

**Wythall Radio Club** meets from 8pm every Tuesday 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

## The Wythall Radio Club does not run itself!

On the 14<sup>th</sup> November the club will be holding its Annual General Meeting in the Darts Room at Wythall House. Ballot papers for the posts of Chairman, Secretary and Treasurer plus 6 committee members will go out on the 7<sup>th</sup> of November together with proxy forms for those who cannot attend but wish to vote. At the time of writing it looks as if we have nominations for all positions which is encouraging as last year this was a struggle.

The recent meeting to discuss the future progress of the club was well attended and the ideas and suggestions arising have been documented so the new committee will have something tangible to work on for the coming year. Not all of the work in the club is done by officers and committee members. Traditionally the club has been able to count on members who act as “project champions” to see a project delivered. For example, the following club activities are all delivered by project champions who were not committee members in the past year;

Morse Class; Diary and Speakers; Training; Newsletter; Website News; Carnival; Christmas and Easter Contests and Club Calls Contests

If a member has an idea for a project the committee and officers can usually find willing support from the members to make it happen. Examples of this have been the;

Plug and Play Days; Wythall Supporting Wythall Fun Run; Xmas Fox Hunt; Summer BBQ; Supporting Wythall Park Bonfire Night; Xmas Party and of course the big one; the Hamfest (aka The Rally).

We would hope that the new committee and officers can carry on with all these activities but they will need the support of the membership.

From the survey and post survey discussion it was clear that nights with

visiting speakers were very popular and that the 3-15 sessions where a member speaks for 15 minutes on a topic of his choosing are also a clear winner. Members like Tuesday nights to have some activity associated with them rather than just a “natter night”. Regular sessions on how to use the radio shack equipment or build a club project would be attractive those members who didn’t want to spend the evening in the bar. Of course we could always encourage people to go on air but we have some antenna and tvI issues to resolve first. We could also look at using facilities such as Skype to deliver some lectures when the speaker lives too far away to visit.



Committee meetings are held once per month and are a good way of reminding members what is coming up and what needs doing. More importantly it enables the membership to tell the committee what they would like the club to support. The Club used to be very active in contests both portable and from shack and Special Event Stations at Mills, Steam Rallies etc. These were good learning experiences for new amateurs but the activity will need new project champions to make them happen again. Of course, sometimes the British weather puts paid to the best laid plans.

The club’s communications channels are considered to be very good. We have the G4WAC group.io forum for members with up to date news and requests for help. This forum also acts as the filing cabinet for many club records and paperwork. We have a 100+ addressees on the group.io

forum I wonder how many members don’t read the e mails. I suspect it is higher than we think which is a shame. We also have a world class website which acts as an excellent shop window for the club to the rest of the world. We have a little used Facebook site which was set up in 2011 when the club lost its last website. We probably need to re-visit our social media policies given the huge growth in their use since those early days. The Friday night Nibbles night seems to have waned in recent months and the Sunday night Net on 145.225MHz looks to have been abandoned although, as can be seen by Lee’s weekly log, members do talk to each other during the daytime. However, it is clear that very few members are now monitoring .225 regularly. On the other hand the Xmas and Easter Contests are still going and are well supported although this has flattened off in the past couple of years. Lee has some ideas for giving this a lift this year (page 3).

Making better use of the expensive assets we have was mentioned by several people in the presentation evening and it seems day time and weekend access would be welcome along with training on how to use the equipment. This is something that can be examined when the antennas are pronounced useable again and we have the “get to know your radios” Tuesdays set up.

It was generally felt that our support for Wythall House Community projects was to be encouraged although help from other constituent organisations seems very much wanting. It is hoped that the support we give the WCA will be reciprocated when it comes to giving us parking facilities at the Hamfest.

So you can see that the new committee and the project champions are not going to be short of things to get their teeth into.

This is a great radio club let’s keep it that way.

**Chris G0EYO**

# Six decades of Morse keys

Here's a run-through of the various keys I've been using since I got my licence at the end of the 1960s.

