



Wythall Radio Club

Wythall Contest Group

G1WAC G4WAC G7WAC G0WRC M5W



g1wac@wythallradioclub.co.uk

<http://www.wythallradioclub.co.uk>

Wythall Radio Club meets from 8pm every Tuesday evening at Wythall House, Wythall Park, Silver Street, Wythall, B47 6LZ, near Birmingham.

Visitors are very welcome. **Wythall Radio Club** is affiliated to the Radio Society of Great Britain

Officers

Chairman: Vaughan M0VRR

Secretary: Colin M0GJM

Treasurer: Mel M0MAJ

Committee -

Martin G8VXX

Chris G6KMQ

Lee G0MTN

Chris G7DDN

Peter M5DUO .

David G0ICJ

Martin G7WBX

Stuart 2E0NYC

Neil M0YMM

Tom G3PQP

Chairman's Message

As I type this we are waiting for the results of this years Club of the Year competition. With me being the Regional Manager for RSGB region 5 I don't get to mark any entries from our Region. In fact I made a point of not even reading the entries, they were all sent off to another region for marking. Fingers crossed !

It's that time of year again folks, "Rally Time" and your club needs you ! if you can help over the rally weekend on the 12th and 13th, even just for a couple of hours it all makes the rally possible.

A couple of dates to remind you about, the 7-8th of May for another Plug 'n' Play weekend and may be a RDF fox/pie hunt on the 26th June, so plenty of time to make those DF antennas.

I shall end my message this time round wishing Tom Foster a speedy recovery, Spinal surgery is no excuse Tom see you at the Rally !

Cheers
Vaughan M0VRR



Newsletter

March–April 2011

Happy 30th Birthday WRC

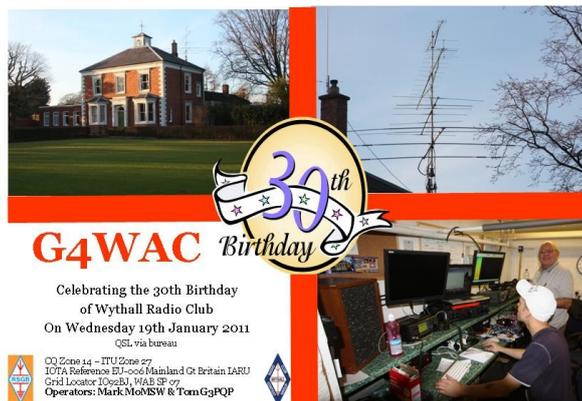
Wythall Radio Club celebrated its 30th birthday on the 19th of January with a day of radio operation from the club shack by Mark M0MSW, with a bit of encouragement from Tom G3PQP, Colin M0GJM, David G0ICJ and Chris G0EYO. Mark made 68 contacts mostly on 2m and 70cm during the

day and in commemoration we produced a special QSL card. I don't suppose the founding fathers of the club gave much thought to what the club would be doing in 30 years time. We have never had a plan to be the best club in the midlands, let alone the country, and we certainly couldn't be the eldest as this year MARS celebrate their 80th birthday. Our only objective was to provide a venue where like minded people could meet to socialise, discuss and play radio and provide a friendly convivial environment. We must have been successful because we attracted the right

people and have grown the club to what we are today. In all that time, members have been motivated, not by what the club can do for them but what they can do for the club. Members have worked hard to provide the club with the facilities and resources it has today, but we must never take those things for granted nor

to other members then new things will be happen in the club. This is well illustrated with what has been happening since the AGM and with changes to the officers and committee. The Christmas contest, whilst always attractive, achieved new levels of participation. The new CW classes have proved very popular with a number of members, some of whom are clearly going to be sending CW QSOs before the year is out. Mark using the shack radios for the birthday QSO is a first. This is excellent stuff and should foster goodwill

and happiness in the club. There are more things to look forward to; the rally in a couple of weeks, another plug and play weekend, the NFD contests, perhaps a summer fox hunt, an inter-club skittles match perhaps .
Chris G0EYO



WYTHALL RADIO RALLY

Its on **Sunday March 13th** at Woodrush Sports Centre, Shawhurst Lane and we need your support to make this a success.

