



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: Martin G8VXX

Secretary: Chris G0EYO

Treasurer: David G0ICJ

Committee -

Chris G6KMQ

Vaughan M0VRR, Deputy Chairman

Lee G0MTN Contest Liaison

Peter M5DUO Antenna maintenance.

Mike G4VPD

Mel M0MAJ

Martin G7WBX

Colin M0GJM QSL manager

Neil 2E0TUX IT manager

Chairman's Message

Summers here and the time is right forNFD. To the uninitiated, VHF National Field Day. So hope to see as many of you as possible at the BBQ on Saturday night 4th July and, as I'm sure some of you are new to this, you are all welcome. The event is 24 hours long from Saturday Morning to Sunday afternoon help is needed to set up and crack down. Please also come along Tuesday 30th June if you can for the pre NFD briefing at the club.

All new members who have joined us as a result of being involved in the training program we have been running are welcome to come and join in on any of our club nights Tuesday evening's from 8.30pm onwards

Details of field day can found on page 8 of this newsletter. I hope to see as many as possible.

Martin G8VXX

VHF NFD Saturday 4th and Sunday 5th July. Real Amateur Radio. Come and Join Us in the field at the back of Wythall Park. Evening BBQ. All are welcome

Newsletter

July- August 2009

We were all as high as a kite one Tuesday!

On Tuesday 5th May the club were honoured to have Roger Stafford, G4ROJ come and give us a demonstration of kites flying supporting wire antennas. Roger followed his demonstration with an illustrated talk to club members.

We had arranged with Wythall House to have use of a field in the park and at 5pm we met Roger in the carpark to take him to the field and help him set up. First problem was that despite several times of asking and going up to the park the morning of the same day, the gate to the fields was left locked with no way of opening it. Those of us there took the alternative route between the Park Hall and the Scout Hut and got to the field that way.

Roger (literally) threw up a kite to see the wind direction and characteristics and then decided that in the current

conditions (windy with gusts and changing direction) that a 300ft dipole fed with twin feeder would be just the antenna to use. The antenna and feeder was laid out on the ground and the kite launched. Very soon it was flying at about 180ft and Roger connected it to his rig/atu in his car. It wasn't long before we were working stations (I got the DX - Dudley and Red-ditch) but Peter G4LWF and David G0ICJ worked inter-G and some continentals. Jon (M6FRG) had just bought an FT817 which was connected to the same antenna. We heard loads of stations but 5w just couldn't attract any responses (apart from Lee who worked us from home and could actually see the balloon from his shack!)

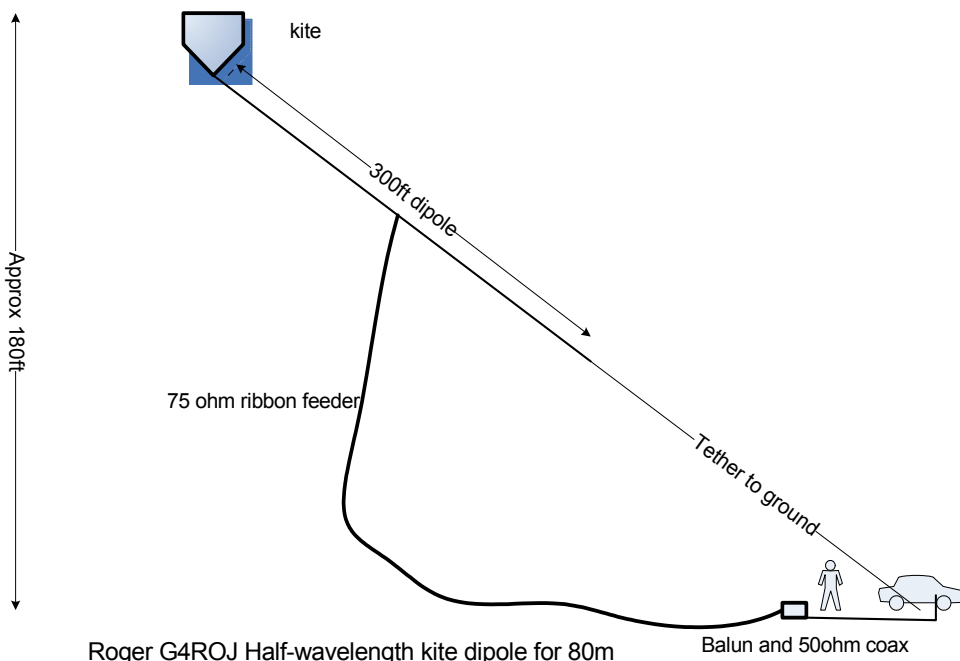
In the talk afterwards Roger explained the different kinds of antennas and their materials as

well as the kites he uses and when wind conditions are poor, helium balloons. He had brought along loads of things for us to see and touch. His experiences of different types of antennas tried over many years enthralled us all and his amusing story of flying kites in Tobago had us in stitches.

This was a great evening and we are grateful to Roger for spending so much time demonstrating and explaining his hobby.

