The Geelong VHF-UHF-Microwave Experimenters Group

VK3UHF/P

Summer VHF/UHF Field Contest
13-14 January 2007

By Chas VK3PY

Contest Objectives:

On bands from 50 MHz and above:

- Make as many contacts as possible on each band in the 24-hour period
- Work as many grid squares as possible
- Have fun with radios

Scoring points:

Contacts on higher frequency bands score more points.

It pays to have as many bands available as possible.

We had equipment for:

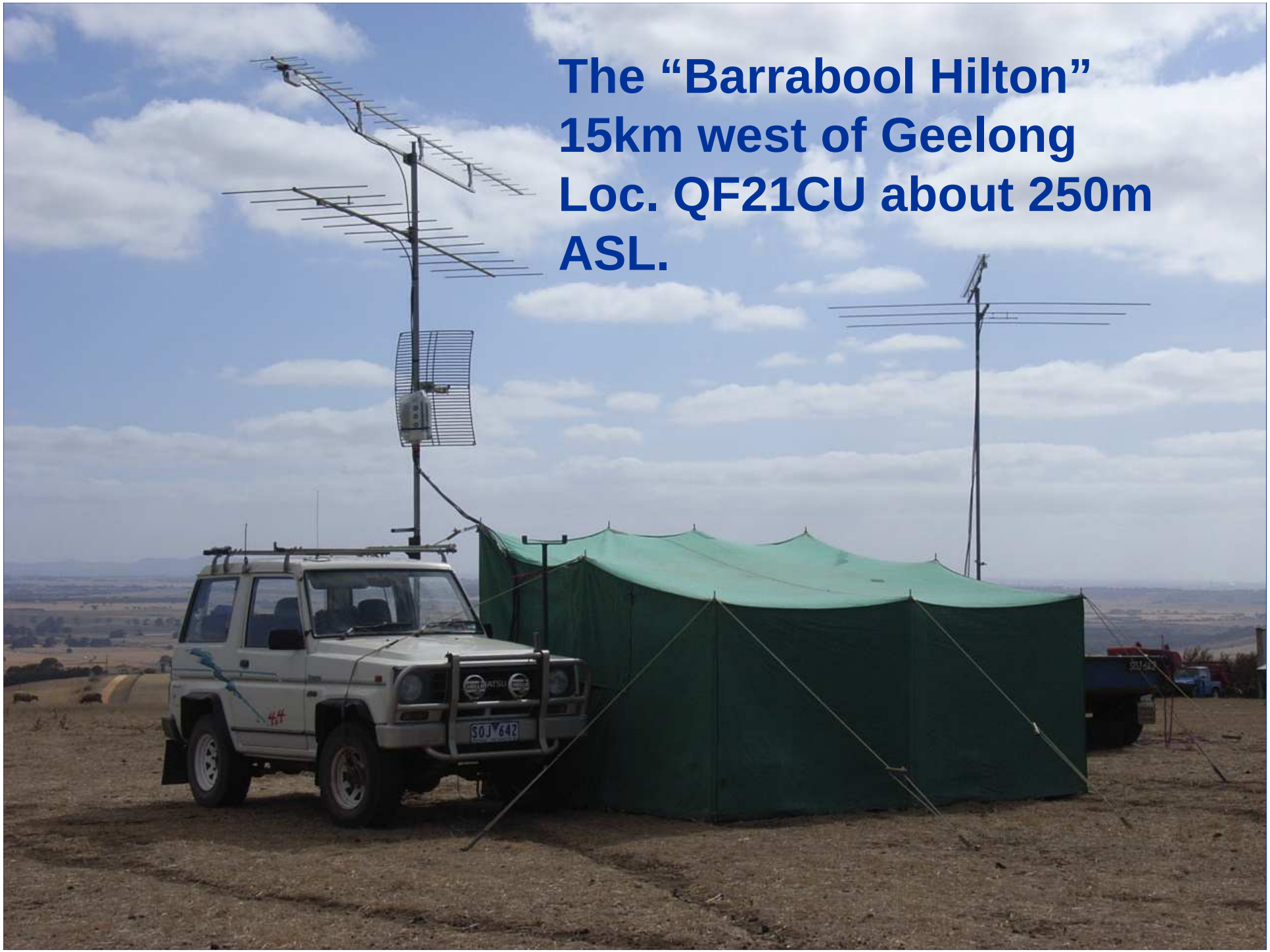
50 MHz / 144 MHz / 432 MHz / 1296 MHz / 2.4 GHz / 3.4 GHz / 5.7 GHz / 10 GHz / 24 GHz.

