

Wythall Radio Club meets from 8pm every Tuesday and Friday 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. Contact g0eyo@blueyonder.co.uk

In Memory of Colin Baker G6ZDQ SK

It was with deep regret that we heard of the passing of Colin Baker G6ZDQ on 17th May 2017 aged 68 years. Colin succumbed to the cancer he was diagnosed with 18 months earlier. Colin had managed to pull through a severe heart attack in his 40's and another when he was 59. Although he could not beat his cancer he survived longer than his doctors thought he would. Not for nothing he had a reputation for having 9 lives.

Colin was a maintenance manager for the NHS at the Mosely Hall Hospital in Kings Heath, although he had in his younger years, owned a green grocers and post office. He was a man of many interests including warplanes and military history, steam railways, power boats, F1 motor racing, photography and was especially knowledgeable about the history of South Birmingham especially Kings Heath.

Colin leaves behind Janette his partner of 14 years, his daughter Anna and his grandchildren to whom he was devoted.

Colin was a founder member of the radio club in the early 1980's when it was a CB club his handle was Mercury. He worked hard to make the clubs meeting room and radio shack what it is today, from the unusable cellar it was before. For many years he was an active participant at club events,



contests, Special Event Stations, Rallies, BBQs, Fox Hunts, Xmas Parties, club meetings until his illness curtailed his activities.

Colin was a widower, his wife Carol died of lung cancer in 2001 and this hit Colin very hard as he was still dealing with the consequences of his first heart attack and the subsequent medical issues. Colin and Jan worked at the same hospital and struck up a relationship which lasted for 14 years. They were very good for each other. Colin was made to feel very welcome by Jan's large family and he felt very much part of it. They loved their holidays, cruising overseas, Cornwall, Devon, Wales, and Weston super Mare.

We will all have our own special memories of Colin, mine are of a stubborn, determined man who would help you anyway he could, who liked being part of the crowd. He was very close to Jan and Anna, and never happier than when in the company of his grandchildren. Over the years many of us will have spent many, many, hours in his company; on holidays, on club trips and events. Eating at local pubs and restaurants, building aeralis, and radio stations, going to steam rallies, air shows at Cosford.

Anita and Peter will never forget the evening that Colin, Jan and Anna visited them in Redditch to

discuss Anna's wedding plans. On their way from parking the car to Anita's front door Colin suffered a massive heart attack. Luckily Anita's neighbour was on hand to administer CPR until the paramedics arrived. Believe it or not but Colin recovered quickly enough to celebrate both his 60th birthday and Anna's wedding some weeks later.

David G0ICJ recalls Colin bullying him into joining the club's CW class run by Lew on his first visit to the club some 35 years ago. David says he was grateful for Colin's persuasive technique as it enabled him to obtain his "A" licence, having passed his RAE some 20+years earlier. Mike G4VPD remembers him, Colin and others spending many hours digging out the tons of silt from the cellar at Wythall House and clearing away skip loads of rubbish. He was very close to senior club member Jim 2E0BLP popping in to see him every week for a cup of tea while Jan went shopping at Sainsburys.

I invite you all to cherish your memories of Colin and remember the very good times we had in his company. The club made a donation to the Midlands Air Ambulance Service as did club members and friends with individual donations

RIP Colin
G6ZDQ
SK.

Chris
G0EYO



The TYT TH-8600 Mini Dual Band Mobile

The problem with modern cars is that there is nowhere to put a mobile vhf/uhf radio. All those curved surfaces and integrated audio/visual systems make it very difficult. The answer is often to use a remote control panel with the rig in the boot. I had an Icom 2725 which was like that but unfortunately it was stolen from the car one night. Since that one was lost I have been using a Yaesu 7800 which I kept in a bag in the boot and brought it out on the odd occasion I wanted to use a radio (such as club contests) and operated it stationary with the rig on the top of the dash.

A recent edition of Radcom featured a mini mobile dual band radio the TYT TH8600. This looked small enough to sit in the box at the bottom of the console in my Suzuki Vitara. These are imported by Sinotel, a company that comes to our rally. After about a day's thought I decided to go ahead and take the plunge and ordered the radio through the Sinotel website. The radio was £119.99 and they offered next day delivery for £4.95 which seemed like a good deal. There was a bit of an issue with the delivery company but by the late afternoon I got my radio. The box included the radio, a mounting bracket, microphone, power lead, mini instruction manual, usb programming cable and a mini-disc with the software to load up the channels.