Roger left us with a CD explaining how to make kite antennas and he has an excellent website for those interested in reading of his exploits <http://www.kiteaerials.com/>

Chris G0EYO
(see photos on page 5)



Intercom System for long cable runs

Another exciting project
from Barry's Bench

Described here is an audio intercom for use with long cable runs (up to 500 meters or so) between the intercom stations. By using a **balanced** audio bus, long cable runs are easily achieved without signal degradation (using unbalanced audio is generally only suitable for short runs). Balanced audio was chosen as I needed an intercom to work between my garage, attic, kitchen and living room, the longest runs being approximately 40 meters. The merits of balanced audio are abundant on the internet and will not be dealt with here. For the interconnecting signal cable between the stations screened two core (KST etc.) is the best, but excellent results have been had using just twisted pair (CAT 5 utp etc.), even bell wire will be okay so long as it is not laid on top of any mains cables (as some of mine are).

THE CIRCUIT

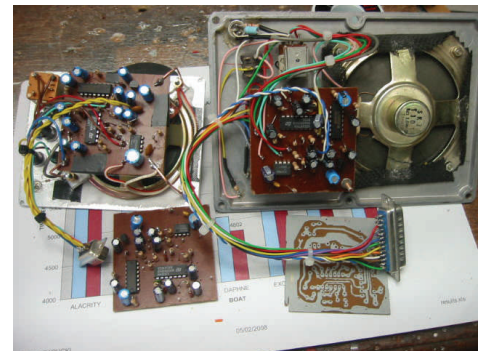
An electret mic insert is used as it is sensitive and cheap. The output from the mic is fed into IC1a which is configured as a non inverting amplifier with a voltage gain of times 26. The 1nF capacitor across the 82K resistor gives HF roll off and prevents any instability at HF. The output from this stage is then fed into IC1b which is configured as a unity gain non inverting buffer. The output from the buffer is also fed to the input of IC1c which is arranged as an inverting amplifier with a gain of exactly times 1 (unity). So, for example, if a sine wave were feeding into the input of IC1b, on the output of IC1b we would see the very same sine wave and on the output of IC1c we would see the same sine wave but it would be 180 degrees out of phase with IC1b output, voila! Balanced audio. IC1b is used as a buffer so it does not load the preceding stage.

The two legs of the balanced audio are fed into IC2a and IC2b, these are bi-lateral switches and for the purpose of this explanation consider them as a solid state single pole relay, activated by its control input. When its control input is active high a low resistance path is created between its input and output (approximately 80 ohms) see the chips data sheet for more detail. When the PTT is pressed, switched 12 volts is fed to the mic, IC2a and IC2b control input thus allowing balanced audio to be fed to the audio bus. This audio is picked up off the bus by IC1d in all the other intercoms. IC1d is configured as a **differential** amplifier which amplifies the **difference** between its inverting and non inverting inputs

resulting in unbalanced audio being produced at its output. This unbalanced audio is then passed to the power amplifier via a volume control. Also when the PTT is pressed the DC supply to the audio power amplifier chip (IC3) in the broadcasting intercom is removed via IC2c and Tr1 to prevent feedback due to the proximity of the mic and speaker. When the PTT is released DC is restored to the power amplifier. So, when the PTT is pressed the audio is broadcast to every other intercom, a useful feature if you don't know where the other person is located but not so good if you want a private qso!

