2016 Spring VHF/UHF Field Day

26 November 2016

There was an unusual arrangement for the field day this time around…. No microwave gear, just 6M, 2M and 70CM. My XYL Chris and I were south of the NSW/Qld border too, rather than just north of it as I usually am.

We had headed south from the home QTH to try out the new(ish) car (/ute/"truck") plus caravan combination early the previous Sunday and made overnight stops at Brooms Head, Wooli and South West Rocks before staying two nights at Port Macquarie and then starting the homeward journey. I had worked out some possible portable QTHs using Google Earth prior to the trip and figured on stopping at the lookout at Bangalow Hill on the way back to operate for a few hours. We stopped overnight at Yamba on the Friday night so that the timing of the travel north would be about right for the start of the FD operations early on the Saturday afternoon time-wise.

I had packed the three-band turnstile plus mounting pipes plus coaxes in the back of the "truck" so that I would have some VHF and UHF antennas to use even if they weren't going to be terribly efficient. The main advantages of the turnstile is that it is light in weight, horizontally polarised and mostly omnidirectional so that I would have a reasonable chance of working the other horizontally polarised home and portable stations. I quickly built up a 2M/70CM coaxial diplexer before the trip so that I could use just one feeder to it and then separate feeds to the 2M and 70CM sections and thus avoid the need for a coax switch. The diplexer was attached to the pipe mast just below the 2M section using a double sided Velcro strap to hold it to the mast pipe.

The journey to the lookout on Bangalow Hill, near the Byron Bay turnoff, grid square QG61SI, went without issue and I parked right at the lookout, and while it was level ground, the truck/caravan combination was just a trifle too long protruding back onto the edge of the roadway. That spot was also fully exposed to the sun on quite a hot day in that part of the country but some large trees (figs?) nearby provided a large shaded area just on the roadside verge but out of the way of any traffic. I moved the combo down under the trees but was now on a downhill slope, something that couldn't be avoided if I intended to operate for a couple of hours at most. Chris took advantage of the shade plus opened up some of the caravan windows and "hid" in there while I set up and subsequently operated.

I opened up the hard lid on the truck and retrieved the antenna and feeder bits and assembled and erected the turnstile array on an extended set of tentpoles thus forming a lightweight mast pipe, running the coaxes in through the back door to the Icom IC-706MK2G that usually stays under the driver's seat. My intention was to operate from the front via the remoted head and that was the way I started off. I worked a few southern stations (VK3s) on 50.150/160 and was then asked to QSY to 2M SSB as it had been open VK4<-->VK3 on that band and that was where I came unstuck. The radio did not receive or transmit on 2M… or on 70CM. The why of it has yet to be uncovered BUT I did have an alternative available.

I quickly moved the (spare) Icom IC-7000 onto the hard boot lid, shifted the coax connections across to it, set up my Netbook PC next to it and plugged in the power lead to the 50A Anderson-style plug on the back of the truck. I was then in operation again on 50.150 and again tried 144.150, only this time I worked Roy VK4ZQ portable up Brisbane way somewhere. We tried 432.150 but couldn't work there, undoubtedly due to the lack of antenna gain at my end. (Any future caravan-based operations will at least have antenna gain on 2M and 70CM...)

Overall I managed just 11 contacts in around 1 hour of operating (less a little gear changeover time), 10 on 6M USB and 1 on 2M USB, not a really good outcome for a reasonable entry in the 8 hour section of the FD, realising 133 points in Division 1 and 12215 points in Division 2. Regardless, I uploaded the logs for both divisions as it assists verifying other competitors' logs claiming contacts with me.

My ***very*** original plan had been to operate from inside the caravan using the caravan's 105AH deep cycle battery but it became obvious to me while we were travelling south earlier that week that the van battery was not healthy in that one cell was abnormal, even though the battery was less than two months old. The battery voltage was low by around 2 volts, a fairly sure sign that one cell was actually short circuit. Needless to say that the transceiver would not have produced full transmit power with the lower supply voltage - if it was going to function at all.

Update: the van battery was replaced under warranty the following week after the supplier tried to charge it normally – and failed.

The following photos show the operating station and setup for the FD event at Bangalow Hill, NSW, QG61SI :

The "truck" and van in the shade of the large trees. The actual lookout area is directly behind the line of the raised bootlid.

The final operating position: Icom IC-7000 with LDG tuner on top, the Asus Netbook for logging. The whip at right is a 40M helical on an L-mount.

I have fitted "tube mounts" on both the front and rear of the caravan so that I can readily mount antennas like my squid pole. On this occasion, it was used to mount the pipe with the turnstile array on top.

The 6M turnstile is easily seen with the 4 colours of paint to indicate which 'socket' the individual elements match up with (red/blue/yellow/maroon). The diecast box for the 2M/70CM diplexer (grey diecast box, red stripe, side on) is also visible but the 2M and 70CM turnstiles are actually hard to distinguish amongst the tree branches. The black whip at extreme RHS is a 40M Mobile One helical whip.

Power from the 50A anderson style socket on the back of the truck was the obvious source of power for the IC-7000.

Hard at work during the event.. The L-bracket for the HF whip at the RHS is easily seen in this photo.

No, I am not ignoring you Chris.... I'm busy talking !!

This is a new game called can you spot the antenna ???