Almost all of my test gear is yet to be set up in the spare room but I had to at least get the spectrum analyser, Adret Synth, the 5 & 10MHz reference sources and the frequency counter up and running so I could check out if the transverters

were actually working and on what frequencies! This done I could go on some of the bands with a little confidence that I might make a few QSOs.

These days, my competitive drive on the microwave bands has dwindled from S9+++ of four or five years ago down to an S1 or 2 as I must admit to now having the "Been there and got the T shirt" attitude. Old age has also taken its toll and at 76 years of age I find the physical work in setting up and taking down my big portable station very hard work. But... don't think for one moment that I have given up contesting! Far from it, for I have turned my energies to the cut and thrust of HF CW contesting where QSO rates of 100+ an hour keep my adrenaline levels much higher than the 20 QSOs a day on 10GHz ever used to do!

However, just to keep my hand in above 1GHz, the other week (21st July) I went out /P in the 24GHz trophy and did the usual "roving circuit" around the Peak District, starting with Alport Height, IO93FB44 from where I had a couple of QSOs with G3UKV/P who moved to a new site for me to have the second contact. My gear consisted of a tripod mounted, kit assembled, DB6NT/G3WDG/G4DDK modular system driving a 2W o/p PA into a 60cm offset dish using a W1GHZ feedhorn. 144MHz talkback (50W from an IC706MK2G and 3 ele yagi) was used entirely as it's much more effective than KST when everyone involved is /P and maybe roving.

The first contact to Martyn, G3UKV/P at Brown Clee, IO82QL saw S9+ signals exchanged both ways, as the 96km path is optical (it was S9 with 5mW wideband 24GHz FM in the old days!). The GB3ZME beacon on approx 24048.860 was an S7 at the same time. This was unusual because the weather was quite poor, with visibility less than 1km at my end and with fine drizzle coating the gear with a thin film of water! I would have expected the beacon to very weak or not there at all under these conditions. While Martyn was driving to a second location I tried the 175km path to GW3TKH/P on the Bloreng as this would have given Keith his best DX on 24GHz. Sadly it was a "no go". G3ZME/P then came on from IO82RQ60 and, as signals were down to S1-2, CW had to be used to make the QSO. Martyn also had to resort to using my reflected signal off the Wrekin as the direct one at 79km was extremely weak! After that I drive over to Merryton Low Triangle (IO93AD51) from where I worked G3ZME/P again. By this time he had travelled to IO82RP and was very strong indeed over the 68km path. Finally I made a nice 148km contact, through the drizzle, with Keith GW3TKH/P, who by this time had driven to the car park beneath Hay Bluff at IO82KA ... a good day out, but it could have been even better if one or more of the Southern stations had driven 50 miles north! The 'North South gap' we complained of many years ago is

now back, with a vengeance. Millimetre wave activity in the contests has fallen drastically up here in the north. Martyn and I seem to be the only ones trying to keep it going.

On Sunday 28th July I thought I would try my new home location (Chesterfield) in IO93GG on 10GHz. I set up my smallest dish (a 60cm offset) on a tripod with my 5W 10GHz transverter. This was positioned on my veranda, just outside the living room window and front door but above the double garage (see photo). I had originally said I would not, for the first time ever (!), use 2m talkback and would rely on KST only but, in the end, I fastened a small 3 element 2m Yagi on the veranda, next to the 10GHz system. I'm glad I did as I set up a QSO with G4LDR this way. I knew my location was much better than the old one in Sheffield but the results were more than encouraging. Eight QSOs was the finally tally of the day. The UK activity was quite disappointing and far removed from the days when 25 - 30 QSOs was the norm on this band. I could have made more I suppose but I spent a lot of time listening to beacons via the excellent rainscatter conditions that prevailed for much of the day. I had never been able to hear these beacons from the old Sheffield location. The Manchester, Cleeve and Finningley beacons were all