We shall need volunteers to put up signs and layout tables on the Saturday and man the halls and help the traders in with their goods on the Sunday morning. Sunday afternoon we need you to help with the knock down, clear all the tables away and leave the place tidy. If you can help please let Martin G8VXX know via the list

Valve Headphone Amplifier

Another exciting project
from Barry's Bench

Here is a nice sounding headphone amplifier suitable for driving 8 ohm low impedance stereo headphones. The virtues of triode single ended class A will not be dealt with here, there is plenty of material on the web regarding this. Most commercial valve headphone amplifiers will not drive loads below 30 ohm or so very well, unless that is, you spend a lot of money on one that uses transformer coupling for the output stage. Expensive output transformers are out of my budget so a cheap alternative is used in this circuit.

The transformer used in this circuit is a common 100 volt line loudspeaker transformer. Anyone who is into audio is now probably having to pick themselves up off the floor, however, using a 100 volt line transformer here is not as daft as it sounds. The key to using this type of transformer is to keep the standing DC current through the primary to a low level so the core does not magnetically saturate. As this is a headphone amplifier, only a small amount of power is needed to drive the headphones, approximately 300mW of output power is available with this circuit - more than enough. 300mW output power equates to a standing current of 6mA through the output triode and primary of the output transformer, a very small amount indeed so no saturation will occur in the transformer. Obviously, the 100 volt line transformer will not compete

with top of the range grain orientated lamination/low capacitance wound transformers costing into the hundreds of pounds but this amplifier gives surprisingly good results. I use it to listen to some of my old vinyl collection and CD's and prefer it to any other audio amplifier in the shack. As always, audio is very subjective.

Moving on to the circuit you can see how simple it is. The first triode is configured as a common cathode voltage amplifier and is biased in class A, the input impedance of this preamplifier stage is high (approximately

900mV to this stage. As it is a class A stage this gives an output power of approximately 300mW to the headphones. Negative feedback is applied to V1a cathode via R5 and the secondary of the output transformer (be sure to get the phase correct). The input sensitivity is roughly 600mV

peak to peak for maximum undistorted output. V1 is a ECC82, do not be tempted to use a ECC83 as this has a much higher gain and anode impedance. The 100 volt line transformer I used is a 10 Watt multi tapped primary with a 8 ohm secondary, the 0.625 watt primary tap gives the correct impedance match to V1b anode, the make is Monacore and are available from CPC and various other suppliers. The heaters of the valve are supplied with DC to reduce audible hum also a separate power supply is used.

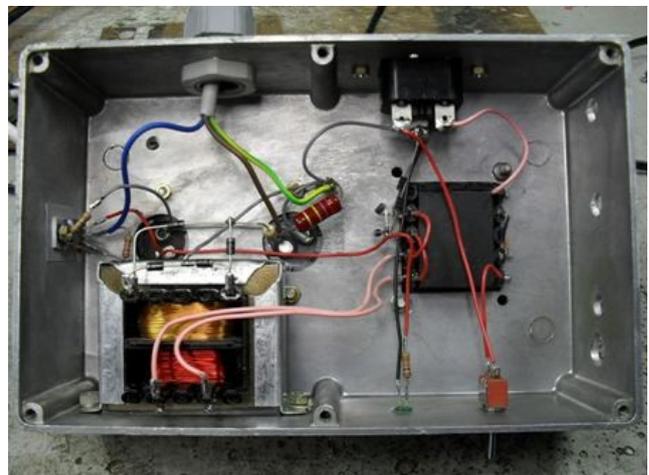
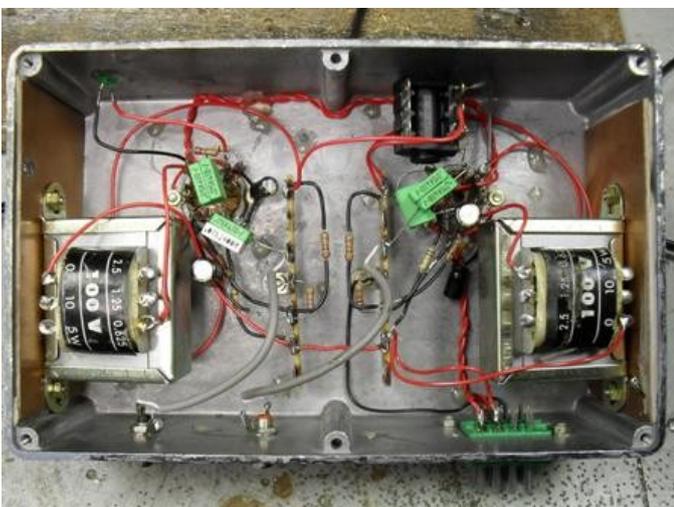
Low impedance headphones are not very common now, most tend to be 30 - 300 ohm, however I still use my DD1's to this day (8 ohm jobs) as they are great for bottom end when listening to loud rock and roll. This amplifier also drives Sennheiser HD250's very well too, use the 1.25W tap on the transformer for best results (These headphones have a impedance of 300 ohm).