## 1960s: the 'Tibet' key

My 1968-9 Morse class was run by Evan Nepean, G5YN SK, who in 1936 was the radio officer for the British expedition to Tibet where he operated as AC4YN (AC was then the prefix for Tibet). In class, we used the key he took to Tibet, which can also be seen in this 1977 photo (Note: No bug keys to be seen!! Evan had rock steady pump key action!). The key is now held by one of the other students in that Morse class - GJ3YHU.



## 1970s: J. H. Bunnell & Co. #9 key

This key was produced for the US military mid-20th century, and originally had a base plate with straps to go around the operator's leg. I bought it from a military surplus supplier once I passed the RAE and Morse test. This key was designed for use in military vehicles/aircraft, so it's not got the smoothest action! As a result, it eventually became my change-over foot-switch!



## 1980s: Hi-Mound 707

This low-profile key enables the operator to send while resting forearm on the desk - unlike the Bunnell where the forearm is kept in the air. I found the action smoother than the somewhat clunky Bunnell!



## 1990s: Vibroplex semi-automatic

This was my move to side-swipper keys. I'd always liked the look of Vibroplex keys, and eventually decided to buy one.

Lovely piece of engineering and with a very heavy base - it's not going to move anywhere! However it takes some getting used to as it's semi-automatic - the left-hand paddle activates a strip of metal that vibrates and automatically send the dots; the right hand paddle is used to send the dashes manually. The way the dot mechanism operates means the key is not really suitable for use under about 18-20 w.p.m. Below this speed, it's difficult to send rhythmic morse (at least, that's what I find!). I'm happy to lend this to any Wythall Club members who want try it!!



## 2000s: Kent twin-paddle

A very nice key to use, with a smooth action and heavy base, and manufactured by a British company. Bought second hand at a rally, the contacts were worn so I replaced these (spares are readily available). Twin-paddle keys can be used for lambic keying, where squeezing both paddles enable particular characters to be sent, but I don't bother with this - left dot/right dash suits me just fine.



## 2010s: Palm mini-paddle

I bought this small, light-weight German-made paddle for portable use, but it's such a nice key that I also use it a lot in the shack. Although it's small, I find the action suits my sending. The only problem is that I need to hold the top of the key to stop it moving - although it does have a magnetic base (as seen on top of the FT817 for /P use). The paddles slide inside the case, protecting them during travel. There's a useful video about them on the [SOTABEAMS](http://www.sotabeams.com) web site.



## Which is the best?

Vibroplex for classic telegraphy looks - Palm for use in a variety of situations. But a note of warning if you are new to cw - as John M6KET will have said, it's very easy to send fast Morse with a paddle - but when your contact sends back to you at the same speed, can you read what they are saying?!!

Chris G3YHF

# Club Contests update

The popular Wythall Christmas Contest is getting a small revamp this year based on feedback from entrants. In recent years the activity contest started on Christmas Eve and ran through until New Year's Day.

The best five days of the daily QSO scores counted, multiplied by the number of members you contacted during the whole period. Whilst ostensibly this means that you can still take several days off to actually enjoy the holiday period with family and friends (!), leading stations in the contest have usually been found on air every single day. This has been quite draining to do.

So this year the contest will run from 8am on Christmas Day December 25<sup>th</sup>, and run for 5 calendar days, finishing on the 29<sup>th</sup> at 8pm (all times are local time / GMT). Similar to the Easter contest, the

best 3 days out of the 5 will count for the final scores. It's hoped this will make the top scores closer, make it viable for more club members to be in reach of podium positions, and hopefully make it more enjoyable for those taking it seriously.

The Excel logger spreadsheet is being updated again. This year I've created a new spreadsheet from scratch, as the last few years of updates have led to the file itself becoming quite "bloated", and a larger file can take a noticeable time to save on a lower spec PC. I'll publicise the new slimline version nearer the time with the updated members list included, but it will essentially work the same as in previous years.