The manual is only about 40 pages long and is in English (sort of). The only problems I had understanding the control functions were, what was meant by bandwidth Wide/Medium/Narrow and how did you programme your 200 memory channels from your PC. Downloading the software on the disc gave you a blank table

which had Chinese headings.

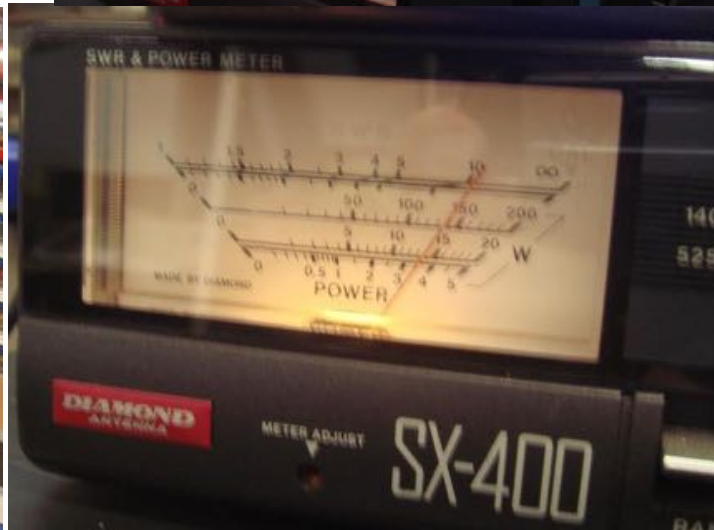
I took the radio into the garage and connected it to a 13.8V PSU; VSWR/Power meter and dummy load. Power measured was around 15W max. The functions seemed to all work so I thought about how to programme the radio for the simplex and repeater channels that interested me.

Using Google I eventually found how to convert these to the English version. I filled in the data required for the first 11 channels with local frequencies and repeaters. However there were no instructions on how to programme the radio. John M1JSS gave me a clue when he said that he thought you connected the PC to the radio and

Read what was already in the radio. This I did and I could see the data for the channel information I had inserted manually using the keys on the radio. The mini-disc contains drivers for several OS. I then called up my table of channels and **Wrote** those to the radio and it worked.



I needed to make up a DC lead suitable for the car cigar lighter which I did and installed it in the Suzuki. It is a bit obscured by the gear stick when in PARK, but if I move it to NEUTRAL I can see the screen. VFO changing can easily be done from the mic keys but you have to use the channel knob to



The TYT TH-8600 Mini Dual Band Mobile cont'd

change channels.

After I had programmed the channels I gave it a try but couldn't raise anyone from my drive at Webheath. A trip to Bromsgrove found me parked up near the Beefeater on the A38 for half an hour so I listened around and found someone on the Gloucester repeater GB3CG. I managed to work a /M although he was a bit scratchy. Going North from Bromsgrove was a lost cause so I didn't even try. Back home looking at the programming table I realised that I had not set the CTCSS encode tone to 67Hz for our GB3WL repeater. To do this with the radio on the car showed up the deficiencies of the instruction manual as far as set up and menu access is concerned. Not at all clear and took a few goes to find my way about. I cannot access WL from here so I tried it out when I went to the club on a Monday night for teaching but no joy so it was back to the start and check the programming table and I found I had the receive and transmit frequencies the wrong way round so I did another READ/ WRITE after modifying the table.

Knowing that a mobile is unlikely to open up GB3WL from my driveway, I drove up to Headless Cross and checked that I could open up the repeater with the updated settings. All ready for the Fun Run now where I hope to get some audio quality feedback.