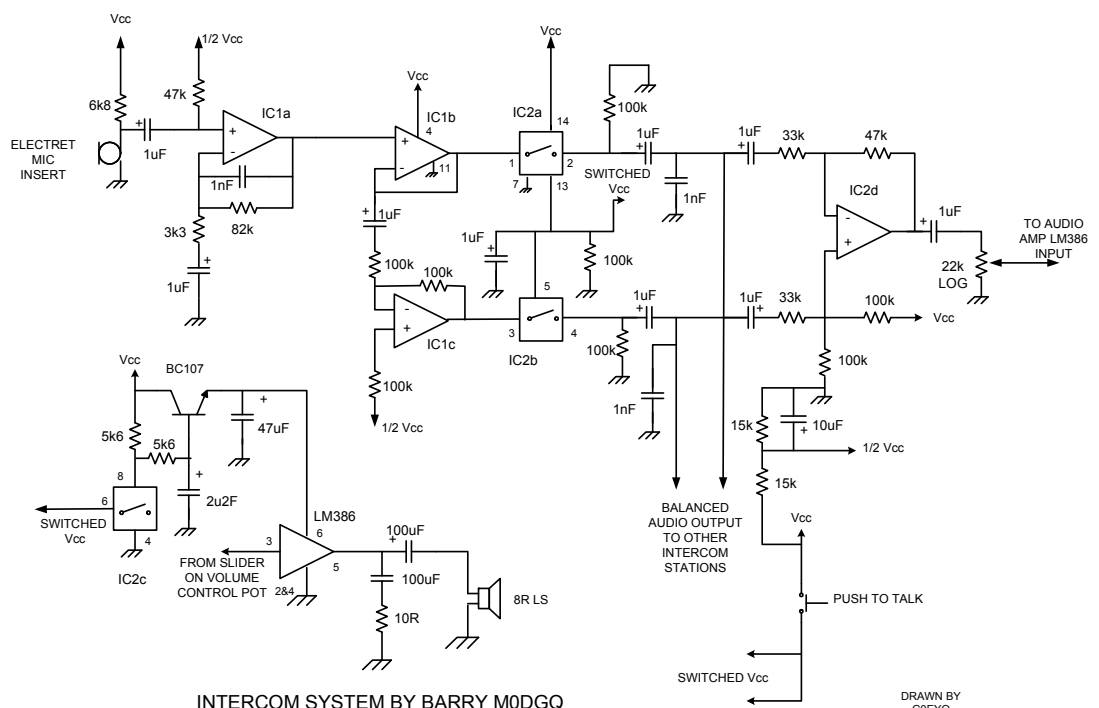
CONSTRUCTION

All units were built on a small printed circuit board. Veroboard would be a good substitute. Layout is not critical providing you follow the usual precautions, keep inputs away from outputs etc. The 47 microfarad decoupling capacitor for the LM386 should be mounted as close to the chip as possible. Resistors are rated for a quarter of a watt and capacitors should be rated for 15 volts or more. All of the polarized capacitors are standard electrolytics. IC1 is a LM324, if you are tempted to use a FET input op amp (TLO74, TLO84 etc.) then all of the 1 microfarad capacitors should be tantalum (low leakage). All components are cheap and readily available, the use of relays was not an option here as good quality signal relays (wetter mercury etc.) are out of my budget, also it is a good demonstration of the 4066. From the photos you can see that the units are reasonably compact although no attempt was made to do so. The numerous



other switches on some of the intercoms are for remote switching of other devices and are nothing to do with the intercom. My garage alarm has to be switched off when running QRO on HF (the long wire antenna runs directly over the garage alarm PCB). Also, HF up to 14MHz is blotted out when the router is switched on (it is not the wireless type).

Barry M0DGQ



With a new batch of M6/2E0 call signs appearing at the club, there has been much talk about simple antennas for use on 2m. Darren GW7HOC recommended the Slim Jim which is made from, cheap to buy, 300 ohm twin balanced feeder. Tom G3PQP had some feeder spare so I thought I would have a go. The dimensions given on the Southgate ARC Technical Tip website were my starting point and to be honest all the information you need is shown in their diagram which I have "borrowed" and shown in Fig 1

I first came across the expression "Slim Jim" in that marvellous little book by PW "Out of Thin Air", published in 1980. I believe it is still in print. The book comprises articles on different antenna subjects and the one on the "2m Slim Jim" antenna was written by Fred Judd G2BCX. The Slim Jim Antenna is defined as a 1/2 wave end fed folded dipole with a matching section below it (see Fig 2). Note the expression "end-fed", we are used to our 1/2 wave dipoles being centre fed where the impedance is approximately 75 ohms or in the case of a folded centre-fed dipole with a feed-point impedance of approximately 300 ohms. As with all folded dipoles the current in each leg are in phase whereas in the matching section they are opposite phase, so little or no radiation occurs from the matching section. By careful selection of the feed-point position on the matching section we can get a match to 50 ohms so can use coaxial cable as a feeder. For many years I thought that the name "Slim Jim" came from the fact that the antenna looks like a "J" but apparently the matching section is actually called a J type Integrated Matching section (JIM). If you "Google" Slim Jim antennas you will find lots of information but one very useful site is M0UKD's website http://www.m0ukd.com/Slim_Jim/index.php from where Fig 2 copied. There is a slim jim calculator on this site so I thought I would see how it compared to the dimensions in Fig 1. (I assumed that the Fig 1 dimensions were based on 145MHz). The spacing between the conductors in the ribbon feeder doesn't seem to be critical and the dimension were very close to those shown in Fig 1.

I decided to make my antenna up on a wooden work bench where I could pin the ribbon feeder to the top and mark out to the dimensions shown. I decided to leave some of the plastic separating the conductors on the ribbon feeder so that I could attached rubber bands top and bottom to suspend it in some 20mm white electric conduit. The tricky part was connecting the coaxial feeder to the ribbon feeder wires. These wires are very thin and easily damaged when you strip the plastic back. I first tried to stick pins into the wire through the plastic so that I could find the exact feed-point position but

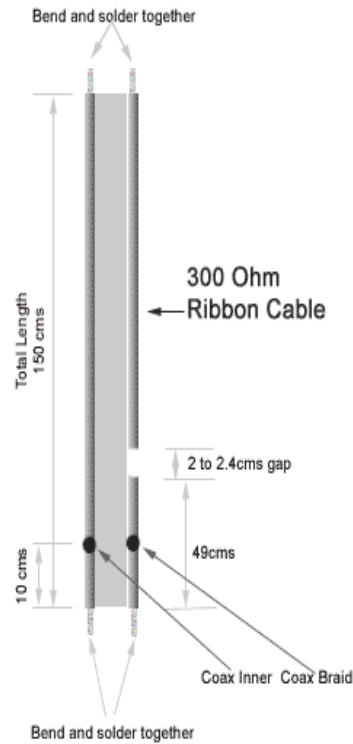


Fig 1

couldn't make a good contact. So I carefully stripped back the plastic and solder some tinned wire to each point. The tinned wire was about 15mm long and I connected a choc block to them and then connected the coaxial feeder to the other side of the choc block. With a suitably long length of feeder (you need to avoid 2m wavelengths) which is why the article recommends 3m 5m 7m etc), I connected the antenna to the MFJ259 analyser. The antenna was still lying horizontally on the wooden work bench well away from any metal objects. My first reading showed that

