

# CHEPSTOW AND DISTRICT AMATEUR RADIO SOCIETY NEWSLETTER

May 2011

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## Annual subscriptions:

Rod (our treasurer) is collecting CDARS annual subscriptions at the Tuesday meetings. If you can't make the meetings let Rod know that you want to renew anyway.

Combined fees are as follows:

Ordinary members £15 (£10 Athletic Club, £5 C&DARS)

Over 60 £10 (£5 Athletic Club, £5 C&DARS)

Under 18 £7 (£2 Athletic Club, £5 C&DARS)

## Diary dates for 2011

Tuesday 17<sup>th</sup> May Informal club night – Bring some kit and play

Tuesday 24<sup>th</sup> May CDARS Committee meeting

Tuesday 31<sup>st</sup> May at Forest of Dean Amateur Radio Group talk on SOTA by Tom Read

Tuesday 7<sup>th</sup> June Club night (talk/activity TBC)

Tuesday 21<sup>st</sup> June Informal club night – Bring some kit and play

Sunday 26<sup>th</sup> June West of England Radio Rally

Tuesday 5<sup>th</sup> July Talk - Communication and Electronics for Health

**Answer to quiz question - How big is a Jar and when did it drop out of common use?**



Although fixed value glass dielectric capacitors are no longer manufactured, it is worth noting that in 1745, Pieter van Musschenbroek (1692-1761), invented the Leyden Jar. This device consisted of a glass jar with metal foil on the inner and outer surfaces which were not connected to each other. These two foils formed the two plates of a rudimentary capacitor.

Originally, capacity was measured in the number of 'jars' of a given size. A typical Leyden jar had a capacity of between 50pF and 1nF. Over 15rET6

## ***Talk on Navigation by Jim Hewitt (formerly 2E0JMH now MOSLH- congratulations Jim)***

Jim did an interesting and wide ranging talk at the May club meeting on the topic of navigation. He started from the basics talking about the types of navigation we use in our everyday lives, a brief overview of the specific issues associated with air navigation and then went on to focus on marine navigation. (The latter a subject of great importance to him when he undertakes his many sea voyages both around the British coast and further a field).

Because of the generally slower speed navigation at sea has to take into account many additional factors to ensure you arrive at your planned destination safely, these include tides, currents, depth of water and underwater hazards such as shoals and rocks. Marine navigation can be broadly separated into two categories deep water passage navigation, sailing across the Atlantic, and coastal navigation or pilotage – finding your way along a coast or into a port.

Key to both of these is knowing where you are at any point in time. This can be by position fixing which in the days before GPS was done with a chart, sextant and chronometer. However if the sun is not visible to take a fix the navigator has to resort to dead reckoning and establishing an estimated position on the chart. Jim brought along some sextants, two of particular interest being an old 1926 (class A ) model and an aircraft bubble sextant MK1XA dated 1943.



A key aspect of navigation is accurate timekeeping and Jim had an interesting fusee watch (described by Jim as a poor man's chronometer) from the 1890s. This had belonged to his grandfather and had survived the first battle of the Falklands and the sinking of HMS Orama by a German submarine in the Western Approaches on 19<sup>th</sup> October 1917.

The latter parts of the talk covered position fixing, tides including tidal range, tidal curves and tidal stream charts, all of critical significance to an inshore navigator, as well as a quick overview of buoyage systems.

Pictured left CDARS members looking at an old chart of the Bristol Channel that Jim brought along to illustrate his talk. (Photo by Roy Phillips)

### **Web links...**

Rod forwarded the following link to the Journal of the Royal Signals Institution which has some interesting technical articles -

<http://www.army.mod.uk/documents/general/JournalSpring10.pdf>

## ***TRAINING UPDATE***

Steve has started a new round of Foundation training. Recently the trainees undertook some of the practical elements of the syllabus. They adjusted a 2 metre dipole to resonance and they each made the HF contact required using the club's callsign under Steve's supervision.