Conclusion

Definitely value for money but fiddly to set up. Build looks fine but mic has a cheap feel about it. Documentation could do with considerable improvement and no instructions whatsoever on how to programme

TH-8600 TECHNICAL SPECIFICATIONS:

General	
Frequency Coverage (MHz)	RX/TX: 136 - 174/400 - 470
Memory Channels	200
Antenna Connector	SO239
Antenna Impedance	50 Ω
Frequency Step (selectable)	2.5/6.25/7.5/8.33/10/12.5/15/25/30/50 kHz
Supply Voltage	12 - 14 V DC (negative ground)
Frequency Stability (-30° to +60° C)	1.0 ppm
Operating Temperature	-30° to +60° C
Current Draw	RX: 0.2 A (squelched), TX: 4.0 A (max)
Dimensions (W x H x D)	107 x 45 x 125 mm
Weight (including cables & microphone)	1050 g
Transmitter	
RF Power Output (Watts)	5/12/25 (20 UHF)
Modulation Type	F3E (FM)
Spurious Rejection	≥ 70 dB
Adjacent Channel Selectivity (W/N)	≤ 70 dB/ ≤ 60 dB
CTCSS/DCS Deviation (W/N)	0.7 kHz ± 0.1 kHz/0.4 kHz ± 0.1 kHz
SNR (W/N)	≥ 40 dB/ ≥ 45 dB
Receiver	
Intermodulation (W/N)	≥ -65 dB/ ≥ -60 dB
Sensitivity (12 dB SINAD)	< 0.2 μ V
Adjacent Channel Selectivity (W/N)	≤ 70 dB/ ≤ 60 dB
Audio Output Power (8 ohms)	4 W (5 % THD)

the set. Cost me £119.99, and still being advertised at that price on the Sinotel website.

Chris G0EYO



Plug and Play Day at Wythall

People join clubs for various reasons, but high among the reasons people join Wythall Radio Club is the opportunity afforded them to “play radio” with a group of like-minded colleagues.

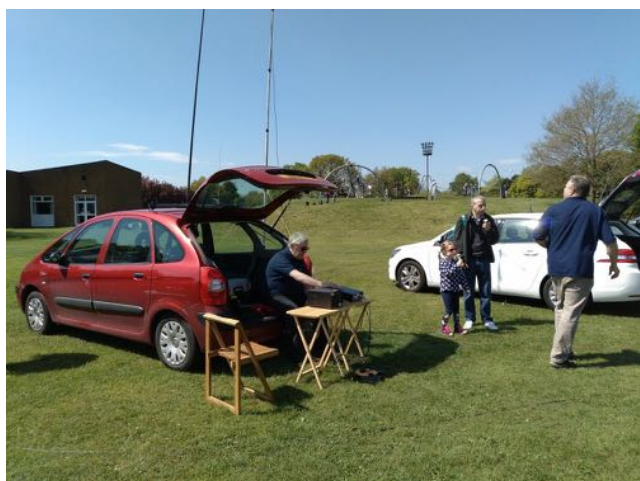
So it was on May 7th, when the weather in Wythall turned decidedly warm – for once, we were quick off the mark too, to arrange one of our “Plug and Play Days”.

Several members managed to get out on the fields behind Wythall Park for some back-to-basics radio, with a generator providing power and members bringing all kinds of strange antennas and radios to do some RF experimentation.

A great time was had by all, and the sun was caught by a few! Just as well there was an ice-cream van and a refreshing cooling bar nearby! Perhaps we should

change the name of such events to “Plug, Play & Pint Days”...

Chris G7DDN



Surecom SF401+ Hand-held Frequency Counter

A frequency counter is a useful addition to the shack and nearly all will just measure the rf transmission frequency with astonishing accuracy (some down to 6 decimal places)

Online web stores list umpteen different types ranging upwards from a few £ to the professional grade of counters which cost considerable amounts of hard earned cash. Recently this hand held device caught my eye and as with most electronics nowadays, can be found at different costs with different brand names. The one I chose was at the time the best value for money from a UK seller and came in at a few £ under £40 including postage. Branded "Surecom", it came well packed with a rather long antenna that had somehow been shoe-horned into the box without being damaged.



rather good (but expensive) RT systems software, it can be a challenge to use Chirp or indeed the software that comes with the rig itself.

I have found that having the "correct" programming lead is vital and it seems now that at least some UK suppliers are supplying this vital component as part of the purchase.

Putting the right info in the right column in the software is not always straightforward and reading from/writing to the handie or mobile rig can need a specific sequence of events to work correctly.