received very well by me beaming to the south (Manchester is actually NW and Finningley NE of me) I also had a 59RS with G3LRP (north of me) by using a scatterpoint south of me. He then found a nice ground based reflection point within a few degrees of the raincloud to provide a normal sounding signal. The best DX of the day was G4ALY (IO70VL) at over 360km. Attempts with G8CUB/P at IO92XA and F6DKW were unsuccessful as the path went straight through a house and trees across the road! However, I am now enthused enough to put up a permanent home microwave station for the very first time in some 43 years of microwaving! I have worked from home before, at the old QTH, but only by pointing this same dish through a double glazed bedroom window towards the Continent to work into OK land at 1100km! The old place had a narrow DX window of around 40 degrees centred on 110 degrees. My new place has a clear take off all the way around from 0700 through 180 to 345 degrees and probably more if the RF is launched from the top of my planned 40ft mast. It will be a while before the home station materializes as I haven't yet applied for planning permission for the mast. However, my sound engineer nearest neighbour seems very interested in what I am doing and he's very happy to see the projected mast with HF beam and UHF arrays right in front of his view to the South! He even said I could fasten one end of my topband dipole to his roof! (I haven't taken him up on that yet). The only other neighbour who might see the mast at close quarters is also most amenable, so it looks as if I should get full planning permission if all goes to plan..... hopefully in time for the Autumn tropo!

The new QTH is quite superb on the HF bands and I can work the world on simple dipoles, with reports often as good as or even better than folk who have Yagis. As they say on TV ... Location, location. location.

EME

From Peter G3LTF

I was QRV for the 9cm leg of the DUBUS CW EME contest on June 29th and worked SP6OPN, OK1CA, DL7YC, PA0BAT, OZ6OL, DL1YMK, ES5PC, G4CCH, OH2DG, OK1KIR, G4NNS, W5LUA, K2UYH, WA6PY, VE6TA. Next day, Sunday, I worked HB9Q and SP6GWN for a total of 17. I called PA3CQE several times with no reply and had two near misses at a QSO with SP7JSG, both occasions were QRMd. I had to QRT at 0700 so missed a lot of the second day. On 4th July, still on 9cm, I worked LA8LF and on 6th July I worked Phil VK4CDI for initial #44. 25W at the feed of my 6m dish and 0.6dB NF W5LUA type preamp.



Other

From Tony G4NBS

Unfortunately yet again little activity outside of activity sessions, but 8th July had an interesting evening of QSOs watching the path across the N Sea improve dramatically as things cooled down. It started with a weak 23cm CW QSO with LA0BY/P (JO37) at around 2000GMT. Whilst in the middle of a lengthy local chat on 23cm SM6HYG (JO58) and LA6LCA (JO59) called in at 2030. QSY to 13cm gave me my first SM (59/55) and LA (55/55) on 13cm. Just over half an hour later and LA6LCA came up to 59 each way.

Back down on 23cm LA0BY/P was in JO38 and 59 SSB at 2120. QSOs with OZ1FF (59+), OZ3UJ (JO46) and DK7QX (JO42) followed.

At 2300 I used KST to test with OZ9PP (JO47) on 13cm. Result 3rd new country for the evening at 59+, also V Strong on 23cm.

On the 15th July I had QSOs with F9ZG/P (IN98) starting on 2m and working all the way up to 13cm. A new square for me on 23 & 13 (No 30), on what were empty bands for me, despite S Coast stations reporting EA & EA6. Also a good example to other stations on how to follow a QSO up the bands!

Last bit of excitement for me was learning about SK6OSO activity. It made up for not going to Finningley. I was able to hear their signals on Saturday for 25 minutes, though I suspect a WSJT signal I heard strongly slightly earlier than the CW might have been theirs also. My poor CW ear would have given 439 as a "tropo" report and they were clearly visible on Spectran, peaking 15db above my noise clutter. First heard when moon was 6° up and lost around 10°. Sunday didn't find them till moon was already at 8° so were not so strong or audible as long. Again lost around 10°.

Don't know how that relates to , but that was my normal tropo 55ele plus 0.9dB NF preamp into the TS790.

Quite an interesting month in the end – 6 new squares on 23, 4 new squares and 3 countries on 13 (including SM despite their pending loss). And to top it off first signals heard off the moon from home. (That is heard, not seen!)

From Eddie G0EHV

The only other item to report is a short 3cm session /P on 30th June. Only 2 QSOs, but a test of the 10 MHz OCXO was successful. Nice to go straight to a frequency and not drift off!

From Ray GM4CXM

I missed my first 23cm UKAC in many years in July due to being away in Barcelona on holiday, but managed to get back for the 13cm event.

Prior to that I had been watching for the possibility of good conditions occurring with the high pressure about and this duly arrived on the 21st.

As this was the first tropo opening that had occurred for me since I came on 13cm I opted to concentrate on that band.

I found the opening very restricted in coverage to parts of SM, OZ and DL.