470k) so it is important to keep the wiring around the grid circuit as short as possible. The anode of the preamplifier (V1a) is capacitively coupled to the grid of the output triode V1b (again high impedance) which is also biased in class A but with a higher standing current than V1a. 6mA of current flows through V1b giving a DC input power of

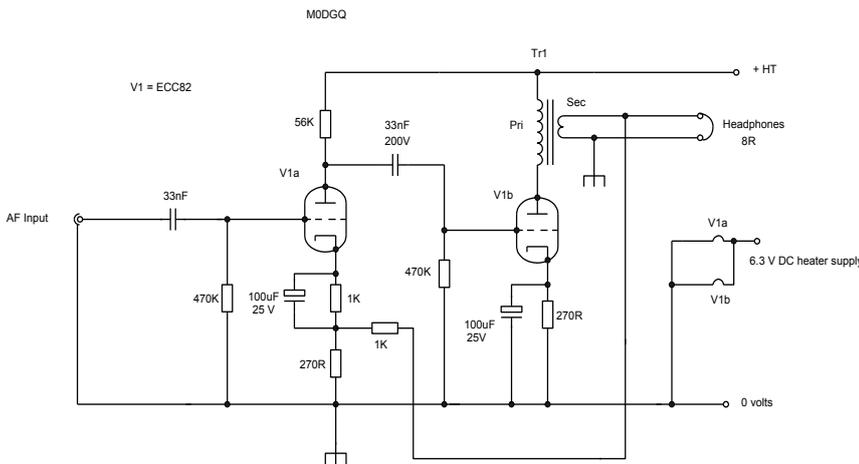
My sincere thanks to Chris G0EYO for donating a couple of ECC82's