For example, you may need to "read" the radio before your start to input data. Having a handy little device like this Surecom will display your transmission



In addition to the unit itself and the BNC antenna, were a 5v USB power supply, a short charger to device lead and a basic user's manual which consisted of two pages of features and specifications with an adequate description of functions. The unit has a built in rechargeable battery which gives more than adequate hours before needing a recharge.

What sets this unit apart is the ability to read ctcss/dcs and other embedded tone transmitted codes and the information is displayed on a reasonably sized colour screen.

The unit is designed primarily for VHF/UHF use and the results are guaranteed for frequencies between 138MHz and 520MHz.

The specifications do say however that the frequency meter may operate between 27MHz and 100MHz with reduced accuracy and the specs show a frequency range of 27MHz to 3000MHz so a little bit of ambiguity exists within the specs sheet. However on both 70cms and 2m the displayed results are accurate.

Whilst it is relatively easy to programme a Yaesu, Kenwood or Icom VHF or UHF rig using the supplied software or the



frequency and programmed tone, and is a quick and easy way of checking your programming is accurate. Below is the result from a incorrectly programmed GB3CF repeater entry.

As a basic frequency counter, it will display the rf from rigs whose parentage is unknown and will give a go/no go indication very quickly.

Amateur radio test gear need not be expensive and this little unit is worthy of consideration for those of us who rely on repeaters to pursue our hobby

Ian M0IDR

Jamie M0SDV wins Lew Williams CW Shield

Whilst there is a lot of focus and excitement about the use and development of machine generated modes (MGM) such as WSJT, WSPR for making difficult contacts due to poor band conditions, or having a limited antenna setup, at Wythall we like to ensure that the original operating mode used for (amateur) radio, morse code, is appropriately publicised and celebrated.

During the month of May we hold a morse code activity event, and ask that members share their experiences. The member who is seen to have made the biggest progression will be awarded the Lew Williams Shield, in honour of club

past president Lew (now SK) and long time morse code trainer for club members. Making an award based on progression, rather than number of contacts made, or countries reached, means that those actively learning are more likely to be the winners. We hope that likewise they will be more appreciative of winning.

We've heard accounts of trepidatious first contacts on HF, stories from the regular club morse class run by John M6KET, and some tales of real progression with morse. As well as sharing members' own experiences, it's pleasing to receive nominations from club members for who they see as having made the largest progression.

For 2017, there were sadly fewer reports and nominations than in previous years, despite a number of reminders online and at club presentation evenings. Please continue to support the event where you can. However, there was still pleasing progress from the 2017 CW class, with Stuart, Barry and Kim getting special mention. John M6KET and John G4OJL deserve thanks for their efforts in the classes and on air throughout the year and during club contests.

Chris G3YHF had a variety of interesting QSOs during his activity sessions to try to work around the world. Mike G4VPD was taking advantage of the Sporadic E season to notch up some contacts, with a glass of red wine in his non-keying hand, naturally.



Our worthy winner for 2017, nominated by several club members, is Jamie M0SDV. His growth in on-air confidence has been plain to see, and is now comfortably entering HF contests and can be found in the middle of DXPedition pileups. He's even recently built his own key. The Shield will be presented next time we see Jamie, who was very pleased to have learned he had won and thanked everyone for the support and nominations.

Lee G0MTN



VHF NFD 1st/2nd July & Wythall Carnival 13th August

VHF NFD

Lee G0MTN has entered us in single band 2m restricted category. We will use a falling Derek mast (with hard hats!) and the IC910 from the shack. We will incorporate a plug and play too. Both generators will be used. The field

at the back of the park is booked and we will have access from 10am on the Saturday.

There will be a summer BBQ in the evening and a charge of a £1 per person to help off set the cost which will be collected prior to the day. Mike G4VPD will arrange the meat and bread and those attending will bring the rest for an America supper very much like last year.

Wythall Carnival

The club will be setting up a stand at the Wythall Carnival on Sunday 13th August. John G3VRF and Dave G3YXM will organise it but are looking for ideas and presentations which would be of interest

to the general public. Any suggestions please make to the committee and/or organisers.