Frustratingly, activity was very low indeed with just 3 contacts made on 13cm and 6 on 23cm. It was interesting to receive 13cm beacon SK6MHI (JO57XQ) stronger than SK6MHI and SK6UHI on 23cm for much of the time. Other 13cm beacons heard for the first time included OZ5SHF (JO45VX) and DB0VC (JO54IF). Stations worked on 13cm were OZ9ZZ (JO46QK), DC6UW (JO44VJ) and SM6HYG (JO58RG) being a new ODX at 991km. SM and DC were also new 13cm countries.

23cm produced contacts with OZ3Z (JO45UM), OZ3ZW (JO54RS), OZ9ZZ (JO46QK), DC6UW (JO44VJ, SM6HYG (JO58RG) and SM7GVF (JO77GA) at 1,168Km.

13cm FT736R + DB6NT + 60W PA + 67el @ 12m

23cm TS910HX + 150W PA + SP23 LNA + 4x44el @ 11m

...and finally

I want to encourage you all to 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.

Please send your reports to Scatterpoint@ukmicrowaves.org, remember the deadline is the 1st of the month.

Don't forget that

**Every Monday evening is
Microwave Activity Evening**

RSGB & UKμG Contests 2013

Month	Contest name	Certificates	Date 2013	Time GMT	Notes
Mar	Low band 1.3/2.3/3.4GHz	F, P,U,R,L	3-Mar	1000 - 1600	First 4 hours coincide with IARU event
Mar	1.3GHz Activity Contest	Arranged by RSGB	19-Mar	2000 - 2230	RSGB Contest
Mar	2.3GHz+ Activity Contest	Arranged by RSGB	26-Mar	2000 - 2230	RSGB Contest
Apr	10GHz & Up EME	Arranged by DUBUS	13-14-Apr	0000-2359	DUBUS EME Contest
Apr	1.3GHz Activity Contest	Arranged by RSGB	16-Apr	1900 - 2130	RSGB Contest
Apr	Low band 1.3/2.3/3.4GHz 2	F, P,U,R,L	21-Apr	1000 - 1600	
Apr	2.3GHz+ Activity Contest	Arranged by RSGB	23-Apr	1900 - 2100	RSGB Contest
May	10GHz Trophy	Arranged by RSGB	4-May	1400 - 2200	Saturday, to coincide with IARU
May	432MHz & up	Arranged by RSGB	4-5-May	1400 -1400	RSGB Contest
May	1.3GHz EME	Arranged by DUBUS	11-12-May	0000-2359	DUBUS EME Contest
May	5.7GHz EME	Arranged by DUBUS	18-19-May	0000-2359	DUBUS EME Contest
May	1.3GHz Activity Contest	Arranged by RSGB	21-May	1900 - 2130	RSGB Contest
May	5.7GHz/10GHz/24GHz	F, P,U,R,L	26-May	0600-1800	
May	2.3GHz+ Activity Contest	Arranged by RSGB	28-May	1900 - 2130	RSGB Contest
Jun	Low band 1.3/2.3/3.4GHz 3	F, P,U,R,L	2-Jun	1000 - 1600	Aligned with some Eu events
Jun	2.3GHz EME	Arranged by DUBUS	15-16-Jun	0000-2359	DUBUS EME Contest
Jun	1.3GHz Activity Contest	Arranged by RSGB	18-Jun	1900 - 2130	RSGB Contest
Jun	2.3GHz+ Activity Contest	Arranged by RSGB	25-Jun	1900 - 2130	RSGB Contest
Jun	3.4GHz EME	Arranged by DUBUS	29-30-Jun	0000-2359	DUBUS EME Contest
Jun	5.7GHz/10GHz/24GHz	F, P,U,R,L	30-Jun	0600-1800	
Jul	VHF NFD (1.3GHz)	Arranged by RSGB	6- 7-Jul	1400 - 1400	RSGB Contest
Jul	1.3GHz Activity Contest	Arranged by RSGB	16-Jul	1900 - 2130	RSGB Contest
Jul	24GHz - 1THz Contest	O	21-Jul	0900 - 1700	New Format
Jul	2.3GHz+ Activity Contest	Arranged by RSGB	23-Jul	1900 - 2130	RSGB Contest
Jul	5.7GHz/10GHz/24GHz	F, P,U,R,L	28-Jul	0600-1800	
Aug	Microwave Field Day	O,L	4-Aug	0900 - 1700	
Aug	1.3GHz Activity Contest	Arranged by RSGB	20-Aug	1900 - 2130	RSGB Contest
Aug	5.7GHz/10GHz/24GHz	F, P,U,R,L	25-Aug	0600-1800	
Aug	2.3GHz+ Activity Contest	Arranged by RSGB	27-Aug	1900 - 2130	RSGB Contest
Sep	1.3GHz Activity Contest	Arranged by RSGB	17-Sep	1900 - 2130	RSGB Contest
Sep	2.3GHz+ Activity Contest	Arranged by RSGB	24-Sep	1900 - 2130	RSGB Contest
Sep	ARRL Microwave EME	Arranged by ARRL	28-29-Sep	0000 - 2359	
Sep	5.7GHz/10GHz/24GHz	F, P,U,R,L	29-Sep	0600-1800	
Oct	1.3 & 2.3GHz Trophies	Arranged by RSGB	5-Oct	1400 - 2200	RSGB Contest
Oct	432MHz & up	Arranged by RSGB	5-6-Oct	1400 - 1400	IARU/RSGB Contest
Oct	1.3GHz Activity Contest	Arranged by RSGB	15-Oct	1900 - 2130	RSGB Contest
Oct	2.3GHz+ Activity Contest	Arranged by RSGB	22-Oct	1900 - 2130	RSGB Contest
Oct	ARRL EME 50-1296MHz	Arranged by ARRL	26-27-Oct	0000 - 2359	
Nov	ARRL EME 50-1296MHz	Arranged by ARRL	16-17-Nov	0000 - 2359	
Nov	1.3GHz Activity Contest	Arranged by RSGB	19-Nov	2000 - 2230	RSGB Contest
Nov	Low band 1.3/2.3/3.4GHz 4	F, P,U,R,L	24-Nov	1000 - 1400	
Nov	2.3GHz+ Activity Contest	Arranged by RSGB	26-Nov	2000 - 2230	RSGB Contest
Dec	1.3GHz Activity Contest	Arranged by RSGB	17-Dec	2000 - 2230	RSGB Contest