But that's not all. As the Christmas event is shorter by several days this year, I'm proposing to run a different experimental

contest on New Year's Day morning for 2 hours starting at 10am. The format is unusual, and most of the details are being kept as a surprise until literally half an hour before the start. You'll be making on-air contacts with other club members just like our other contests, but the QSO format is very different, and all of the logging will be done online. Apologies to anyone who doesn't have a computer, tablet or phone they can use when they're on air. At the very least it should be fun!

A short review of the rules and these changes will be held in the clubroom on Tuesday December 19<sup>th</sup> at 8.30pm.

**Lee G0MTN**

# Another successful 3-15 evening at the club

A couple of years ago, diary organiser John G3VRF, came up with the idea of inviting club members to give a 15 minute talk on any subject they liked and he would organise an evening meeting at which three such mini-talks would be given. These have proved very popular and in October I attended the session at which Peter G4LWF, John G4OJL and John M6KET talked about a variety of subjects including home-brew antennas; Aircraft instruments and a 50 year journey from SWL to M6.

The meeting was held in the shack and some 27 members squeezed there to hear from our speakers

Peter G4LWF showed several home-brew portable antennas that he had made and they included a simple 6m dipole using a choc-bloc, connector and some red household mains wire, a mag mounted hf antenna for 15m with a metal base plate with multiple earth wires.

John G4OJL explained how he got into ham radio through flying and explained to us the function of the important instruments in the cockpit which included the magnetic compass; the giro-compass or heading indicator; the altitude meter; the air-speed indicator; the vertical speed

indicator; the attitude indicator and the turn co-ordinator. He also explained how the radio transponder and beacon indicator worked.

John M6KET gave us an amusing talk on his journey from a non-technical short wave listener using home-brew radios his ex-Wireless Operator father made for him in the 60's. Transcending over the next four years via an Eddystone S640 and an RCA AR88D by which time he had dis-

covered drumming and other attractions resulting in a fifty year gap until 2013 when a visit to Bletchley Park re-ignited his interest and caused him to seek out Wythall Radio Club and take his Foundation exam. Happy with his 10W and a good Elecraft radio, he works the world on CW with the minimum of additional technical support.

**Chris G0EYO**



# Syllabus Review - An update

You may recall that the RSGB Exams Standards Committee issued a Consultation document in June which proposed significant changes in all licence levels and which would come into effect from January 2019. This caused quite an uproar as in effect it made the Foundation and Intermediate harder so that the jump to Advanced was not so difficult and also introduced new technology and lost a few less relevant ones. Some 200 people responded to the Consultation Document (including myself) and a presentation was made at the Convention of the revised document with the statement that it is now with the RSGB Exam Standards Committee and RSGB for final approval and submission to Ofcom for their approval. I don't know how long this will take but there will be no further round of consultations and hopefully it will be quick so that we can spend 2018 preparing tuition material and the RSGB books can be rewritten.

**Chris G0EYO**

Peter M0PSX of Essex Ham was invited by the ESC to review the final document and below is his summary of the changes proposed.

## Changes to Foundation

As a result of consultation feedback, many of the proposed changes to Foundation appear to have been reversed. There's still additional content for tutors to factor in, plus changes to practical assessments. Here's a summary

- Licensing – some simple items brought down from Intermediate
- Technical – Some material from Intermediate, but not as much as shown in the consultation document
- Transmitters & Receivers – SSB, basics of analogue vs digital, introduction of SDR
- Feeders & Antennas – Adding Twin feeders & polar diagrams

- Operating – Digital voice & satellites

Safety – Tool handling, ladders & soldering brought from Intermediate

## Changes to Intermediate

Some items brought down from Advanced to equalise steps. Also adding an SDR block diagram and the concept of Frequency & Time domain.

## Changes to Advanced

Little change. Updates for analogue-to-digital conversion, Fourier transform, SDR, EME/Auroral propagation & risk assessments.

## Practical Assessments

At Foundation, there are two likely changes:

### Morse OR Digital –

1. **Morse Appreciation** is now optional. For clubs without Morse expertise, a club could elect to do an alternative Digital QSO. In other words, it's either Morse or a data mode.