Lee G0MTN goes EME

Following the success of some meteor scatter contacts last year, my thoughts turned to a new project. This is following the trend of trying something personally new, seeing what can be done for relatively low cost, and with the caveat of using invisible antennas that I've defined as "about 6 feet from the ground, and packed away when not in use" given the status of my permission for antennas.

Quite a few years ago, I had used the 144 MHz station at the club to make a CW moonbounce, or Earth-Moon-Earth (EME) contact with Dave W5UN, who owns one of the largest 144 MHz EME stations in the world. There have been contacts made with Dave via the moon with a 3 element yagi. For the contact from the club I ensured I had 400w RF output at the antenna, which involved generating a lot of RF in the shack. So much so that the lights dimmed in time with the CW.

Step forward some years, and moonbounce has been revolutionised by the development of the WSJT software suite by Joe Taylor K1JT, everyone's favourite Nobel prize winning ham. This machine generated and decoded mode allows signals far below the threshold for CW decoding by the human ear. In practice this means that less gain and lower power are needed to make contacts.

In order to make a successful contact, the link budget of the path needs to be considered in both directions. A small station like mine is able to contact a small number of 'big gun' EME stations, as their large system gain makes up for the shortfall on my side. As I increase my gain, so then increases the number of stations I have the possibility of hearing, and being heard by.

The information online about moonbounce can appear daunting. There are many reasons why losses increase and

contacts fail. The moon itself varies in its orbit, and does not reflect signals well. The changing polarisation of signals on their travels adds to the losses. On a good day it's a 250 dB loss for the half million mile round trip.

I purchased a pair of 8 element 144 MHz yagis, and inspired by the website of Paul G4DCV with his successes as 'backyard EME.' I mounted the yagis with horizontal spacing, using pieces of old HF yagi to form the horizontal and vertical sections. This then stood a little precariously on a garden parasol stand.

By EME standards this is a toy station! As everything needed to be built up each time, I listened around on some of the EME contest weekends when activity was likely to be higher. The first attempt was unsuccessful. Westflex 103 is not great at 144 MHz over any reasonable length. The purchase of a pre-amplifier solved that problem, with many stations worldwide

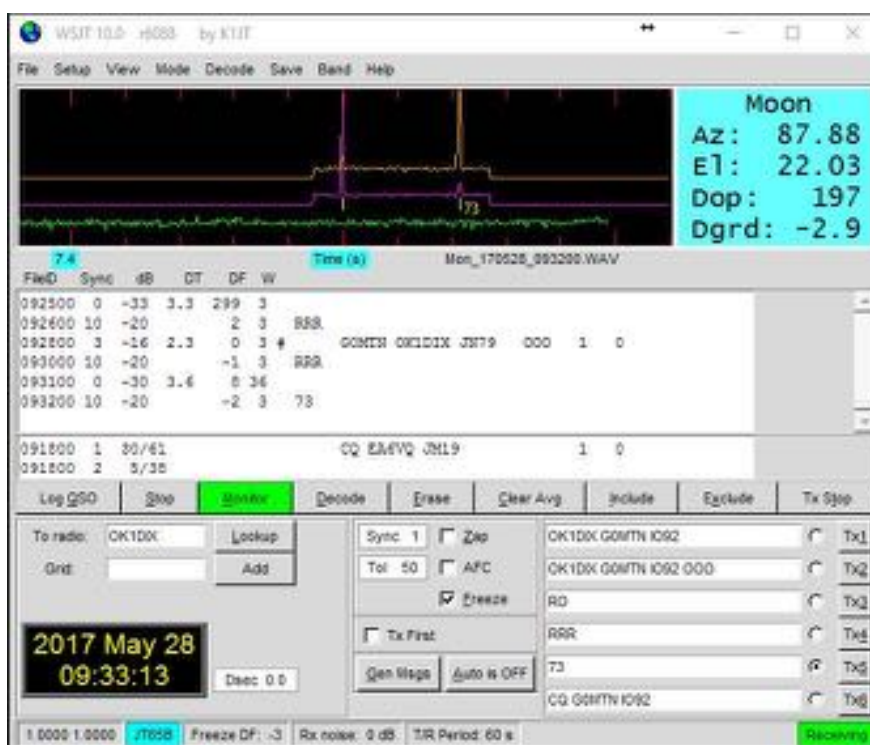


being heard during a second weekend of listening. The RF output was boosted by 3 dB courtesy of a brick linear amplifier I bought from Simon G4TVR.