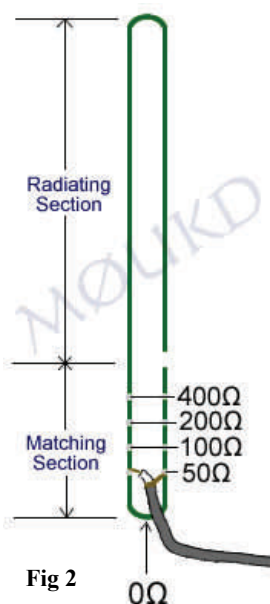


Fig 2

the VSWR on 145.5MHz was 2.6:1 and that it resonated with a 1.1:1 VSWR on 136.5MHz. Given that the feed-point was so delicate, I decided to see if reducing the length of the antenna from 1500mm to a figure I derived from taking 145.5 and dividing it by 136.5

which equalled 1.066. In other words it was about 6% too long which at 1500mm is 90mm. So I chopped 90mm of the top and remade the fold connection. And lo, the VSWR came down to 1.5:1 which was good enough for me. I remade the feed-point connection by removing the choc block and soldering the coaxial feeder to the tinned wire previously soldered to the feed-point.

I mounted the whole thing in a 1.8m length of 20mm plastic conduit by putting a bolt through one end and connecting an elastic band to the top of the antenna and then doing the same at the bottom. Gaffer tape top and bottom completed the antenna. I will mount the bottom of the conduit on a U bolt arrangement I happen to have in my junk-box. Other club members have suggested using electrical conduit clips or saddle to mount the antenna to a soffit or wall mounted pole.

Mark M6MSX made the same antenna using the dimension shown in Fig 1, but measuring the VSWR down in the shack it seemed to resonate at a frequency higher than 145.5MHz. We (well me really) made the mistake of taking 25mm off the 1500mm dimension but the VSWR was still high when tuned to 145.5MHz. Obviously we should have put 25mm on. Which is exactly what Mark did at home and measured the antenna in the open and got his VSWR to 1.5:1.

Interesting project, it took less than one hour to end up with a very useful 2m antenna for vertical operation.

Chris G0EYO



A successful raid on the capital?

Going to rallies has always been one of the fun parts to this great hobby of ours. Last year I managed to visit a handful of new ones, usually going with a small group of other amateur friends. It's so much more fun when there is a group of you. Nantwich and the Lincoln Hamfest were among the locations we notched up in 2008. But in 2009, work commitments were stopping me from getting to any rallies (even our very own!) so it was with some excitement that I realised that I was actually free on the date of the Kempton Park Rally on Sunday 19th April. At last a chance to go to my first one this year!

I reckoned that Surrey was only, at worst, 90 minutes or so from Wythall, so I checked with Mark G4FPH from Rugeley, one of my friends on Top Band, that he was willing and available. Yes indeed!

To make sure a day out like this was acceptable to the relative "Station Managers", we decided that it would be good to make sure there was something in it for them too, so the plan was for Mark and Karen (M6KJH) to meet early at our house in Major's Green and then to travel down together with my wife and fellow Wythall club member Lynne (M6FAB) dropping the ladies off at Bicester Shopping Village near the M40 on the way. We could pick them back up on the way home (assuming the car would be large enough to hold all their purchases!)

The King's Heath contingent, Dave G3YXM and Jan M3YXM (another Wythall club member!) got to hear about our plans and were also free that day so a few rearrangements later, it was finalised that the "boys" would travel down in my car and the "girls" would go to Bicester in Jan's car, thus obviating the need for any time (or load!) constraints on any of us.

0800, Sunday 19th April and the gang met up – the boys having more trepidation about how much cash might be spent by their respective "other halves" than on what we might get for ourselves at the rally! However, by 0900 we were on the road (Top Band mobile all the way down, of course!) and by 1030 we arrived at Kempton Park Racecourse.

As we went into the main building, we were given a questionnaire to enter the "Top Ham 2009" competition, 25 multiple choice questions in typical Radio Exam format. As the first 100 entrants got a free mug(!) and there were not many left, I was in a bit of a rush to get the answers in to the organisers!

Dave and Mark took a little longer on their entries but, even after I had got my rather fetching blue "Top Ham" logo-ed mug, there were fortunately still enough of them left for Dave and Mark to get one each too. At least we would not be returning home completely empty handed!

The rally itself was ok, not much larger than our own to be honest, although the "big 3", Icom, Yaesu and Kenwood were all in atten-

dance, as well as Waters & Stanton and Martin Lynch (though his stall was, at best, minimal!). We got to have a play with the new Icom 7600 HF Transceiver and the new Yaesu VX-8 handie and there were a few junk type stalls to keep everyone amused. Shortly before lunchtime, I had a call on 2 metres on my FT-817 (yes I carry it round rallies with a headset attached!) to ask if I had had a mobile phone call.

"No" I replied. "We both have" said Dave, "Mark and I are both in the Top Ham final!"

I made my way over to the other two lads and after congratulating them both, we chatted away about how brilliant it was that both of them had got into the last 6 from over 250 entries, and how we had a 1 in 3 chance of winning something to take home to the Midlands, when an announcement came over the Tannoy.... "Will G0MLY please report to the rally office please, Golf Zero Mike Lima Yankee..."

Well, you guessed it! Thanks to the lack of signal provided at Kempton Park by T-Mobile, no-one from the office had been able to get hold of me to tell me that I too had got into the final! What a turn-up! All 3 of us in the final! Apparently we had got 23 of the 25 questions correct just to get there!

By now we were all getting just a little excited about this competition. Between us, we now had a 1 in 2 chance of winning it, so we enquired about what happened next. It transpired that the final was to be held in one corner of the main room with the 6 finalists "on stage" with buzzers in a typical TV quiz show setting.