It's not entirely clear what constitutes a "digital QSO". It's explicitly not DV (DMR, D-Star, Fusion), so presumably PSK31, JT65, RTTY or SSTV would qualify. But how far do you go? Does RSGB mean that each candidate needs to set up and configure a data setup (PC<->rig interface, CAT config, baud rate, sound card, COM ports, PTT, init strings, software and mac-

ro setup) and a live QSO (probably on HF) – If so, doing that with multiple candidates will take up a lot of time on a busy training course

Or can the trainer set everything up for the students, then walk them through a macro-driven QSO – In which case, like Morse, it's a "data appreciation" and the students won't learn enough out data modes for the exercise to be useful

## 2. Resistors Practical

A new practical, involving connecting battery, LED and resistors. No more details at the moment, and I'm not sure what the relevance or justification is for this additional overhead on Foundation courses.

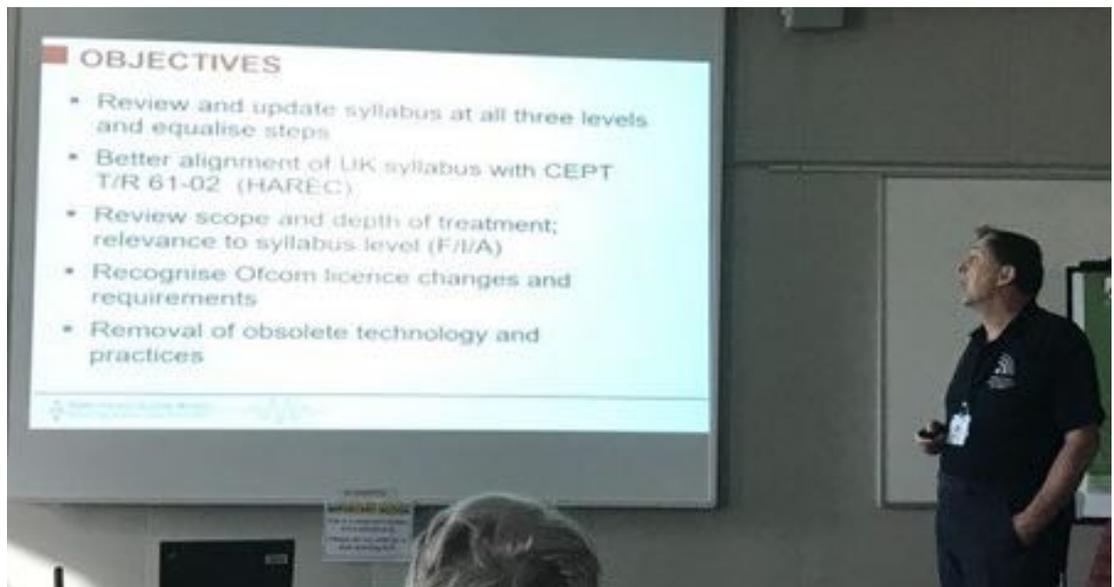
That's the latest as I understand it. Hopefully, the update is of use.

### Pete M0PSX - Essex Ham

More information on their website

[www.essexham.co.uk](http://www.essexham.co.uk)

*Exam Group presentation from Alan Betts G0HIQ (at RSGB Convention Oct 2017)*



# Training Report

We have 8 on line students taking the Foundation Exam in November and 9 students taking the Advanced exam in December. Of these, six students are from our own advanced class the others are from the on line Advanced distance learning programme run by the Bath group and Steve Hartley G0FUW.

For the first time we are offering the advanced students the chance to take the exam online and we are striving to ensure that the Brit Room, which we have booked for this exam, has suitable wifi connection for the occasion as the house have promised to put an extender in the room. The RSGB announced recently that a recent Exam Group meeting had approved the roll-out of online exams as

follows:

From 1 November 2017 the RSGB HQ Exams Department will accept applications for online Intermediate exams.