Congratulations to the following club members who recently passed their advanced licence exam; Dave Nicholls (callsign awaited), Jim Hewitt M0SLH, Ryan Hewitt M0VXO and Paul Dekkers M0SSJ. The three latter members started their radio training with CDARS, passing the foundation exam in June 2009. Many thanks to Steve Trott, Nick Gleed and Dave Reynolds (silent key) for the many hours invested in the training.

**OOPS! – Correction to frequencies reported in last month's article on SARA repeater.** The frequency pair for the Penallt SARA repeater is 147.475 / 155.350Mhz and not as stated in the previous newsletter (I must have had a senior moment when I wrote them down from Steve!) Many thanks to Tony Hawker (South Glos repeater keeper) for the correction.

## **Summits On The Air (SOTA) reaches millionth QSO**

Summits on the Air recently passed a significant milestone with its millionth QSO being made over the recent holiday period. SOTA started in 2002 and has now grown into a worldwide award scheme with 55 associations across the world and around 44,000 qualifying summits. For more information at [www.sota.org.uk](http://www.sota.org.uk). For those of you who would like to find out more about SOTA go to the talk by Tom Read at FODARG on Tuesday 31<sup>st</sup> May

## **Come and play radio evenings re-introduced.**

Now that the advanced level training on Tuesday nights has finished we have re-introduced the "bring some kit along and play radios" evenings on the third Tuesday of the month. The first session was a great success with lots of hardware evident. The greatest entertainment was provided by the group trying (this being the keyword) to reprogramme some PMR radios for a friend of Rods. Dan was trying two approaches; on one radio it was a simple matter of accessing the internal menu with some suitable software and resetting the frequencies (or so he thought). Roy provided a lot of assistance, although I'm not sure Dan saw it like that, and Roy even had a go himself, discovering features in the menu I suspect not even the designer new existed!

The second approach should have been simpler as it was a mechanical fix adjusting the trimming screws in another PMR rig however despite a lot of expensive looking test equipment supplied by Rod and Dave this also drew a blank and they ran out of time. This was probably a good thing as Dan had forgotten his nail varnish anyway. He assures me it is to seal the trimming screws once they have been reset!

However they were able to test a frequency meter I bought sometime ago at a FODARG auction and show it was serviceable, which was a success for me.

The next come and play evening is on Tuesday the 17<sup>th</sup> of May.



## News from the RSGB...

Russia has become the latest nation to sign onto the pan-European CEPT licensing agreement. According to the IARU Region 1 website, the Russian State Radio Frequencies Commission decided in March that the Russian Federation would join both the CEPT and ECC Recommendation. This makes it possible for every CEPT licence holder to operate on the territory of the Russian Federation. There are a few caveats. Among them is that Russia will only permit such CEPT operation by a foreign station for a limit of three months, without any additional permission needed. Also, the callsign to be used in CEPT operations will be RA followed by the foreign amateur's personal call letters.

### Ideas for future talks:

Henry Higgins will be giving a talk on Communication and Electronics for Health in July. However there are still gaps in our schedule, if there is anything you would like to present on or hear about please let one of the committee members know. Even if you only feel you could support a mini talk say 15-20 minutes we could have a few of these together to make up an evening. There doesn't have to be a slide show either.

## Source of heavy duty fibreglass poles:



I recently came across a source of collapsible heavy duty fibreglass poles at the Peterborough campervan rally. They are made for a company called "Life's a Breeze" and are more substantial and have a much thicker tip than the conventional fishing poles available at radio rallies. Their longest pole is 8.5 meters and when I tried it out in the back garden as a vertical, with an unun and ground wire I already had from a Pro-Whip, I found it was a good match at 12 metres. (See result on analyser above). I bought 2 poles and plan to do more experiments with them as portable supports for dipoles and inverted Vs. More information on the poles can be found at [www.lifebreeze.co.uk](http://www.lifebreeze.co.uk) tel. 01271 343121. I'll bring one along to the next "come and play" on Tuesday the 17<sup>th</sup> May if you want to have a look.