Eugene Sully G0VIQ of "Big Brother" fame (we had never heard of him!) was the host and question master and the scores were to be kept on a computer screen behind us.

Well, suffice it to say that the questions varied from the impossible (Uplink and downlink frequencies for some obscure satellites!) to the trivial ("Who is the editor of RadCom?"), but G4FPH's background as a professional broadcast engineer, coupled with his wide-ranging Ham knowledge and his canny ability to press the buzzer at some speed propelled him into an early lead from which the rest of us just could not recover. He finished first with 15 points.

However, my own skills (or was it just luck) meant I got myself into a solid enough second place (8 points) by the time the final questions were being asked. And so it was that, by early afternoon, Mark

found himself on a specially prepared stage being crowned "Top Ham 2009" winning himself a brand new Icom 7200 HF/6m Transceiver and a rather fetching glass cut Top Ham 2009 trophy which he even gets to keep.

But the Wythall end was kept up by my good self – as second prize I was presented with an Icom E92D D-Star Handheld Transceiver, (which I can now use instead of the FT-817 at rallies if I wish!) and I suppose, the title of "Deputy Top Ham"! Dave G3YXM even finished 3rd, but we hadn't got the heart to tell the organisers (or the radio press) that all 3 of us had travelled down together from the Midlands in the same car. I am not sure that would have made a good story!

The journey home was full of some excitement and perhaps even a little smugness, in that we felt it only right and proper that the "lads from the Midlands" had staged a raid on the capital and come away with all the swag!

Chris Rolinson G0MLY

P.S. You might see the write-up in June' Radcom, though for some reason, though my call-sign was correct in the article, they inadvertently changed my surname and QTH, so no-one knew who I was! Perhaps the organisers smelt a rat after all....



Above: Our own Chris G0MLY receiving 2nd prize
Below: Mark G4FPH receiving his 1st prize.
Jammy beggars!!



Training News—more passes at Intermediate

Our Intermediate Course candidates took their examination and I am pleased to report that all five passed and are currently applying for their 2E0 call-signs. So well done Jon M6FRG, John M6JNR, Mark M6MSX, Darren M6DJL, and Mike M6CDR and thanks to all the tutors and invigilators who helped them on their way. This was the first intermediate course under the new syllabus which covers more technical basics than previous courses.

We normally have a break from training during July

Club Diary

Tuesday	30th June	Preparation for VHF NFD
Sat/Sun	4/5th July	VHF NFD and club social
Monday	6th July	Foundation Course Week 1
Tuesday	7th July	2m UKAC contest
Monday	13th July	Foundation Course Week 2
Tuesday	14th July	Committee Meeting
Monday	20th July	Foundation Course Week 3
Tuesday	21st July	The Secret History of Radio
Monday	27th July	Foundation Course Week 4
Tuesday	28th July	Natter Night
Monday	3rd Aug	Foundation Course Week 5
Tuesday	4th Aug	2m UKAC contest
Saturday	7th Aug	Evesham Steam Rally
Sunday	8th Aug	Evesham Steam Rally
Monday	10th Aug	Foundation Course Exam
Tuesday	11th Aug	Committee Meeting
Tuesday	18th Aug	Natter Night
Tuesday	25th Aug	Natter Night
Tuesday	1st Sept	2m UKAC contest
Saturday	5th Sept	Advanced Course Session 1
Monday	7th Sept	Advanced Course Session 2
Tuesday	8th Sept	Committee Meeting
Monday	14th Sept	Advanced Course Session 3
Tuesday	15th Sept	Homebrew Night
Saturday	19th Sept	Advanced Course Session 4
Monday	21st Sept	Advanced Course Session 5
Tuesday	22nd Sept	Natter Night

and August but we have three guys who have approached us and are real keen to get their Foundation license so Martin G8VXX and Chris G6KMQ are running a 6 week course for them starting on Monday 6th July. Monday is proving to be a popular day for holding a class with most tutors being available and, of course, we can save costs by using the shack. We also do some practical or preparatory work on Saturdays.

In September we shall be running a 15 week Advanced Course and this looks be full already with some 12 members expressing an interest. The Advanced Course starts on Saturday 5th September and the examination is on Monday 7th December. The course schedule will be circulated to those who have enquired about the course and will be put on the club website.

Chris G0EYO

Trainer's Champion New RSGB President

Dave Wilson, M0OBW who led the Train the Trainers Session at Wythall last May so effectively has been elected President of the RSGB for 2010-11. This is good news for those who are active supporters of the current Training Programme. We wish Dave well in his new role



John, Jon, Mike, Darren and Mark proudly showing their Intermediate Pass Slips: bring on the advanced course!



KITE ANTENNAS DEMONSTRATION from page 1



Above: Roger G4ROJ giving his talk on kite antennas.
Middle: Operating G4ROJ/M in the field
Far Right: Roy G0HDF looks impressed!



How I became a Radio Amateur— Kev G4XLO

A very good question – and if I had a £1 for everyone who has asked me that over the years I'd really be a millionaire by now! It all got going in 1980 when my Mom and Dad bought me an aircraft receiver for my birthday. My neighbour at the time was a guy called Bruce Davies (G8KKS) who worked for the then GPO, anyway, Bruce invited me over one night to look at his station (A Trio 2200G with a Slimjim antenna as I remember) and the rest is really history!

