

# Time to get serious

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Now it's time for some serious talking to the doom and gloom whingers in language that they'll understand.....*The bands are not dead....The bands are not dead....The bands are not dead.*

It's just your mindset that tells you that. I have worked more DX on HF in the last year than I have ever worked in any one year period of hamming since becoming licensed in 1975!

OK, you say, he must have an antenna farm to die for and a two kilowatt linear (idling at 400 W of course), as well as the latest and greatest all bells and whistles rig.... Naah not here! In the last year I've used my Yaesu FT-817 with a 40 W homebrew amplifier, a Kenwood TS-680 (circa 1988) and I am currently using a Kenwood TS-930 (circa 1984)...nothing special or 'State of the Art' there.

Antennas....Well I'm a VHF/UHF man at heart, so my 13 m pole has Yagis for 2 m, 70 cm and 23 cm up top. An inverted V for 40 m and a two element sloping wire Yagi for 20 m....pretty normal suburban backyard stuff there as well.

So what's the secret? Well, we've all got two ears and one mouth so you should at least use them in that proportion. In other words Listen, Listen and then Listen some more. That will get the first two parts of the secret solved. You will know where to operate and when to operate, and there's only one part left, how to operate.

After listening to yet one more statement on 40 m about 'dead bands'(you can hear the DX stations beneath the regulars), I went directly to 14100 to use one of the tools that every ham should be using, the IBP HF beacon network.

And this is what I heard at 4:00 pm local time on 20 April, 2007: see Figure 1

What's that you say? A bunch of squiggly white lines on a blue background! Well that, my friends, shows a transmission, from left to right, from New York (weak), northern Canada, California, Hawaii, New Zealand (strongest), Perth, Japan, Russia (weak), Hong Kong, South Africa and a trace of Kenya.

The beacon network has 18 transmitters based all over the world, transmitting on 5 HF bands with variable power steps,

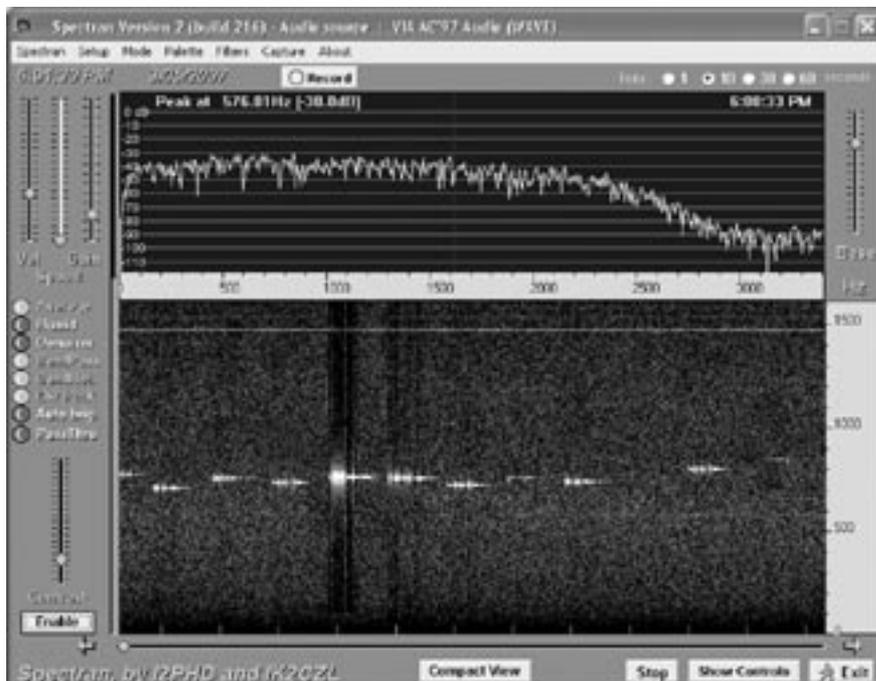


Figure 1: A Spectran glimpse of the international beacon network on 14.100 MHz.