From 2 January 2018 you will be able to apply for an online Foundation exam

To bring consistency to the application process, a notice period of ten working days will apply to every exam from 1 November, regardless of level or whether online or paper-based. All examinations, both online and paper, will still be held at approved Exam Centres and invigilated in exactly the same way as now. Online exams reduce paperwork for invigilators and provide immediate

feedback to the candidates. Candidates still have the option of requesting paper based examinations.

This year we have had Lee G0MTN give a short lecture on the advantages of joining a radio club at each of our Foundation Practical Assessments. I am pleased to report that as a consequence 9 members joined the club. Thank you Lee.

**Chris G0EYO**

## Notice and Agenda of WRC AGM to be held on 14/11/17

**Notice of AGM of Wythall Radio Club on Tuesday 14<sup>th</sup> November 2017 in the WCA Darts Room, Wythall House, commencing at 20:30.**

### **Agenda**

1. Check on members present
2. Appointment of Minute Taker
3. Appointment of Tellers for voting
4. Apologies
5. Proxies received
6. Acceptance of 2016minutes (on G4WAC group.io site)
7. Matters arising from 2016minutes
8. Chairperson's report
9. Secretary's Report
10. Treasurer's Report
11. Resolutions on Changes to Constitution recommended by WRC Committee (these will be pre-published to enable proxies/postal voting to be organised)
12. Election of Officers and Committee by secret ballot from nominations previously received
13. Election of Auditors
14. AOB (suggestions for committee to consider – not discussed at AGM)

# The only way is Essex CW Amateur radio Club

The trailer for this event pulled no punches .. the word "Boot Camp".. the very word "Essex". "Be sure to arrive in plenty of time" .. "the day will be intensive" and perhaps most threatening of all "seating is on plastic chairs- if your derriere is of a delicate nature you might like to bring a small cushion"

Yes these Essex boys know a thing or two about military discipline and rigour. Nevertheless I was tempted. I mean I don't think I'd been to Essex before.. they had won the County Championship\* (Respect)...and you know my enthusiasm for all things CW: I just had to go.

An 8.30 register on a Saturday morning has its own challenges but there I was bright-eyed and bushy tailed with a bag packed with morse keys, headphones and a variety of jack plugs and adaptors for all occasions- and 2 M&S sandwiches in case we were allowed a break- and of course a cushion.

Imagine 3 long tables down the centre of Witham Scout Hut (or any scout hut!). Each partitioned off from the other by screens. Beginners-(0-10 wpm) Mid-range (11-24 wpm) high speed (25 wpm and above). Around each table 10 or nervous operators with keys and headphones all plugged in to a central console- a birds nest of tangled wires. At the head of the table our two instructors Dean and Rob. Our note pads and pencils at the ready, fingers twitching , elbow room at a premium.

My table the central one 10-24 wpm where electronic keys prevailed but three

of us produced rather apologetically our ancient straight keys ( one guy did have a rather flashy Begali Spark- but he later left for the top table!)

The first exercise: the critics ran the rule over the sending whilst the rest of us copied what we heard. We weren't great. I was dreadful.. (nerves or cramped elbows?) the main faults voiced with great tact and diplomacy; sending too fast , the spacing between letters and words. Staccato delivery, not flowing and lacking in rhythm. My hand showed all the signs of a heavy session the night before-(not true!) I was shown a more conventional way of holding the key and urged not to bounce up and down and this undoubtedly helped.

For me the receiving was much more positive as the instructors sent words and sentences at ever-increasing speeds, eventually encouraging us to copy without writing down in anticipation of higher level skills.

I loved the sheet of sending and receiving materials provided with such CW tongue twisters as:

All questions asked by five watch experts amazed the judge.

I have just spotted the four women dozing in the jury box.

About sixty codfish eggs will make a quarter pound of very fizzy jelly.

Try them in practice and just try working those into your next QSO.

radio in the back room. A vertical had been erected just outside the window feeding a Yaesu FTDX-3000 tuned to 40 metres with Rob in attendance for those of a nervous disposition! Two members made their first CW QSO's during the day.