Basically, Bruce got me to “Bite the Bug” so to speak, and I got my dad (later G6NGF) to take up the hobby too. Dad had some experience of radio back in the Forces days when he did his National Service and was doing some kind of Air Traffic Control both here in the UK and in Australia. Anyway, all that aside I persuaded my parents to buy me a receiver for my Christmas Present, and they got me a Daiwa SR9 and a dipole antenna. That was all I needed, and all too soon I was listening to 2 metres and keeping an SWL log of all the station I was hearing. Also I got hold of a receiver so I could tune into HF as well with a VERY long wire going down the garden – how my Mom put up with it I will never know hihi! Then that got me onto the next stage and that was the RAE – I got Dad

involved again and he studied for it too with the help of Roy Williams (G4IUX) and Alan Kelly (G4LVK). (Oh the Saturday mornings we used to spend in the local shop where Roy and Alan worked I'll never forget!!) Both Alan, Roy and a lot of other Hams gave us the inspiration, support and encouragement we needed to take the RAE. I was still at school studying for my O Levels at the time, therefore with the pressure of exams, Dad passed first and was licensed as G6NGF, and I had to retake mine and was eventually licensed as G6ZKP in September 1983. The morse code test followed a few months later and I got the callsign of G4XLO in April 1984, operating first of all as a QRP station running 10 watts on all of the HF bands from a half sized G5RV erected in the parents garden, and for 2m I was using an HB9CV up in the loft.

I'll always remember the 1st day I got my B class license, I was at school and had been waiting patiently since I sent off the forms at the start of the summer holidays – every day the postman came and there was no brown

envelope for me – I was beginning to think that they had forgotten all about me. I got back from school on the 23rd September (I remember the date well!) and called the Post Office – they had got a letter down there for me, but, of course could not tell me who it was from – in those days I was an impatient little bugger! I got on my bike, raced into town and collected the letter; as soon as I got home I tore it open to reveal my brand new call sign – G6ZKP. That was it I thought – a fully fledged licensee and ready to take on the airwaves – I had waited so long for this moment. My first QSO was with Roy Williams (G4IUX) who had given me so much support in getting on the air – I called him at



work and asked if he could come on the air. All I remember is my hands were sweating as I pressed the PTT switch for the first time and gave out my call sign – it was weird, horrible yet exciting at the same time. I don't think I ventured downstairs for the rest of the evening. I was glued to the radio working away on my Kenwood TR9000 and the 10 watts to a slim jim antenna! It was a really wonderful day in my life, the station log which I have still got proves the first contacts I ever had as a ham.

In my first year or so of on air operating I was lucky enough to be heard by W5LFL/AM – the space shuttle and also loved working QRP CW into the States which was fantastic. At that time both Dad and I were really active members of the Bromsgrove and District Amateur Radio Club that met at the Avoncroft Arts Centre on a Friday evening, where Dad eventually was the Club Treasurer and I served as the Junior Committee member. Throughout our time at the club we organised and ran several special event

stations and various contests, the highlight there was the station to commemorate the wedding of Charles and Di from Sanders Park. Moving away from the B&DARC we then formed another club in the town called the Bromsgrove Amateur Radio Society which was more geared towards talks and special event stations. I remained in this club till my parents moved to the Cotswolds and moved onto Hospital Radio.

In the years I have been away from the hobby, I have done all kinds of different aspects of radio, but I feel once you have the bug it's very hard to lose it for life. In my time away from Ham Radio I ran a hospital radio station (Radio Alex in Redditch) as well as doing an awful lot of Broadcast Radio, being heard on most of the Community Stations in the Birmingham area. I was also the voice of traffic and travel news here in the Midlands when I worked for the AA's Roadwatch team based in Halesowen. When I was there I was doing both ground based reports and also reports from 2000 feet up in the air flying from Coventry Airport. Other achievements include presenting on the award winning local station Rugby FM doing the Sunday Breakfast Show as well as the weekday Love Zone. I've also managed, through my radio work to

do a lot of fundraising work for Cancer Research by comparing the various Race for Life events, and also through abseiling down the side of the RSC in Stratford Upon Avon. There have also been lots of other charity events that I have either organised or taken part in.

The ILR side of things led me to follow another passion and that was organising discos and quiz nights for local pubs and clubs which I still do specialising nowadays in weddings and anniversaries which I am still very active in doing although I don't do as many as I used to. Over the years I've been lucky enough to work with all kinds of people and charity organisations as well as doing some TV work too. I would like to stay in the industry on a freelance basis.

Kev G4XLO

Martin and Vaughan Turn it Round for the Rotarians (but the Rotator nearly unwound everything!)

Members will recall that we had a request a year ago from the Rotarians of Amateur Radio (ROAR) for them to loan our Versa-tower Trailer mast to set up a ham station at the International Rotarians event at the NEC in June 2009. We agreed to lend it to them but asked that they get insurance to cover its value during transportation and erection. Earlier this year they came back to us and said that they couldn't get insurance so we dropped the whole idea. Not so long ago they came back to us and said that they had insurance lined up so could they borrow the trailer tower. Unfortunately the trailer was then undergoing refurbishment by Martin G7WBX and didn't look as if it would be ready. However after discussions with Martin, Vaughan M0VRR was confident it could be finished in time and he was willing take over the logistics of getting to the NEC and seeing it erected.



