

Brisbane VHF Group's talk : the amateur microwave scene in Europe

25th April 2012

John Wood, G4EAT, was at the Brisbane VHF Group meeting and presented a talk about the amateur microwave scene in Europe. John is a keen exponent of microwaves in amateur radio, and he lives in an excellent location near the East coast of the UK. He has lots of varied experience on several bands 1296 MHz, 10 GHz, 24 GHz and higher, with several DX records attained along the way. John is also an interesting presenter and illustrated his talk with relevant images and diagrams, etc through a MS Powerpoint presentation.

While the talk was based on the European scene's activities, a number of 'missed possibilities' arose during John's nearly-2-hour presentation. Europe has many active amateurs in a close concentration while Australia doesn't - but - the distances being worked at 1296, 2400, 3400, 5760 and 10368 with relatively low power are repeatable here in VK if we put our energies into it. John expanded on the anomalous propagation methods they use over there, with attention to the Hepburn charts to predict the possibilities of "tropo openings" in the microwave bands even when the path is not there at 144MHz or 432MHz.

He also emphasised the need for lots of microwave-band beacons to determine whether a path exists. In the UK, the higher microwave bands have beacons in each grid square while the lower bands may have one only every alternate grid square. That is something lacking here in Australia and with the low overall activity levels at microwave on other than field day weekends, you can but wonder whether the availability of paths to different areas would help up the normal activity levels at other times, and from permanently-equipped home stations.

He also drew our attention to the use of rain scatter (RS) at 10GHz (plus bands 2400MHz and up) to work many hundreds of kilometres - something that would allow us in Brisbane to work into Sydney etc.. when weather conditions were right. Sceptical ?? I have to admit that I was until John provided the details of the forward scatter, side scatter and back scatter effects that they implement by use of the Weather Radar displays to pinpoint exactly where to point their antennas. If operators all point at the one intense rain cell (as visible on the radar), comms at 10GHz over very long distances can be achieved. He did recommend polishing up the CW skills as only forward scatter works well with SSB, falling back to CW for side and backscatter due to the effective signal distortion that occurs with these forms of anomalous propagation methods.

John showed an number of images of the European installations concentrating on the microwave bands, with a few from the USA included, and provided ideas on how to get equipped for the various bands. He suggested eBay as a good source for many items for the higher microwave bands, falling back to the Kuhne series of transverters and add-ons (preamps and power amps) as an easy way to access the bands up to and including 10GHz.

The evening was interspersed with questions, with knowledgeable answers provided by John.

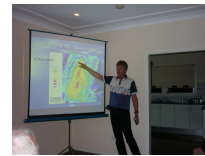
Many thanks to John G4EAT for the visit and interesting talk, and Doug VK4OE for organising this event and publicising it. There were 17 in attendance, including most of the enthusiastic microwavers around SE Qld. Also thanks to Rob, VK4ZDX, for hosting the evening at his QTH and Leanne, his XYL, for the fine supper provided.

Some of those present appear in these photos, some departed after the meeting and do not appear. Others present included Ron VK4KLC, John VK4IE, Peter VK4EA, John VK4MJF, Mick VK4NE,..

Mouse-over the images to see larger..



John G4EAT at left, Doug VK4OE at right.



During John's presentation, he provided a number of examples of using the weather radar displays and Hepburn's charts to illustrate propagation paths.



The informal chat afterwards included Kevin VK4UH (partially behind John), Ron VK4CRO and Phil VK4IIO



Rob VK4ZDX (left), Phil VK4CDI, Jason VK4YOL and John VK4YJV



The supper as prepared by Leanne.... and, no, the clock is not showing the correct time !



John VK4YJV over Rob's head, Doug VK4OE, John G4EAT, Kevin VK4UH, Phil VK4IIO.