Each new grid square worked earns a bonus 10 points on that band.

However, soon you run out of nearby, easy grids to work. So distance becomes a factor.

Station capability counts for a lot. Important factors are:

- Location – a high, quiet hilltop
- Antennas – high gain antennas
- Receivers – Low-noise amplifiers on UHF & above
- Transmitters – Highest practical power


The “Barrabool Hilton”
15km west of Geelong
Loc. QF21CU about 250m
ASL.

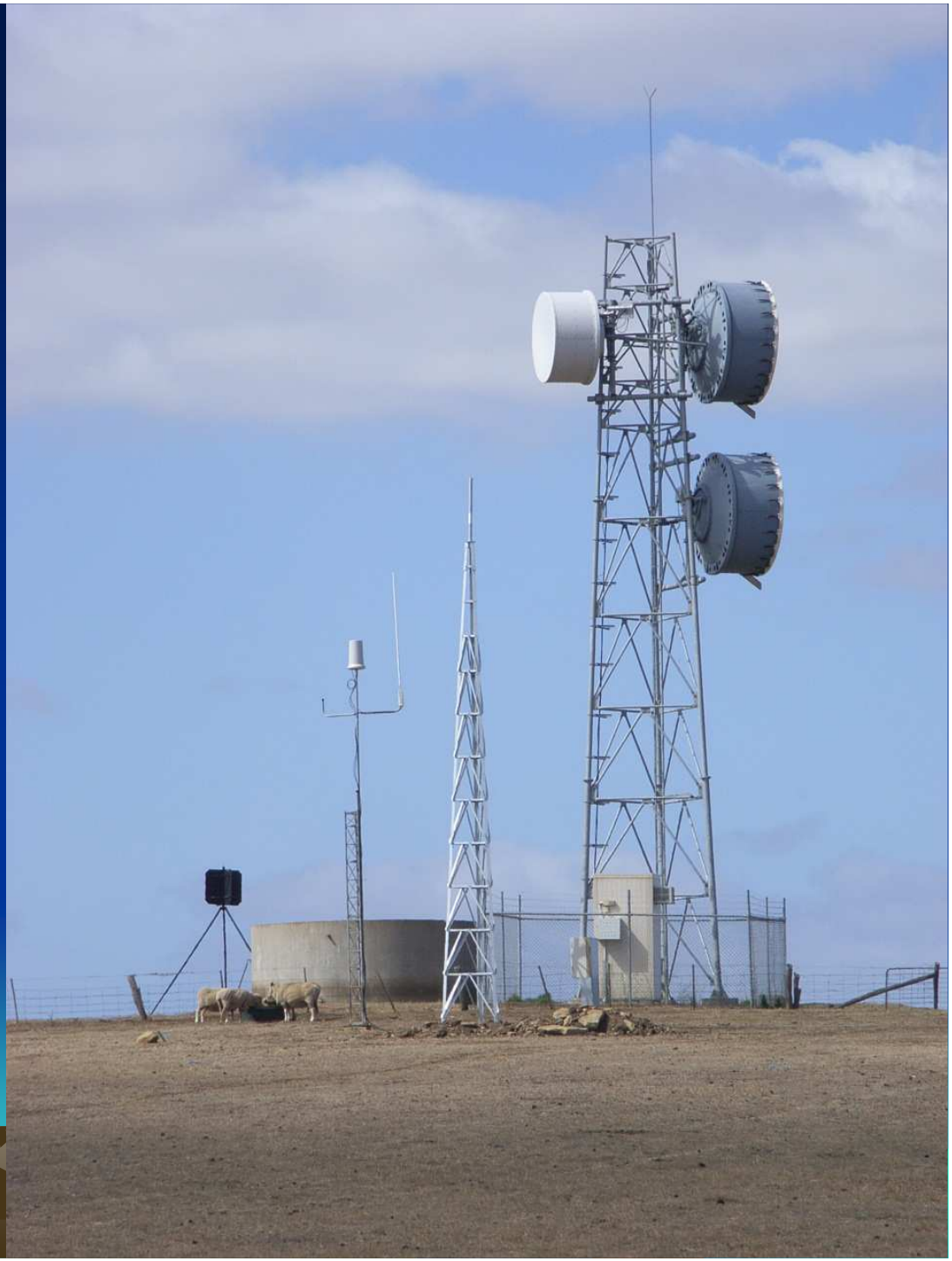

View to the North

View to the North West


View to the North East

Looking south.