Martin did a fantastic job on doing up the tower; cleaned off the green verdigris, removed the pannier boxes and their accumulated rust and repainted them, fitted a new jockey wheel and new tyres and serviced the brakes. Some of you will have seen the difficulties he had in removing the wheel nuts from the video put out on the list.

In the months before the event we had spent quite a bit of time discussing with the ROAR representative, John Rickwood, G3JJR the requirement and what would be needed to put it into the rather small space the NEC had allowed for it. This included the NEC supplying some ground anchors or blocks to fit the guy ropes to. The mast was only going to support a 3 element Tri-bander at about 50ft so we needed a radius of about 30ft for the guy anchors.

The day before the installation, Martin and Vaughan picked up the head-frame and rotator and some feeder for the ROAR guys to use, as well as the clubs Windom in case they wanted to operate on the lower bands.

Well the day started off alright but I will let Vaughan tell the story from here.....

"Well after a very long day Martin WBX

and I have represented Wythall Radio Club at the NEC and got the Rotarians of Amateur Radio all set up.. Sounds nice and easy doesn't it ???

Well a quick run down of the day follows :-

1) The tower is just great and it tows like it did when we first got it, I would like to offer Martin WBX a very BIG thank you for all the hard work and effort put in.

2) Arrive at the NEC, find hall 5 and spot the HF beam built and ready to go.. looking good so far. I then spot the ground anchors provided by the NEC. They are basically ground pins as used to pin down a marquee and no way to attach a shackle they are totally unsuitable. The full details of what happened next is story best told down the club one night, lets just say there are now three of our ground anchors in the ground at the NEC, Martin wins first prize in the sledge hammer swinging competition.

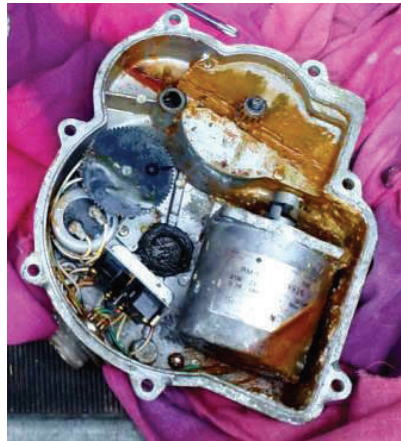
*3) Next onto the rotator and the attached pictures. Following on from the discussion regarding rotators on the list I assumed ALL the clubs rotators had been tested..... Guess not... seized solid, nothing absolutely solid... * I took a screw out of the side of the rotator and a nice steady stream of brown/red water about 3/4 of a pint ran out. Oh well c'est la vie we have a problem... Now Martin and I have in the past rebuilt Land Rover gear boxes and diffs in the back of Land Rovers using no more than hammers, an adjustable spanner, blood and lots and lots of swearing. So we'll have a go at getting the rotator working after all its only got to last for this event as the club WILL be buying a NEW one. In the picture you see the work area, The other picture shows the motor and the worm drive gear box, note the previous repair to the controller feed back gear. After a few choice words and little blood we have a working rotator.*

4) Quick test of the Beam..... OH FOR G.. S.... SWR over 5 all bands, checked and rechecked the connections as the SWR was ok before the tower went up... Got a comment from one of the Rotarians, "It will just have to come down again" at this point Martin and I say, "if thats the case you will be doing that without us!!" at this point I point out that they are testing the wrong feeder and are testing a ground mounted windom (1.1

on 6M though Hi Hi)... Ok now with the correct feeder the beam has 1.2:1 max on all working bands..

5) Picture from out side hall 5 All done time to go home.

6) 19.30Hrs after 12hours arrive home..... What a fantastic Day !!!!"



Martin and Vaughan have shown great spirit and fortitude and they were obviously the right blokes to solve the problems that fate threw at them that day. Did anyone get to work GB2RI that week?

On Tuesday 23rd June, we had a surprise delegation of eight ROAR amateurs, including overseas hams from VK, W and EA7, turn up at the club to thank the club for their efforts and presented the club with a cheque for £100.

(* After the flood in the shack in August 2008 we did check the rotator and it worked fine. What we obviously did not realize was that the rotator was actually full of water and since the check it had obviously seized up the gear arrangements..... Never take anything for granted I guess)

Chris G0EYO

Lord Pettitt's Shooting Competition

Each year the club run a clay pigeon shooting event for club members and friends and family. The whole event lasts a Sunday morning and is ideal for experienced and beginners alike. We have a cup for the winner and it has proved a very popular event for the six years we have run it.

This year the event is scheduled to take place on Sunday 27th September at 10am at the Hereford and Worcester Shooting Ground near Beoley. Cost is about £42 per person. If interested contact Chris G0EYO on g0eyo@blueyonder.co.uk

Contest Group Report

Whilst I don't seem to be on-air very much these days, I'm happy to report several other club members flying the flag for the club on HF and VHF. Mike G4VPD is making good progress from home in the 144 MHz UKAC contests on Tuesday evenings. (The Wythall House TVI will be fixed as soon as permits Mike!) Les M0COK has been active from the Lickey Hills again in the Backpacker contests. Pete M0COP seems to spend all of his free time on the Long Mynd, operating on most VHF bands in the UKAC and Cumulative Contests. On HF, Chris G0MLY is using the 80m CC contests to develop his skills. Chris is now brave enough to call CQ in Morse contests, and had great success during his first ever attempts at using PSK in the data sessions. Trying new things and developing skills are something that contesting can give which can be taken away and used in other areas of amateur radio. Thanks to everyone else that has submitted scores too. Looking forward to seeing lots of you for VHF National Field Day.