Barry M0DGQ

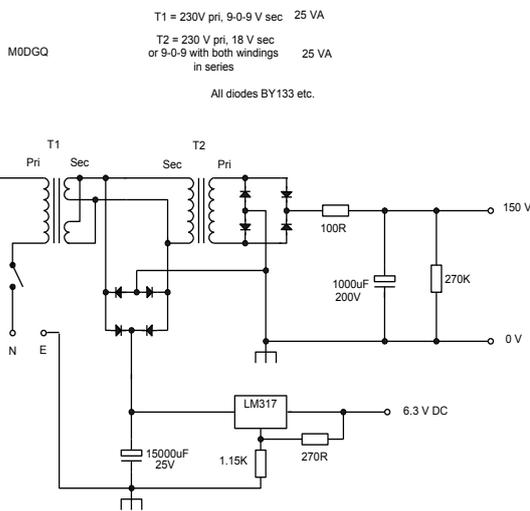


Valve Headphone Amplifier

Training Report



HEADPHONE AMPLIFIER AUDIO CIRCUIT



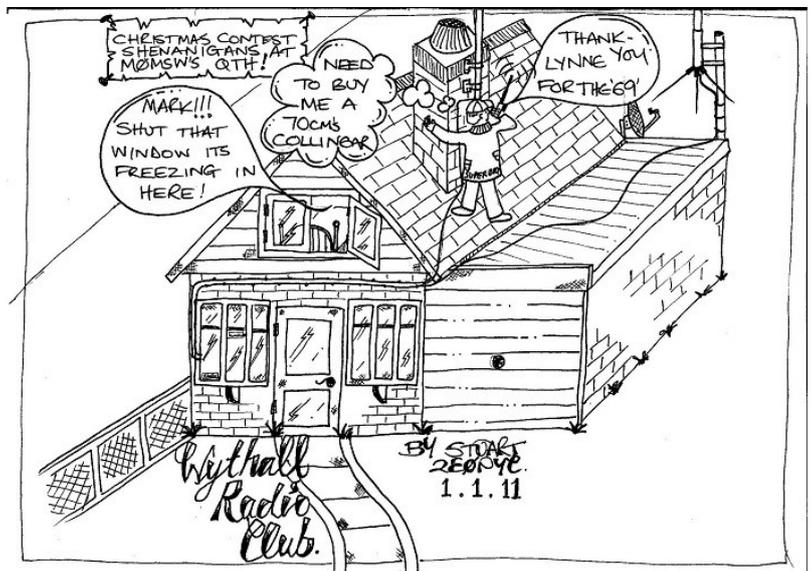
HEADPHONE AMPLIFIER PSU CIRCUIT

We started an Intermediate Course on the 15th January with 3 candidates; Mark M6RKX, Gary M6AGA and Paul M3CVU. As reported in the last newsletter, we have adopted a slightly slower pace, especially on the technical side, with more time for demonstrations, revision and videos to reinforce the power point presentations. One thing that has proved useful is a circuit simulation package called Circuit Wizard where you can draw a circuit and then show what is happening in the circuit. We have been able to quickly demonstrate rectification, transformers, tuned circuits, amplifiers and oscillators with this program. It will probably have much more use in an advanced course but we are learning how to use it. Our intermediate class take their exam on Monday 7th March so we wish them all well and an easy pass!

We have had number of people interested in our next Foundation Course which will start on 21st March and run for 8 weeks, mostly on a Monday evening with the examination being held on Monday 9th of May. If you know of anyone looking for a Foundation Course then get them to contact Chris G0EYO on g0eyo@blueyonder.co.uk

Wythall have been invited to participate in a pilot scheme run by the Radio Communications Foundation (the exam and training side of the RSGB) to improve the quality of their practical work undertaken by students in the Foundation and Intermediate Courses. Apparently there have been wide variations in the quality and management of the work undertaken by students and the idea is to standardize the practical work to the same level. You can imagine how pleased we were when we discovered that the pilot scheme was almost identical to the way in which we have been running practical assessments at Wythall with worksheets for each task.

Chris G0EYO



G7OJO Christmas Contest Trophy

Where does one start to report on this? Perhaps the best way is to hand the soapbox over to you the members, as reported back to the club...

- "I don't recall such enthusiasm & enjoyment in previous years"
- "We need to keep this momentum going into 2011"
- "I really enjoyed it all"
- "An air of anticlimax now hangs... (now the contest is over)"
- "It was brilliant fun - I loved it !!!"
- "The logging software was very easy to run"
"It was great to QSO with a lot of members, most for the first time"

Comments like these encapsulate some of the adrenaline-fuelled fun that so many members reported on during the 2010 Christmas Contest. Penning these words a few weeks after the event, members are still buzzing about the fun they had on air.

Highlights

Highlights (in no particular order) included....

- At least 4 female members of the club were heard operating during the event
- CW contacts on the 2m FM channel(!?)
- At least one member scurrying for his radio manual in order to work another member who had CTCSS stuck on!
- G3PQP staggering around on New Year's Eve between shack and house
- M0MSW airing his new call, hanging out of windows to get any signal he could on 433 MHz, and hearing the magic words "I'll give you 69, Mark" from Lynne M6FAB!! (apparently flabbergasted, he tried hard NOT to reply with "Thank you for the 69, Lynne!")
- G7WBX using any (and every) band and mode possible to make contacts, including trying to set up repeater and Echolink skeds

- 2E0BLP a little worse for wear (several nights!) on his Jamieson's Whiskey
- M0JJM going down the Drain in Herefordshire to give points away
- M6CLR appearing on air for the first time (Well done, Clare!)
- At least 3 stations taking the time to activate Broadway Tower in Worcestershire
- Bands operated included 160m, 80m, 6m, 2m, 70cms
- G3YXM coming on 2m & 70cms remotely from Scotland (bet that surprised a few!)
- The debut of the Logging Spreadsheet (which worked fantastic if you had Excel and a bit so-so if you didn't!) although it also seemed to help people in their enjoyment of the contest in the sense that you could see how well you were doing for the first time. Some also said that it made it

scheduled fun into proceedings.

- Quite a few people reporting that they felt they were getting to know other members better
- Several people out working mobile – even G0EYO was heard at the Peacock (with or without real ale, Chris?)