We do have to share the QTH with paying customers….




Tuneable IF for 23cm
Tuneable IF for 13cm
2m rig
70cm rig
Geoff Merrill
PINOT NOIR
2003
KENWOOD
144MHz ALL MODE TRANSCEIVER TR-751A
KENWOOD
430MHz ALL MODE TRANSCEIVER TR-851A
SPK04
SPK04
2m/70cm/23cm/13cm equipment

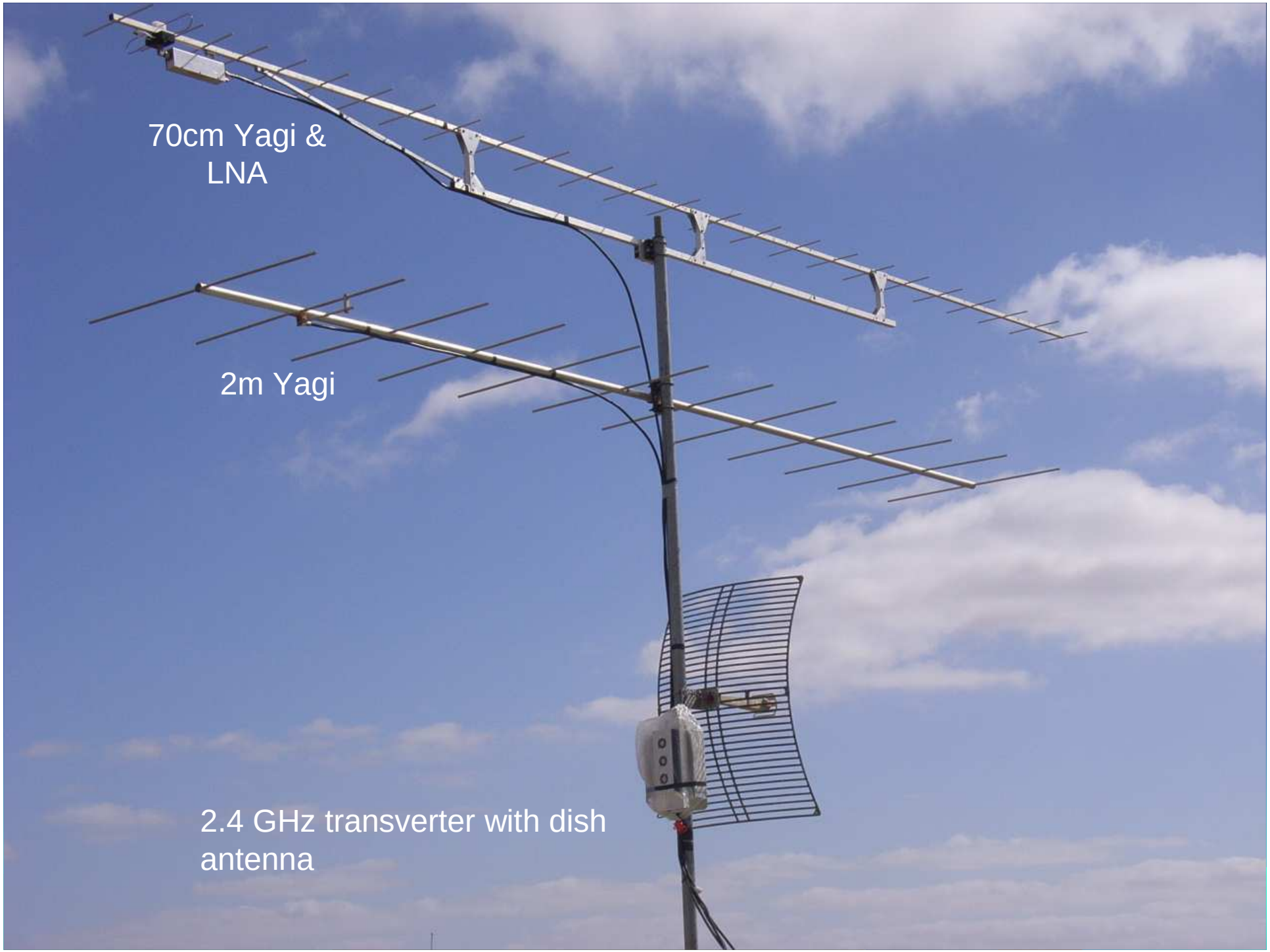
2m 220W & 70cm 200W power amplifiers

Charlie VK3NX operating on 432 MHz


VK3PY 1296 MHz