Lee G0MTN

4-5 Jul.	1400-1400	VHF NFD	Open R L M FS	Special Rules for VHF NFD (VHF/NFD)
5 Jul.	1100-1500	3rd 144MHz Backpackers	3B 10H	Countries and Locators (M4), Special Backpackers Rules (Backpacker)
19 Jul.	1100-1500	4th 144MHz Backpackers	3B 10H	Post Codes, Countries and Locators (M3), Special Backpackers Rules (Backpacker)
1 Aug.	1400-2000	144MHz Low Power Contest	SF SO O	Post Codes, Countries and Locators (M3), 25W max. transmit o/p power, (Low Power Contest)
2 Aug.	0800-1200	432MHz Low Power Contest	SF SO O	Post Codes, Countries and Locators (M3), 25W max. transmit o/p power, (Low Power Contest)
16 Aug.	0900-1500	70MHz Trophy Contest	SF SO O	Post Codes and Countries (M1)
5-6 Sep.	1400-1400	144MHz Trophy Contest	SF SO O 6S 6O	Runs concurrently with all or part of an IARU co-ordinated contest (S7)
6 Sep.	1100-1500	5th 144MHz Backpackers	3B 10H	Countries and Locators (M4), Special Backpackers Rules (Backpacker)
13 Sep.	0900-1200	Second 70MHz Contest	O SF	

RSGB HF Contests – July to September

July	1900-2030.	80m Club Championships	6th – CW; 15th – SSB; 23rd - Data.
July 19	0900-1600	Low Power Field Day	3510-3580, 7000-7040kHz, RST+Serial+Power.
July 25/26	1200-1200.	IOTA Contest	3.5-28MHz, RS(T)+Serial+Reference.
August	1900-2030.	80m Club Sprint	13th – CW; 26th – SSB.
August 2	0700-0900.	RoPoCo 2	3520-3570kHz, RST+Postcode Received.
September	1900-2030.	80m Club Sprint	10th – SSB; 23rd – CW.
September 5/6	1300-1300.	SSB Field Day	3.5-28MHz, RS+serial.

Other HF Contests – July to September

IARU HF World Championship	1200Z, Jul 11 to 1200Z, Jul 12
European HF Championship	0000Z-2359Z, Aug 1
SARTG WW RTTY Contest	0000Z, Aug 15 to 1600Z, Aug 16
SCC RTTY Championship	1200Z, Aug 29 to 1159Z, Aug 30
WAE DX Contest, SSB	0000Z, Sep 12 to 2359Z, Sep 13
CQ Worldwide DX Contest, RTTY	0000Z, Sep 26 to 2400Z, Sep 27

VHF NFD 4/5th July - come and join in

There are quite a few mentions of VHF National Field Day in this newsletter. What is all the fuss about you may ask? Well, for the club membership it's the biggest 'radio' event we take part in all year, if we consider we don't really get on air during the rally weekend. It's the best chance we have to get a lot of club members together to help put on a contest station, but also relax, chat and catch up with each other in the pleasant surroundings of Wythall Park.

Saturday morning will be a busy time, putting together masts and antennas. For those that haven't been before, it's a good chance to pick up some ideas and learn something about portable operating. The contest starts at 3pm local time so there's a literal race against time to get ready. Normally we're ready with time to spare!

When the contest starts, club members will take it in turns to operate and log on the 3 bands we're active in this year, 50, 144, and 1296 MHz. Some times there may be a little run of people calling us. Many other times we will be wily, carefully turning the beam

to pull a weak signal from the noise. The satisfaction of each QSO on 1296 MHz will be huge. It's a marathon, not a sprint, and it's a team effort.

As the afternoon turns to evening, family and friends will arrive to enjoy a social evening and some food cooked on the field day barbe-

cue. There's nothing like BBQ food in the open air, watching the sun go down. Hopefully the weather will be kind to us – but the social will be enjoyed regardless of rain or shine. The station will shut down overnight, before restarting in the morning for the final hours. Other attractions such as playing with HF antennas, trying balloon or kite antennas keep everyone from getting bored. Inquisitive passers by and dog walkers will have questions to be answered. There's always something to do.

There is also the chance of some exciting propagation. On previous occasions when we've just run 25 watts, on 144 MHz we've still been able to make contacts into Germany and Switzerland. Mainland Europe will have many hundreds of high powered contest stations on hilltops – so increasing our chances of making some long distance QSOs.

Maybe we could have some sporadic-E propagation too. Very random and selective E layer ionisation can occur, permitting contacts all over Europe on 50 MHz, and perhaps up to 144 MHz too. Most VHF NFD weekends see some E's fun on 50 MHz. Last year for example we were working from the Balkans to Scandinavia on 6 metres. In 2000 the E's reached 144 MHz, and I remember working ER6A/P in Moldova at 2,200km from the field. This past weekend has been the 50 MHz Trophy contest, where the leading UK groups have worked over 1,200 QSOs in 24 hours. High QSO rates are not just for HF contesting. Who knows what we'll find at 3pm on Sunday 4th July? See you there.

Lee G0MTN



CC Wythall Radio Club

The next issue of the Wythall Radio Club Newsletter will be published at the beginning of Sept 2009

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