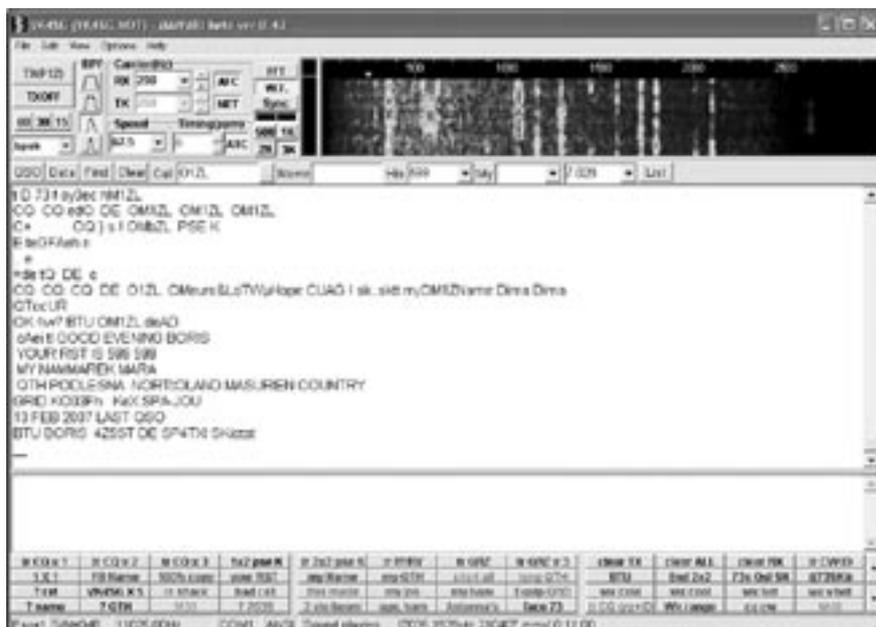


Figure 2: PSK31 signals (and one PSK63 signal) on 7.035 MHz

repeating every three minutes, twenty four hours a day. A full description is in every Callbook, and on the web.

The program that I used to capture these

CW transmissions is called Spectran. It can be obtained freely from many web sites. All that is required is a lead from your speaker/headphone connection to



Figure 3: PSK31 signals on 14.070 MHz.

your soundcard input. If you read CW you don't need to use your computer, but if you don't, you can capture the lot, identify just one station (usually NZ is by far the strongest) and count from that signal to identify the rest.

So, 20 m was open to North America, Asia and Russia at the same time that the procrastinator on 40 m was telling all and sundry that the band was completely dead. My first bit of advice is to learn about the beacons and use them!

Now for something interesting. If you tune a band and it appears completely dead, try the following spot frequencies, 3580, 7035, 10140, 14070, 18100, 21070, 24920, 28070. There will probably be a funny warbling sound there, that my friend is PSK31, the mode that opens and closes bands.

Now people will tell you that Olivia or Domino or Throb is the better digital mode, and they all have their advantages, but the point about PSK31 is the thousands of hams all over the world using it.

Figure 2 shows twelve PSK31 and one PSK63 signal from European stations on 7035 at daybreak.

Figure 3 shows twelve or so stations on 14070 or around at 17:36 UTC.

To use PSK31 you need an interface between your rig and your sound card. These are available from many sources and generally cost around \$40 for a

kit. To just listen, all you need is a lead from your speaker/phone output jack to your soundcard. The software (many versions) is available free from many websites. Just type PSK31 in your search engine. I use MMVARI 0.42 myself, and DigiPan 2.0 and MixW 2.18 are other popular types.

So what am I suggesting? That you put the microphone away? Well, if you want to work all the DX you want, over 70 countries on both 40 m and 20 m in the last 5 months, with low power and simple antennas, you will have to. DX is always there on narrow band modes, PSK31 and CW. To prove a point, I got up early in the morning before the last club meeting, on March 25, and within an hour I had worked MW3 Wales 7035 PSK, DJ8 Germany 10140 PSK, OH3 Finland 14070 PSK and F4B France 3530 CW. The only one in the club not impressed with that was John VK40Q, who does the same thing each day regularly with 100 W CW! I use 50 W when operating PSK.

Why am I telling you all this? Because I can't keep up with the QSL cards! VK is quite rare DX to the Europeans at the moment and I sometimes find myself at the bottom of a pileup. I need you to do your share.

So extract your key or mouse and give me a helping hand.

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