The highest serial numbers ever heard (into the 140s) and 38 members (more than 50% of the club) active on air at some point during the event

Well I could go on and on with just highlights, but the bottom line is that the 2010 Christmas Contest has been an absolute blast!

Before the contest, I had heard people talking about how much they were looking forward to it, but during the contest, the fun and camaraderie just built up further and at the end there was almost a sense of "what next"?

Several folk commented on how they had actually USED their radios properly for the first time in ages during the contest (and how much they really found that they enjoyed radio again!)

In some ways, it is a sad indictment of us amateurs that this has to be said at all, but we probably spend more time in front of our computers than on air these days. Even the list has too often been busier than the airwaves. And if there is one thing we should take away from this year's contest, it should probably be a resolution to get on the air more.

So indeed, what next?

Well in many ways, we have already seen some results of the Contest filtering into the daily activities of the club. There has been a good feeling between members about being "on air" more. 145.225 is much more busy than it was and there are a few "regulars" popping up there most days now. CW classes have sprung up on Tuesdays for beginners at the club and also for advanced members on air on Sunday nights.

We are looking at finding better frequencies for club monitoring. We are investigating the possibility of running another club contest during the year. We have had an open meeting about how we can improve the contest rules to

POS	CALL	QSOs	BEST 5 DAYS	MULTS	PTS
1	M0MSW	142	99	32	3168
2	2E0NYC	144	96	31	2976
3	2E0BLP	135	85	30	2550
4	G7WBX	106	77	30	2310
5	G7DDN	116	75	28	2100
6	G6KMQ	101	77	25	1925
7	G0EYO	111	74	25	1850
8	M0GJM	103	70	22	1540
9	2E0XTV	100	69	22	1518
10	M6FAB	79	61	23	1403
11	G3PQP	68	56	23	1288
12	M0AEJ	60	50	19	950
13	G0ICJ	49	49	18	882
14	G3YXM	44	44	20	880
15	2E0WTH	47	47	17	799
16	M5DUO	35	35	20	700
17	M0DGQ	51	41	15	615
18	M6RKX	27	27	18	486
19	M0JJM/M	21	21	13	273
20	G0MTN	19	19	13	247
21	M3SSP	17	17	13	221
22	M0COP	17	16	10	160
23	G1WAC	12	12	12	144
24	M0MAJ	14	14	10	140
25	M0VRR	10	10	6	60
26	G4VPD	8	8	5	40

easier to submit an entry, which was good.

- QSOs taking place literally around the clock (0400 does appear in some logs – are you mad??!!)
- Folk popping up on strange bands for set periods of time, which added a lot of un-

G7OJO Christmas Contest continued

make it fresher and keep it more fun for future years.

All of which means this year's Christmas Contest has been, if anything, more fruitful in what it has produced, rather than what it did for people trying to win the G7OJO Trophy. In many ways therefore, the results are secondary, as the taking part really did seem to matter more to people than who eventually won.

Nonetheless, there has to be a winner, so it is perhaps only correct that Mark M0MSW, the self-styled "King of Waffle" prevailed in the end. But he was pushed very hard by Stuart 2E0NYC. Previous multiple winner Jim 2E0BLP managed a creditable 3rd place, but the gap was largest between 2nd and 3rd places, showing just how far the top 2 were ahead of the chasing pack this year. Also honoured was Lynne M6FAB in 10th place, with a certificate for the leading Foundation License holder.

The most important thing though, is that we carry the good feeling on into 2011 and beyond and that next year the contest is even better!

Pauline, Reg's widow was kind enough to come and present the trophy and certificates to the winners and runners up. The club presented her with a bunch of flowers by way of thanks for her participation.

My thanks to you all and especially to Lee G0MTN and Colin M0GJM for their support throughout and especially with the Logging Spreadsheet Project.

Chris G7DDN

You know you are a Radio Amateur when;

- 1 You have bought black electrical tape in ten packs.
- 2 You have stripped wire with your teeth.
- 3 You have told your child, "One day, all this will be yours," and he or she did not respond at all.
- 4 You would rather help another Ham friend to hook up new equipment, or to put up a new tower, than to mow your own lawn.
- 5 You have grabbed the wrong end of a hot soldering iron.
- 6 You have gotten an RF burn from your own antenna.
- 7 You know the Latitude, Longitude, and Elevation of your home QTH
- 8 You have told the XYL, when she noticed a new rig in the shack, "Why, that has been there for years."
- 9 You have set your watch to UTC only.
- 10 When you look at anything made of wire or metal tubing, you wonder if it could be used as an antenna.

