



Founded 1969

T.D.A.R.S.

Telford & District Amateur Radio Society

News Letter

G3ZME G6ZME

Issue 219 Date Sept..2006

Dawley Bank Community Centre, Bank Road, Dawley, Telford, Shropshire. TF4 2AZ

Forthcoming programme

- Sept 9 (Sat.)** Visit to Museum of History of Science, Oxford, to see the special exhibition "Wireless World—Marconi and the making of Radio" . Leave here about 9am. Families etc welcome
- Sept. 13** Telford Hamfest 2006 Preparation night. Please support this one.
- Sept. 20** TDARS Debate around the theme: "Is SDR the future of Amateur Radio ?"
- Sept. 27** Telford Hamfest 2006. Final, final preparations!
- Sept.30 & Oct. 1** HAMFEST SET-UP & EVENT @ ENGINUITY, COALBROOKDALE.
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- Oct. 4** Open Evening & Committee meeting
- Oct. 11** Post Hamfest De-Brief. Your observations, please.
- Oct.18** RSGB Regional Manager, Dave Gourley G0MJY visits TDARS
- Oct. 25** Slow Scan TV with Dave G4EIX
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- Nov. 1** First-in-the-Month O.T.A., Committee and Open Evening
- Nov. 8** Club Calls 160m Contest Preparation for this coming weekend. (Contest 8-11 pm)
- Nov. 11(Sat.)** Club Calls 160m Contest at QTH G0VXG. Pls let Richard know if you wish to attend.
- Nov. 15** Surplus Equipment Sale
- Nov. 22** New TDARS Construction Project. (SDR project current favourite to build.....)
- Nov. 29** "I Like My" Talk about it, demo or whatever !
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- Dec. 6** Open Evening / HF OTA / Committee Meeting
- Dec. 13** Annual Christmas Dinner. Allscott Inn.
- Dec. 20** Social and Games Evening at Club QTH.

**CLUB MEETINGS EVERY WEDNESDAY AT Bank Road Community Centre,
Bank Road, Dawley Bank. Rooms available from 7:30 pm.
ALL WELCOME. COME AND MEET EVERYONE !**

NOTE: New Intermediate course to commence late September: Contact Mike G3JKX

For Foundation & Intermediate training, contact Mike G3JKX tel: 01952 299677,
mjstreetg3jkk@blueyonder.co.uk (new e-mail address)
Advanced course contact Eric M0KZB tel: 01743 240286, or Mike G3JKX, as above.

The Welsh Side of Marconi by Richard M1RKH

I was on a great Holiday. I was in Wales, a whole week in June with Blue Skies, under the Snowdonia range, staying in the grounds next to a brew Pub, next to the Welsh Highland Railway. Bliss. We drove to Caernarfon Castle so we could catch the train from there down to Snowdon Ranger and back again in one go. It doesn't go any further yet, but they are working on extending it all the way down to join up with the railway at Porthmadog – not far from Portmeirion where they filmed the classic cult series The Prisoner.

So plenty of time on the train to sit back and read the Travellers Guide. I got to the section on Waunfawr, the village next to our Pub and I couldn't believe my eyes. Not only was I on Holiday, In Wales in sunshine, next to a pub, but I may also be able to go to a Marconi museum. Double whammy. It read:

“The Italian Marconi chose Waunfawr to build a radio station. The first ever radio transmission to Australia from the British Isles was sent from this very station. In Ty Capel museum find out more about the history of Marconi in Waunfawr. For many years, Waunfawr was the most important long wave transmitting station in Britain”

Great. Now all we had to do was get back, look around the castle (it has a great Royal Welsh Fusiliers museum, a regiment over 300 years old!) and go and see this museum, I had the keys to the car so no one could stop me.

We turned up at Waurnfawr and after a bit of hunting found the Ty Capel centre just down the road, a place that is a centre for Mentally Handicapped Adults, with a tea room, garden and craft shops. I asked them where Ty Capel was and they pointed me to a house

Great I thought, I found this really easily. I walked up to the house, no one around, walked in, mooched around a bit, it really was someone's house, I think some of the staff were living there, luckily I didn't bump in to them. Obviously Marconi's museum is not here.

I went to the tea shop. Ordered our tea and Bara Brith and asked the lady what had happened to Marconi's museum. “Ahh”, she said, “they talked about it for a while but didn't actually set it up. If you want to know more about Marconis station ask this man”, she pointed over to an elderly man, said something in Welsh, luckily he spoke to me in English. He said “the old station is mostly gone now, it is up on the hill and is now the climbing centre. You should have heard it, at times it was like huge thunder claps as the wind ripped through the wires, and sometimes lightning”.