50W Transverter
1296 MHz:146 MHz
TRANSVERTER

David VK3QM’s stack of microwave transverters


1296 MHz Yagi (top)
50 MHz Yagi (bottom)


70cm Yagi &
LNA
2m Yagi
2.4 GHz transverter with dish
antenna


Setting up the microwave systems
MITEC LTD AUSTRALIA

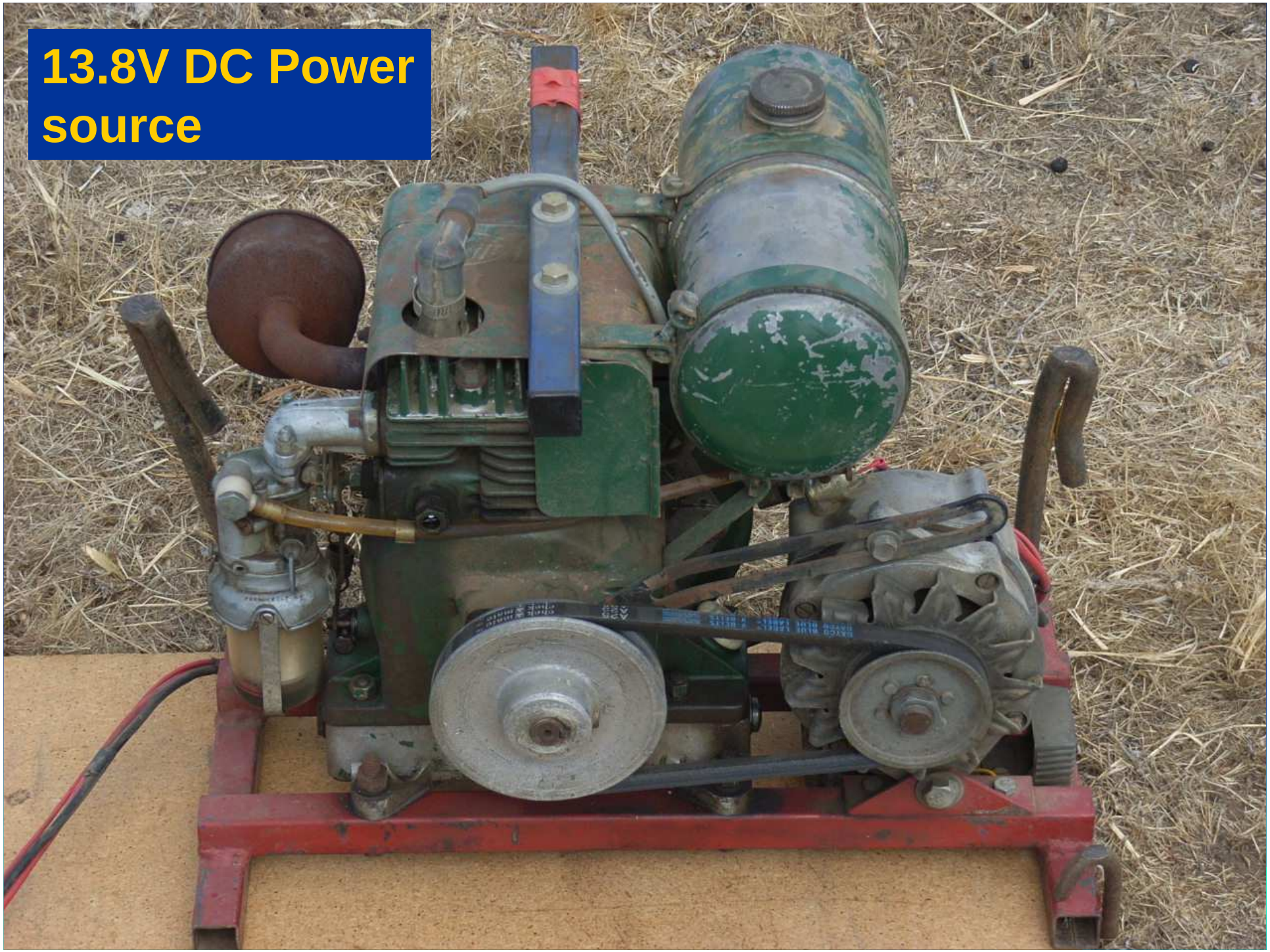
3.4 GHz Transverter and power amplifier

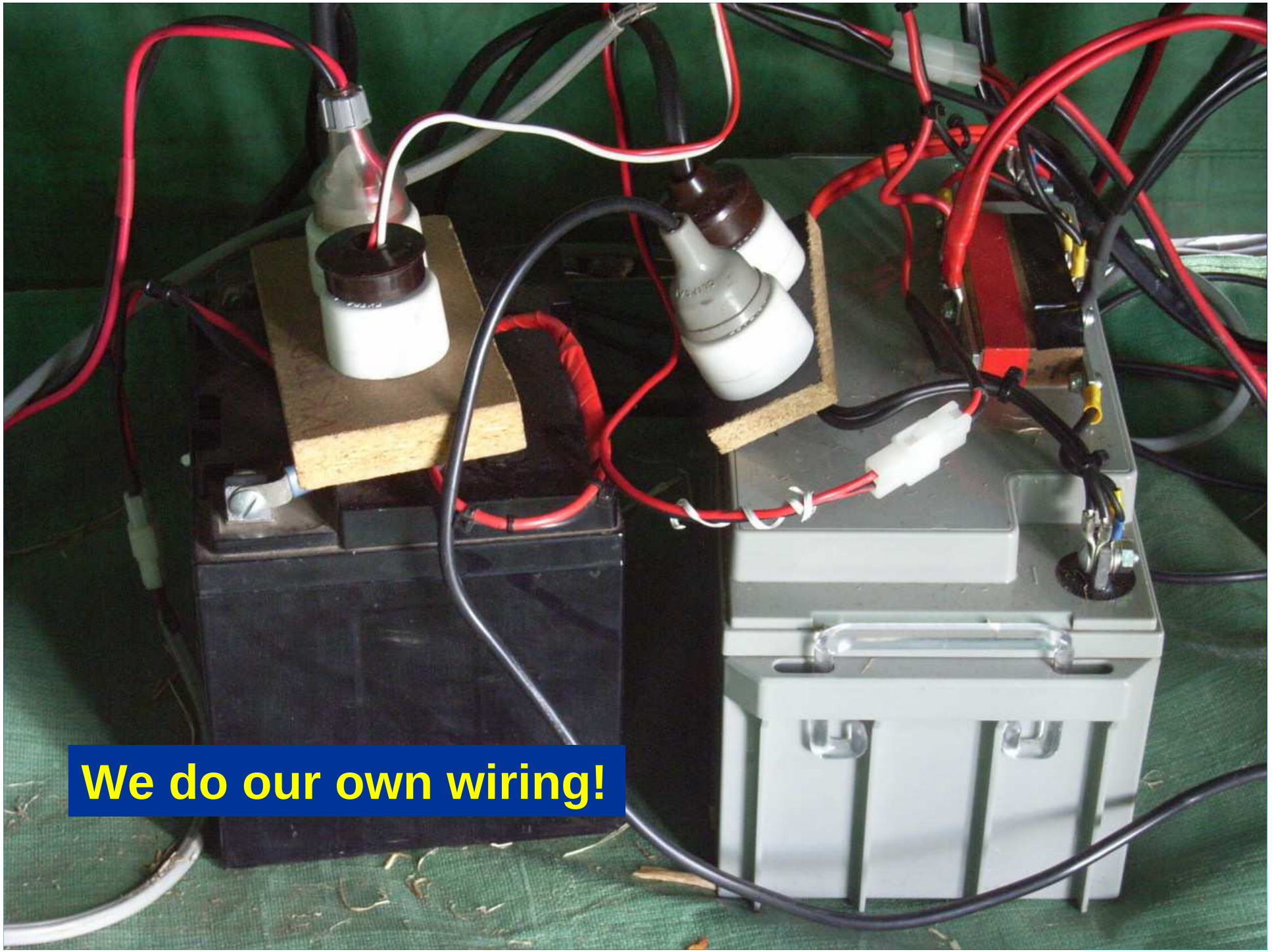

10 GHz Transverter
with 1.2m dia. dish

David VK3QM operating his 10 GHz gear

Charlie VK3NX operating his 10 GHz gear

13.8V DC Power source




We do our own wiring!

Some of our more notable contacts:

VK2KRR - Wagga Wagga on 144, 432 & 1296 MHz (>300 km)

VK2AES - Mt. Corree, ACT on 144, 432 & 1296 MHz (>400 km)

VK5AKK – Adelaide, on 144 & 432 MHz (>500 km)

VK5SR – Mt. Gambier on 1.3, 2.4, 3.4, 5.7 & 10 GHz (300 km)