Pauline, presenting the awards to; top right Mark M0MSW 1st; Right middle; Jim 2E0BLP 3rd; Lower right Stuart 2E0NYC, 2nd; below; Lynne M6FAB Leading Foundation



Below right; Mark M6RKX at Broadway Tower



The Pico Keyer Plus

I guess I'm quite awkward to buy Christmas presents for. Even coming up with suggestions to make things easier for my nearest and dearest has been a challenge. Last year I had the idea to get away from high power, intense radio contesting and try something a little more low key and less stressful. Following Darren MW5HOC's positive experiences of the FOXX-3 QRP CW Transceiver kits, and a recent RadCom review, I ordered one. I'll tell this story next time as it's not complete.

My intent was to get some real use out of this radio, perhaps on holidays, and use an iambic key would be far more enjoyable than the push-button on board key. My external keyers were very large and heavy compared with the QRP FOXX, so I looked for a similarly



miniature alternative. I found it with Dale NOXAS's Pico-keyer Plus from his HamGadgets website. For less than £20 it came shipped to the UK from Nebraska, and was an ideal Christmas present and mini holiday project.

Inside the box was a mini-CD with the instructions, and the bag of components. The board itself is quite small and tightly packed, but there are not too many parts to solder. There are 3.5mm connections to your key, and then the radio. There is an on-board speaker, battery, and one rotary speed control, and one all-purpose menu button. It was all complete within an hour, and a very satisfying '73' came out of the speaker when plugging in the battery for the first time.

The logic control is very clever, making use of the single button. Holding the button

down will cause different morse characters to play, highlighting which menu option is being selected. You can program several memories, for example a CQ message, and you can change the keying style, sound pitch and

volume and so on.

When plugged into my Palm mini-paddle, it does make an excellent lightweight CW keying combination ready for an expedition to far off places. The only final touch is to add a case. I would recommend this as a simple straightforward kit that gives a useful end product. See <http://www.hamgadgets.com> for more details.

Lee G0MTN



Post Xmas Fox Hunt

The annual club Christmas Foxhunt had to be postponed from its usual date of 27th December, to 9th January 2011. A check on the roads, between Bromsgrove & Red-ditch, by Chris G0EYO, clearly indicated that they were still very hazardous due to the snow & ice. The decision was made to postpone, as we carry out these events for fun, not to endanger life & limb !!

Those participating on a cold but bright sunny Sunday morning, gathered at Morrison's car park in Bromsgrove. Maps of the area to be used along with rules were given out to the following teams :-

while for all the radios, aerials & people a little while to warm up !

Phil and Eric were then out to be found and before we had got a second direction fix seemed to have been found by Vaughan & Chris, who then found a location that eluded us all, for a while. Regular transmissions gave more & more clues but still they proved elusive. Rob and I had a good direction bearing but local signals were too strong to get a fix. After seeing some of the other chasers going in different directions, Rob and I stumbled on Vaughan and Chris, by a telephone box clue, getting there before Jon and Darren, by the length of a Freelanders.

Maybe a test run, on a Tuesday evening, when the dark winter nights are over.

Again, a fun filled morning that was enjoyed by all & looking forward to the next Fox Hunt in the summer.

Colin M0GJM

Left; the fox hunt group; below; Mark finds a bigger DF antenna; below ;Chris , Pete and Rob looking lost!; bottom right Darren and Jon just beaten by Rob and Colin; bottom left: Rob brings out the big gun



Phil (2E0WTH) & Eric (2E0EJW)
Chris(G0EYO)& Pete(M5DUO)
Vaughan(M0VRR) &Chris(G6KMQ) &
Vaughan's son Nick (M6NJR)
Jon(M0JMM) & Darren(M0JMM)
Mark(M0MSW) & Stuart(2E0NYC)
Colin(M0GJM) & brother Rob

Jon and Darren became the next fox and were found fairly quickly by Mark & Stuart by the crane mounted beam antenna of Dave G0EVY in Copyholt Lane. I suspect, however, that it was either inspired guess from Mark or luck, as they were heading to take a look at the giant aerial !