Sections	F Fixed / home station
	P Portable
	L Low-power <10W 1.3/2.3/3.4GHz, <1W 5.7/10GHz)
	R Radio talkback
	U Unlimited Talkback

Main changes from 2012 calendar

- 1 ARRL/DUBUS EME updated
- 2 Lightwave event deleted
- 3 5.7/10/24GHz Cumulatives replaced with individual events

73 John G3XDY, UKUG Contest Adjudicator
[UKμG Contest Portal](#)

Journées d'Activité Dates in 2013

From Robin Lucas G8APZ

There will be nine fixed JA in 2013:

First JA – 24 GHz and above in March,

Seven JA – 1296 MHz and above in April, May, June, July, August, September and October, and a JA mid-July for reflection via Mt Blanc 1296 MHz and above.

JA March: W/E 30 and March 31

JA April: W/E 27 and 28

JA May: W/E 25 and 26 (UKMG contest)

JA June: W/E 22 and 23 (Activity "Big Blue")

JA July: W/E 27 and 28 (UKMG contest)

JA of August: W/E 24 and 25 (UKMG contest)

JA September: W/E 28 and 29 (UKMG contest)

October JA: W/E 26 and 27.

F6BSJ memorial JA: QSOs by reflection via Mt Blanc will take place on Sunday morning July 14.

Duration of JAs: Saturday 5:00 p.m. Sunday 5:00 p.m.

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

Events calendar 2013/14

2013

Sept 8	Crawley Roundtable	See page 13
Sept 13–15	58.UKW Tagung Weinheim	www.ukw-tagung.de/
Sept 27–28	National Hamfest	www.nationalhamfest.org.uk/
Oct 8–10	European Microwave Week, Nuremberg	www.eumweek.com/
Oct 11–13	RSGB Convention	www.rsgb.org/rsgbconvention/
Oct 18–19	Microwave Update, Morehead, Kentucky	www.microwaveupdate.org/
Oct 26-27	BATC Convention, Finningley	www.g0ghk.co.uk/calendar/viewevent/90-batc-convention
Nov 2	Scottish Roundtable	www.rayjames.biz/microwavert/

2014

Apr 12	CJ-2014, Seigy	cj.ref-union.org/
May 16-18	Hamvention, Dayton	www.hamvention.org/
Jun 27-29	Ham Radio, Friedrichshafen	www.hamradio-friedrichshafen.de/
July 1	Scatterpoint 10th Anniversary	www.scatterpoint.org/
August	EME2014, Pleumeur-Bodou near Lannion	
Oct 6-9	European Microwave Week, Rome	www.eumweek.com/
Oct 10-12	RSGB Convention	www.rsgb.org/rsgbconvention/
Oct ??-??	Microwave Update, Rochester, New York	www.microwaveupdate.org/