A SLOW SCAN TV CONTACT ON 6 METERS

The 5th of November 2004 at 9PM. I decided to set up for my SSTV sched with Brad VK2JBC on 50.680Mhz USB. Brad and I had worked SSTV before between his old QTH and my QTH but the signal path had not been good due to antenna restriction at both QTH's. Prior attempts tried all frequencies between 15 meters and 2 meters but never a good signal path. This attempt was going to be it. It was going to work. Brad had obtained a 6 meter linear and modified a 27MHz CB helical whip to operate on 6 meters from his balcony. I had 100 watts available on 6 Meters to a vertical dipole mounted on the roof of my terrace in Woolloomooloo.

Plugging up the Dell laptop to the Yaesu FT920 was an easy job. The PTT control was via the USB port on the Laptop to the serial interface on the Yaesu. The Audio interface to the soundcard was via a homebrew adjustable attenuator 1:100 interface box between the Yaesu FT920 and the soundcard in the Laptop. The software we had both decided on to use for SSTV was MMSSTV ver 1.11 by JE3HHT Makoto (Mako) Mori. The software is free, easy to install and can be got up and running in a matter of minutes. The site to obtain the software from is http://mmhamsoft.ham-radio.ch/ .

The clock in the shack is indicating a few minutes after 9PM. Running digital modes always concerns me with the Yaesu as the adjustments are somewhat critical if you don't want to have a distorted signal on the band. In relation to SSTV I am always keen to ensure that I do not overdrive the finals. In the case of the Yaesu FT920 this means ensuring that the speech compressor (manipulate a menu item) and processor (push of a button) is OFF. Careful adjustment of the mike control, making sure there is not too much ALC, and one is ready to have a contact.
Going through my usual checks to double check that I had fulfilled the before mentioned criteria. I put out about 10 seconds of carrier at 10 watts on 50.680Mhz USB. I wish to point out at this stage that usually on 6M I hear nobody, and one can imagine my surprise when I dropped carrier to receive in response a carrier in return of about S9 +40db. This type of signal is unheard of at my place and as my arrangement with Brad was to transmit a test signal at 9.30PM I decided to transmit the test immediately to see what was going on. I quickly loaded the test picture of my cockatiel "Woody", put my call sign on it and also placed the word TEST TRANSMISSION across it and let it go at the 10 watt setting.

Test picture received by Brad VK2JBC

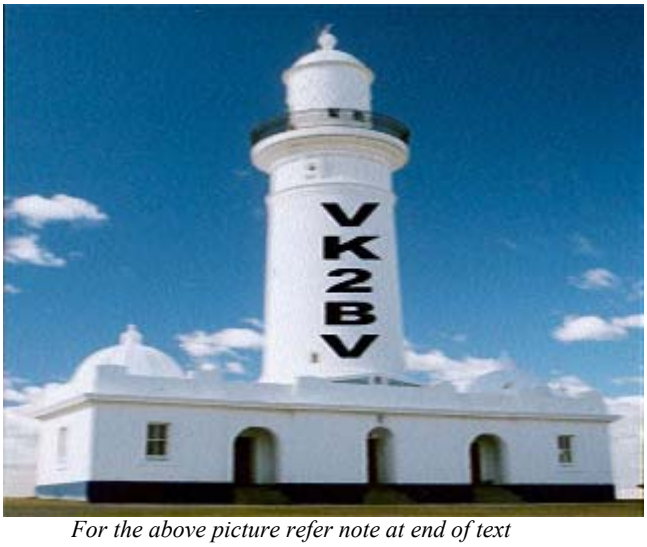
At the conclusion of the test I received back the following picture. The FSKID signal told that it was no other than VK2JBC. Early start to the sched and Hey! Brad how much power are you running you are S9 ++ VK2JBC de VK2TUI. Brad responded with, he thought about 40 watts. He also advised me that he had relay chatter at his end but it certainly had no impact on the signal. Brad is running a Yaesu FT817 driving his new linear to a whip antenna on the balcony. It was decided at that stage the signal path between us was indeed good. I elected to continue just using my 10 watts and below are just a few of the pictures that I received from Brad.

First picture received from Brad VK2JBC

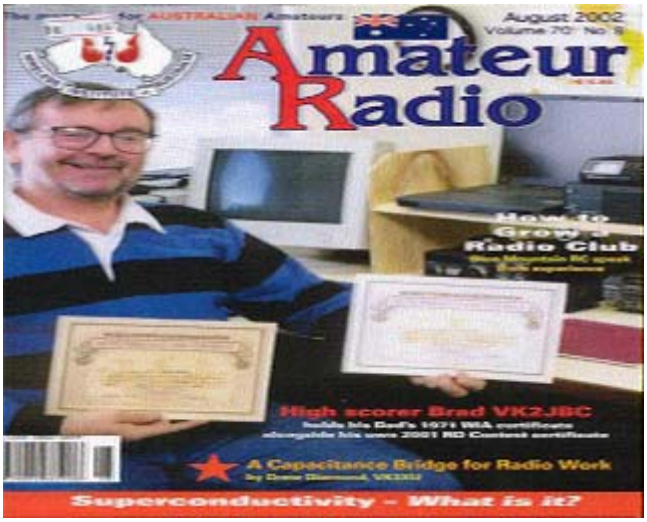
Brad elected to send me a picture at a reduced power level (picture below left) he thought this was about ½ watt with the FT817 barefoot. If you look closely you can see the white noise just starting to bleed through. I felt indeed this should prove high density dwellers with restricted antenna space can in fact communicate point to point and have fun using the newer digital modes. On the next page I have included a set of pictures that came from Brad to my QTH. According to my log the QSO ran from 9.05PM to 11.40PM of that evening….. good fun had by all.

½ Watt picture from Brad VK2JBC

Pictures Transmitted from VK2JBC to VK2TUI



For the above picture refer note at end of text



Pictures received by VK2JBC transmitted by VK2TUI

Above and to the left are just some of the pictures received by Brad.

Why did we use 6M and not the Paddington 2M or 70cm repeater? Due to the high level of RF pollution (QRM) in the Woolloomooloo area emanating from the "Top of the Cross" 2 meters and 70cm are almost unworkable due to cross modulation and front end overload from pager services etc. 6M on the other hand is usually very quite with little or no QRM as can be seen from the pictures and even at low power levels has a lot going for it. I hope in the near future to do some further

experiments with Brad using SSTV-Multimode or Digtrx transferring digital pictures between our QTH's.

SSTV analogue software scans the picture one line at a time, converts it to sound and exports that via a sound card to the transmitter's audio input. Brad says that he finds part of the fun is watching each received line building up on his screen, wondering that it will eventually become. The MMSSTV software not only transmits pictures but also allows text to be readily superimposed on the image. Many text styles and effects are available as you can see in these samples.

73's from Brad and Alan and look forward to working more club member stations on SSTV

Some SSTV frequencies to monitor if people are interested. These frequencies are from the December 2002 edition of Radio & Communications.

1.840 – 1.856Mhz
1.910 – 1.916Mhz
3.845Mhz
3.857Mhz
7.158Mhz
7.170Mhz
7.173Mhz
14.230Mhz
14.236Mhz
21.340Mhz
28.680Mhz
28.690Mhz
28.700Mhz
50.680Mhz
145.500Mhz

Note:- *Exchanging SSTV pictures is normally punctuated with a voice to comment on the sent/received picture. For example, prior to sending the Macquarie lighthouse picture with VK2BV superimposed on the lighthouse. Brad described the picture that he was about to send and its context to ensure no listeners would mistake it as a VK2BV transmission.*