Rob and I went out as first Fox to a location not too far from the start and after 40 mins were found by Phil & Eric. I think it took a

At this point we had had enough driving around the Worcestershire lanes and& headed to the Crown at Wy-chbold for lunch. I think it is fair to say that there is room for further development of both antennae & method, of use, to provide a more effective system.



Contest Corner

Contests coming up that may be of interest to you are listed below.

March 2011

All the regular contests take place as usual. The one that may especially interest you is the CQ WPX SSB contest on 26/27 March. There will be every opportunity to work the world, including some rare countries during this contest, so it is a "must try" for you if you want some new DX in your log!

Start Date	Organisers	Contest	Mode	Start (Local)	Length
01 March	RSGB	2m UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
05 March	RSGB	March 2m/70cms Contest	Mixed	00:00	24 hrs
07 March	RSGB	80m Club Championships (CC)	DATA	20:00	1.5 hrs
08 March	RSGB	70cms UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
12 March	RSGB	Commonwealth Contest (formerly BERU)	CW	10:00	24 hrs
13 March	RSGB	4m Cumulative Contests - Leg 2	Mixed	10:00	2 hrs
15 March	RSGB	23cms UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
16 March	RSGB	80m Club Championships (CC)	CW	20:00	1.5 hrs
22 March	RSGB	6m UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
24 March	RSGB	80m Club Championships (CC)	SSB	20:00	1.5 hrs
26 March	CQ Magazine	CQ WPX (World Prefixes)	SSB	00:00	48 hrs
29 March	RSGB	4m UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs

April 2011

A contest worth a try this month might be the RO-POCO 1.

In years past, this series of 2 contests have been CW only events, but this year the first one is set to be an SSB contest. This should prove very popular. Part of the fun is that you exchange the post-code of the station you have just worked! It leads to some fun in the "Chinese whispers" style and is even more exciting when you get your own postcode back during the contest! Worth a try?

Start Date	Organisers	Contest	Mode	Start (Local)	Length
03 April	RSGB	1st 70MHz Contest	Mixed	10:00	3 hrs
03 April	RSGB	ROPOCO 1 (Rotating Postcodes)	SSB	20:00	1.5 hrs
04 April	RSGB	80m Club Championships (CC)	CW	20:00	1.5 hrs
05 April	RSGB	2m UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
10 April	RSGB	1st 50MHz Contest	Mixed	10:00	3 hrs
12 April	RSGB	70cms UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
13 April	RSGB	80m Club Championships (CC)	SSB	20:00	1.5 hrs
19 April	RSGB	23cms UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
21 April	RSGB	80m Club Championships (CC)	DATA	20:00	1.5 hrs
26 April	RSGB	6m UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs

May 2011

May sees the start proper of the summer season with more and more VHF/UHF contests appearing in the calendar and notably the advent of the Backpackers series of contests.

There are plenty of events for all tastes across the summer and if the weather is good, it is great to get out with a simple Yagi and maybe a Yaesu FT-817 and do some real portable work (with a pub nearby of course!). If HF is more to your taste, then the usual 80m Club Championships continue and there is the CW less of CQ Magazine's WPX Contest, where, once more, there will be exotic DX floating around! Whatever you do in the Springtime, have fun and remember to let me know what you have been up to and how you get on for the monthly contest reports.

Chris G7DDN

Start Date	Organisers	Contest	Mode	Start (Local)	Length
02 May	RSGB	80m Club Championships (CC)	SSB	20:00	1.5 hrs
03 May	RSGB	2m UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
07 May	RSGB	70cms & up Contest (inc. 70cms Trophy)	Mixed	15:00	24 hrs
10 May	RSGB	70cms UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
11 May	RSGB	80m Club Championships (CC)	DATA	20:00	1.5 hrs
15 May	RSGB	4m CW Contest	CW	10:00	3 hrs
17 May	RSGB	23cms UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
19 May	RSGB	80m Club Championships (CC)	CW	20:00	1.5 hrs
21 May	RSGB	2m May Contest	Mixed	15:00	24 hrs
22 May	RSGB	2m Backpackers - Leg 1	Mixed	12:00	4 hrs
24 May	RSGB	6m UK Activity Contest (UKAC)	Mixed	20:00	2.5 hrs
28 May	CQ Magazine	CQ WPX (World Prefixes)	CW	01:00	48 hrs

The next issue of the Wythall Radio Club Newsletter will be published at the beginning of May 2011

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