I managed to get a 'QRZ?' from some of the largest stations worldwide, but no QSO. During the ARI contest at the end of May, I moved the RF amplifier from the shack to the antennas, so cutting out any feeder loss. This was sufficient to generate enough ERP to make a couple of QSOs to big-gun stations OK1DIX and EA6VQ, with many others being heard. This was using JT65b mode, and many of the stations were loud enough to be heard on the speaker, as well as being seen on the trace on-screen.

I may give it another go in the autumn with the next round of contests. I've had a suggestion to change from horizontal to vertical polarisation to reduce the effect of the metal cross boom, and I keep looking at adverts of higher powered RF amplifiers. I can see why this can become addictive!

Lee G0MTN



Programming Rigs from your PC

Perhaps for our new licencees especially, programming a new or second hand rig may prove a challenge. As they say, been there-done it-got the T shirt but it can be daunting and the software that is available is not always user friendly.

Whilst I would use CHIRP as my preferred programme, there are lots that CHIRP will not work with and I found a issue today which has sparked this comment.

With a lot of today's handies or mobiles you do not get as standard a programming lead or software. Supplying the programming leads and/or software is a nice little earner and for that very purpose several suppliers are marketing a software and programming lead package. Convenient-of course but somewhat costly as most are a one specific model only.

Whilst CHIRP works well with the supported models, it can be persuaded to work with others of similar electronic design and the Baofeng UV5R series is an example of that. The Baofeng GT3 which is almost the same does not have a CHIRP profile but the one for the UV5R works perfectly.

You do need the correct programming cable and this is where problems may arise. All the leads contain a "chip" and these convert the radio hardware to USB that the modern PC can work with, it is effectively a serial to USB adapter.

There are unfortunately some fake leads on sale and to make things even more complicated there are two chipsets FTDI based and Prolific based.

A comment from a independent reseller of Serial to USB leads. "The on-board chipset is from FTDI chipset which in my opinion is easier to work with and more reliable than Prolific versions. We base this opinion on the 5 years experience of selling and supporting a range of USB to Serial adapters"

From this you will see that the FTDI based leads are the ones recommended and I would go along personally with that comment. Choose a reputable seller to purchase from and do check the manufacturers website for guidance. Also check that the lead will work with the version of Windows etc your PC is running.

For example, Sinotel do provide software downloads and can supply suitable leads or advise. As an example, I have a Sinotel UVF-9, 2m and 70cms handy which looks similar to the Baofeng UV5R but will not work through CHIRP.

From the Sinotel website you can download the programming software and when set up on the PC, you insert the programming lead into a USB socket and wait whilst Windows (or your chosen OS) installs the lead chipset driver software.

Once done, connect the radio and turn it on. At this point you need to READ from the radio (import any programmed info) and you will be prompted to click on a COM port (mine was COM3)

If all is well the software will READ the radios memory and you will see the details in CHIRP or the chosen programme.

You can then populate the spreadsheet with your preferred repeater info but do note that there are differences. You may find that in some you have to put in the receiving repeater frequency and repeater shift ie -0.6 or +7.6 etc. You may find you need to put in both the receive and transmit which automatically calculates any repeater shift.

To access repeaters you need a "tone" and this would go in the encode column.

Once you have put all the info in the programme, WRITE it to the radio and fingers crossed you have a programmed handy!

I am always happy to help a stranded Club member or indeed non-member, so please do contact via the Radio Club's Groups.io and together we can get you up and repeater running.

Ian M0IDR

Aircell 5 Coax - Review

I recently discovered Aircell 5 coax. This coax is the same size as RG58 but with similar RF properties to RG213.

Mechanically, it has a solid inner core with solid dielectric and a 100% copper foil with a thick copper weave on top. It isn't quite as flexible as RG58 and has a minimum 1-time bend radius of 25mm, rising to 50mm for regular use (although spec says not more than 15 times at 50mm).

