

GLOUCESTER AMATEUR RADIO AND ELECTRONICS SOCIETY

RAG CHEW



SPECIAL
10/6
EDITION

APRIL 2016

To celebrate the start of our new GARES Spring Challenge

A Special 10/6 Edition of Rag Chew

The Hatter knew a thing or two about Wonderland and its idiosyncrasies but in this edition of Rag Chew I hope to inspire you to have a go at our GARES Spring 10m / 6m Challenge – both Wonderlands in their own way but with their own idiosyncrasies too.

The Challenge starts from 1st April and finishes on 30th June – see the GARES web site for the full rules but essentially the aim is to work countries (DX entities) on 10m and Locator Squares on 6m.

Obviously band conditions will be a tremendous factor as both 10m and 6m can be quite unpredictable i.e. dead for days on end, and then magically spring to life.

So you have decided to have a go and your first thoughts are antennas. You may already have an HF antenna which performs well on 10 metres and it is worthwhile to see if it loads up on 6m. I know Tom G3XMM is able to load his HF doublet on 6m and if yours does then at least you can put a signal out, and if the band is wide open with Sporadic E you will work as many stations as the big guns.

But first let's have a look at 10 metres.

This band offers excellent long-distance opportunities even with low power, also a purpose built antenna for this band is smaller and easier to build than for the other HF amateur bands. Solar Cycle 24 passed its peak in 2014 and is now slowly subsiding, even so there is still enough solar activity to produce some good propagation conditions during the day – hopefully GARES members will be on when this happens!!

Try the following to keep track of any 10 metre band openings:-

http://www.ham-radio.ch/dxc/top_50_28_MHz.html

The 6m band is interesting in that sometimes it behaves as an HF band with world-wide propagation and at other times behaves as a VHF band and exhibit virtually all propagation modes including tropospheric, Sporadic E and meteor scatter. It's not called the **Magic Band** for nothing. As with 10m, a good start is a dipole for 6m – you will be surprised what can be worked with a simple antenna.. Gary, M0XAC experimented successfully with a Delta Loop last year and several GARES members have recently purchased 6 metre square halo (“Squalo”) antennas. Somewhere in my garage I have a 4 element yagi but it's been many years since it was last used on a GARES Summer Weekend on Noel Baker's field at Gamage Court. I think it's about time I blew the cobwebs off it!

Towards the middle of the Challenge period (May onwards) we will hopefully experience some Sporadic E, which to quote K1SIX on his web site *“Regardless of solar conditions, Es remains the bread-and-butter of the average 6m dxer”*.

As the name implies, Es conditions are “sporadic” and unpredictable, and can appear quickly and disappear just as quickly. Because of the nature of the ionised “clouds” a small, low antenna is preferable to a high-gain, low take-off angle antenna so do keep that 6m dipole handy!

The behaviour theory of Sporadic E is constantly being revised and there is still much to be discovered about his mode of propagation and if you have never experienced a big Sporadic E opening, you will always remember your first one!

Mine was a few years ago when we were staying with some farming friends who

live just north of Exeter at a village called Brampford Speke and of course have a handy field adjacent to the River Exe. On the Sunday there was a 6m contest and I decided to have a go. I had my 10 watt IC703 rig and a dipole antenna on a mast about 12 feet above ground level. When I first went on I seriously thought that either the rig was u/s or the antenna feeder was open circuit as I struggled to work G8T on the Lizard in Cornwall whose signal exhibited a very strange fading effect. After about an hour I had just 2 qsos in the log – G8T and G8DEZ (now sadly SK) in JO03 square. I was just about to give up in disgust as I could hear no other signals when suddenly the band exploded and in the next few hours I racked up 50 EU QSOs in 30 locator squares. No other G stations but lots of EU call signs in the log – all with 10 watts and a dipole. So give it a try – but you will need to monitor regularly to catch the openings.

The following link will, like the 10m one above, give you an idea of the 6m band conditions:-

http://www.ham-radio.ch/dxc/top_50_50_MHz.html

Don't forget that a useful way of working UK and perhaps some EU Locator Squares is to join in the Tuesday evening UKAC events (20:00 – 22:30 local time) – the fourth Tuesday in the month is for 50MHz so during our Challenge period the following dates are the ones you need to note on your calendar – April 26th, May 24th and June 28th. And if you do operate on these evenings please send your entry into the RSGB to boost the GARES score!

Also note the following RSGB Contest dates:-

Sunday 10th April - 1st 50MHz contest 0900-1200 UTC

Saturday / Sunday 18th-19th June 1400 – 1400 UTC 50MHz Trophy Contest

Sunday 26th June 0900 – 1200 UTC 50MHz CW contest

Saturday / Sunday 4th - 5th June National Field Day 1500 – 1500 UTC – plenty of stations on all bands and as /P entrants get double points on 10m there is a good chance you will be able to work stuff on this band.

Log on to the RSGB web site for full details of all these contests.

Thanks to the ARRL QST archive, I have downloaded a selection of 10m and 6m antenna articles which I hope you will find useful – let me know how you get on!

Brian G4CIB