By 3.30 we were mostly dot/dash crazy wandering round with glazed eyes and muttering in dits and dahs so we were led gently out into the car park, installed safely in our cars, pointed in the right direction and dispersed -mostly to Essex and East Anglia but one to Portsmouth and one mad fool to Worcestershire. So was it worth it? You bet, not least for being a traveller from a distant land I qualified for one of the M L & S spot prizes -a PK-4 CW Pocket keyer.

But more than that it was great to have honest feedback on your CW and a bit of intense practice. It was good to meet others of a similar mind and enthusiasm and to have some pointers as to how to improve: it was a really enjoyable day. Many thanks to the hardworking team of G4AJY (Dave), G4ZUL (Steve), M0WAG (Oliver), G4WQI (Dean) M0KCP (Rob), and G0IBN (Andy\*\* )

\*County Championship Cricket- men in white with red balls.

\*\* G0IBN is active as GB2CW with slow CW transmissions on 3555 every Monday night . 2015-20.30 GMT and thereafter for QRS QSO's

Essex CW Amateur Radio Club is open to all with a real enthusiasm for CW. See the website for further details- and join!



And so the day continued with this programme of sending and receiving feedback interspersed with talks on all things CW. The many different kinds of paddle keys.. electronic keyers.... straight keys and their design. Building a paddle key speedometer; different computer programmes for learning CW; con-testing and computer logging; operating basics. How to hold the straight key avoiding the glass arm. There was even a brief demo of straight key by foot operation- thank you Andy G0IBN!!

I didn't get chance to get on the

## John M6KET



# The “Bathtub” Morse Key

Colin G6ZDQ (SK) was a collector of morse keys and signalling apparatus. His collection was given to the radio club and it is our intention to catalogue and display these as Special Event Stations we might put on in the future.

Going through the keys I found three military morse keys ref. 10A/7741 Type F also known as the “Bathtub” for obvious reasons

The key was cast in Bakelite and manufactured in two colours black and brown. From what I can determine Colin’s keys were brown (yet to be properly cleaned). The black types were manufactured from 1936 onwards by Northern Electric in Ottawa and the brown type were manufactured in Mill Hill London.

The housing is designed to water and spark proof as it was to be used in ships and wartime planes such as large British and Canadian bombers like the Wellington, Lancaster and Halifax and also some fighter planes. Sparks in those environments could cause an explosion. It was also used in open cockpit planes such as the Fairey Swordfish Torpedo bomber.

From the picture you can see that the housing is hinged on the left hand side and next to that were the two electrical connecting terminals. To the right

of the signalling knob is the spring which holds the housing in place. It also has a secondary function in as much as it can be clipped over the signalling knob to emit a continuous carrier during netting procedures or when the crew had to bail out of the plane, mostly over water, and doing so hoped that somebody could make a fix on their current position. The other picture shows a wireless operator in a wartime bomber with the famous T1154/R1155 wireless set up and a “bathtub” morse key

**Chris G0EYO**



## Prize Time

A couple of club members have been lucky enough to win prizes connected with amateur radio.

At the RSGB Convention this month, Mark M0LXQ, who arrived on the Sunday to sit his USA Licence exam (Mark’s wife is an American citizen, so it makes sense for Mark to have a US license in case he and his wife decide to reside in the USA in the future). He passed his Extra Class (Advanced) licence with a staggering 94% mark but was in for a

big surprise when it was revealed that he had also won the Convention’s top raffle prize, a brand spanking new Icom IC-7300 Software Defined Radio worth £1200 – not bad for a fiver’s worth of tickets! Congratulations to Mark, who tells me the radio was set up and working within one hour of returning home from the Convention.

As described on page 6, our CW Instructor John M6KET won a CG Antenna PK-4 CW Pocket Keyer for being the

candidate who had come the furthest for the course. Well done John.

Following our support for the Wythall Fun Run in July, the radio club were awarded a grant of £1000 part of which will pay for an upgrade of our 70cm repeater GB3WL initially to a dual—mode Analogue/System Fusion Digital Box subject of course to clearance from Ofcom.

**The next issue of the Wythall Radio Club Newsletter will be published at the beginning of Jan 2018**