In terms of RF performance, it doesn't quite have the kick of say Westflex or Aircell 10 and I wouldn't recommend it



for VHF use unless for small runs, however on HF, you

wouldn't notice any difference from 30 MHz and below. For a 100m drum at 10 Mhz for instance, the losses for Aircell 5 are 2.93 dB whilst RG213 is typically just over 2 dB, depending on quality). Velocity factor is 0.82.

We all know that RG213 can vary tremendously depending on the manufacturer / seller. The good news is the whole Aircell and Ecoflex range of coax, although slightly more expensive is accurate and repeatable.

You can also get those lovely SSB Electronics connectors. These screw down, waterproofing the connector by

forcing a rubber grommet between the coax and the inside shell of the connector. Installing the connector is also a breeze with only one solder point required at the tip.

Good coax isn't cheap - but if you are after an economic solution, you are interested in keeping your losses down and need something small and lightweight, Aircell 5 is certainly a coax to consider. Perhaps a good solution for /P operators.

Callum M0MCX



Wythall & Hollywood Fun Run 25th June

The club supported the Wythall and Hollywood Fun Run again this year, the 4th year we have done so. Our job was to provide communications between the marshals and race control. The Fun Run is now in its eighth year and is a charitable organisation that uses the race entry fees to provide funding for local community organisations. The radio club has been the beneficiary of some of this funding for the past 3 years. Local businesses also sponsor the Fun Run including Phoenix Insurance, Becketts, Traffix Management, Spar, Rosebank Stores, The White Swan and Hollywood Monster Sinage. Our own Wythall Community Association provide the venue for the start and finish.

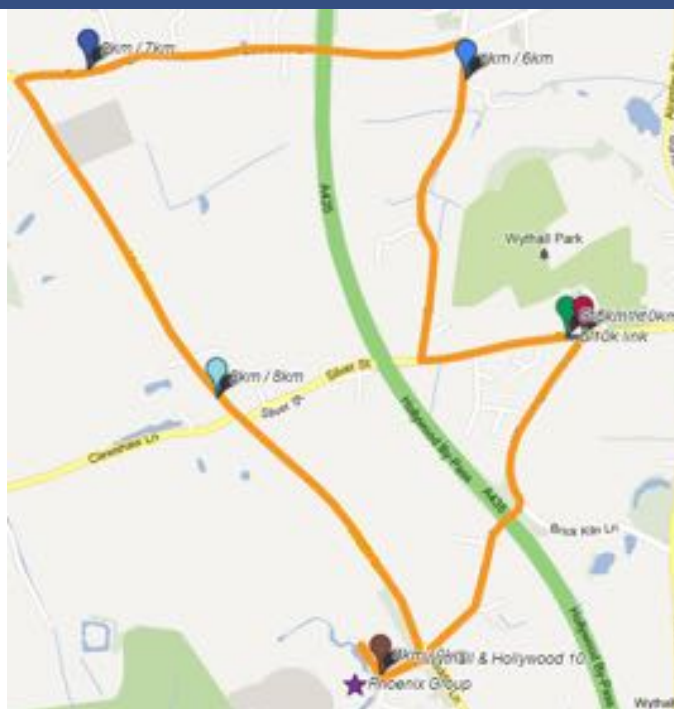
There are two races around a 5km circuit (see map) and 5k and a 10k (two laps). Marshalls are stationed at various road closure points and we provide a comms back to race control for the marshals. This year we had 22 club members helping out. Chris G0EYO and Roger M0GWM provided race radio control in the main car-park and Lee G0MTN accompanied Race Controller Pete as he went round the circuit on the Traffix truck. This meant that Pete was able to listen to the communications traffic (via GB3WL) and respond accordingly via Lee.

Messages received could then be passed to the PA announcer who was operating the PA via a radio mic in the main carpark. The radio traffic consists of instructions to marshals to close the road with barriers provided by Traffix Management, the count down for the start of the race and the progress of the front runners for both the 5k and the 10k races.

We used GB3WL for Control to Check point communications and 145.225 for Check point to Check point communications. We provided PMRs so that Race controllers and organisers could also talk to each other, radio control used a PMR set to talk to the PA controller. It all worked well. Members arrived on site

just before 8am and together with the marshals were briefed by Pete, the race controller, at 8.15. Roads were closed at 9am and the race started at 9.15. The fastest 5k runners finished in about 17 minutes and the 10k elites at about 35 minutes. The last 5k entrants strolled through the park entrance at around 10.30. I believe about 600 runners entered the race.

Anita and Peter's son Matthew ran 28 mins in the 5k and Simon and Maries boys, Jack and Will ran 51 and 55 mins respectively in the 10k. Well done to all who participated.



Our members have plenty of stories of recalcitrant motorists who tried to dodge the road closures but we will leave that for another time.

Chris G0EYO



Members at various check points

Silver Street & Bateman's Lane

Dave Pick G3YXM
Phil 2E0WTH

Bateman's and Packhorse Lane

Pete M5DUO
Jim 2E0BLP
Kev 2E0NCO
Maz M6NKO

Packhorse lane / Middle Lane

Roy G0HDF
Peter Green G4LWF
John 2E0EGP

Silver Street / Clewshaw Lane

Simon G4TVR
Anita 2E0DUO
Chris G3YHF

Phoenix 5k

Stuart M0NYP
Georgia
Ian M0IDR

Phoenix 10k

Neil M0YMM
John M6KET

Willmore Lane/Brick Kiln Lane

John G3VRF
David Cotton G0HVN

Sleeve Dipoles Part 2

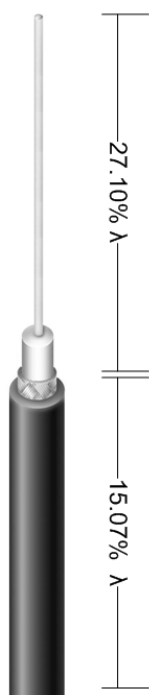
In my last article, I discussed the concept of an end-fed "dipole" using a quarter-wave of coax - and a quarter-wave element length above with a high impedance choke at the base. I closed the article off, explaining that I was about to go to Cornwall for an antenna "Development" holiday.

Development was interesting. The major issue was that all the antennas I built had a low impedance of around 35 ohms with a ratio between coax and upper element of 50/50. This clearly was affecting my SWR. I recalled that Off-Centre-fed antennas generally have a higher resonance, so I went about testing different lengths of coax-to-element lengths to push up the impedance to 50 ohms.

The long and short of these experiments is that I discovered (quite by accident actually) that I was achieving almost 1:1 SWR when I used 15% wavelength for the coax portion (Aircell 5 coax) of the antenna and 27% of the wavelength for the upper radiating element..

I am supposing that velocity factor of both the coax and the D10 military insulated comms wire that I used plays a part in this since I am achieving resonance at 84% length of what it "should be".

I have named this antenna the "Banana Antenna" because when I built the 60m version (1:1 SWR across band)



and tensioned the end, it became Banana shaped!

The cool thing is that I have not only built and tested these for the low bands as Banana Antennas (80m, 60m and 40m) but also straight verticals for 20m, 15m and 10m bands. All these higher HF frequency verticals are completely "radial-less", which is something I thought I'd never achieve, although I never managed to get better than a 1.4:1 match on 20m band. Again, all with the weird 15% / 27% ratio.

The 15m and 10m versions were superb, being elevated pretty high probably helped and of course, no radials. There's no doubt that 17m and 12m can be achieved too. I haven't tested these yet.

All in all, a great experiment week!

Callum M0MCX

Training Report

Eight of the nine students who took the online Foundation examination passed and it is our intention to run another online Foundation Course in the Autumn.

Our intermediate class continues and we are expecting seven candidates to take the exam in July. Also in mid-July we are hosting an Advanced examination at Wythall for two external candidates plus our own Howard 2E0KWH.

We shall also be commencing the Advanced course in

early September with the examination in December. Encouraging to see a number of new members have joined club after doing Foundation courses with us this year. Lee G0MTN's little chats at our practical sessions on the advantages for being a club member are obviously paying off.



We take safety very seriously in our training

Neal M6JNA, Andy M6IZJ & Matt M6UVQ show off their pass certificates (left)



programme. At intermediate level we demonstrate correct fusing using the latest guides. (see above)

Chris G0EYO

The next issue of the Wythall Radio Club Newsletter will be published at the beginning of Sept 2017