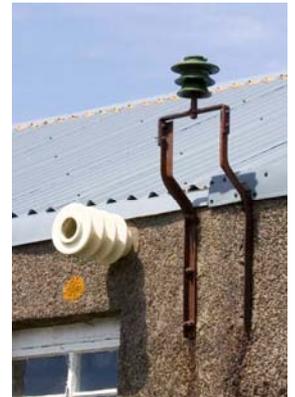




I was determined now. No one is going to take Marconi away from me now. We drove out of the village and up into the hillside looking for the climbing centre, sure enough, it was occupying the building. Like the man said not much to see. No signs of antenna bases, obviously they were made of wood in those days.



However if you get close to the building there are still a few signs of what may have been all those years ago. If you look up to the roof, there are still some of the large insulators there, obviously, either for power or for the antenna wires.



So it begs the question of just why Marconi would have wanted to set up here. For one the site is fantastic, you can see the tops of the Snowdon Ranges due South. Better still, from South around to North, the land slopes down to the sea, the Irish Sea, The Menai Straights. Great take off over water. And if you get a globe, the shortest distance of travel for a Radio Wave may have been somewhere SW and around the world that way, we always assume a polar path is short, but not always. It may also have been the fact that it had cheap land, a building vacant and somewhere to hook to the grid. And maybe as it was around the time of war it was pretty secure and allowed us to communicate with our old colonies.

The station was built in 1914 as a transmitting station, and there was a receiving station at Tywyn, in Cardigan Bay.

Here is an extract from the BBC website:

Dafydd Francis Jones of Tregarth is a former electronic engineer and wireless enthusiast. He is a member of the 'Friends of Marconi' group, and tells us about the first wireless transmission made between Rhyd Ddu, nr Caernarfon, and Australia.



"As a young boy in the 1930s, I visited the transmission station in Rhyd Ddu, from where the first wireless transmission was sent. I remember looking around open-mouthed at the huge masts and machinery which were necessary to transmit signals before new technology took over. I went on to work as an engineer,

Ephemera: Club News

- Recently we have heard that our **Club premises' rent is not being increased** this year (sigh of relief!), with one exception. The monthly rent for the exclusive use of one room (the Shack itself) has been increased to £30 (from £20). So we have another £120 to find annually. It could have been a lot worse. Another good reason to ensure our Hamfest is a success, both as an Amateur Radio Event and Financially.

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- It is hoped to organise a **regional Microwave Workshop** somewhere in Telford next Spring (2007), along the lines described by Richard M1RKH last Newsletter. Details and Date not yet decided, but please let the Committee know if you're interested. There will only be about 20 places, and it will probably attract more than that from the Midlands area.

- The Radio Activity Contest from March to June** was an outstanding flop. Quite a few Members exchanged TF Postcodes, and a few tried HF with 10 watts, but by the deadline for entries (July 19), only one written entry (ie log) for each section had been received, together with an e-mailed acknowledgment. The winner of both sections has donated his £20 winnings back to TDARS, so we made a £16 profit on the 8 initial entries with no prize payout ! I still like the Postcodes idea to encourage local activity between Members, so it may be re-tried next March. Perhaps instead of a prize, Members who fail to participate should pay a forfeitnot necessarily cash, but perhaps a variation on the party game of "Forfeits" ! Ideas on a postcard.
- The Club generator** has been showing signs of its age, but kept going throughout VHF NFD, thanks to TLC provided by Derek G0EYX. Due to the difficulty in getting spares for this old warhorse, it has been decided by the Committee to 'run it into the ground', but not spend too much on it. Inevitably, a new gennie will have to be purchased in the 5-7 KW class at some stage, but not just yet.
- On the subject of **VHF NFD, the Club's entry** was submitted in July, with the following claimed QSOs and scores (2005 claims in brackets):- **50MHz:** 146 QSOs, 118283 pts (169/116695 pt in 2005). **70MHz:** 73 QSOs, 13314 pts (75/12799 pts). **144MHz:** 233 Q, 44979 pt (322/89290 pt). **432MHz:** 101 Q, 22273 pt (141/38472). So, a successful event, with noticeably less activity on 2m and 70cm. Thanks to everyone who made the event another success, and we'll chew our nails until the results come out, usually some time in December. Special thanks to Richard 'RKH for another very enjoyable Saturday evening meal & Kevin 'UPF for his snacks!
- Visit to Jodrell Bank** (Cheshire) envisaged for Spring 2007. Date TBA
- Car Park CCTV** now using wireless technology for us to monitor anywhere on site.

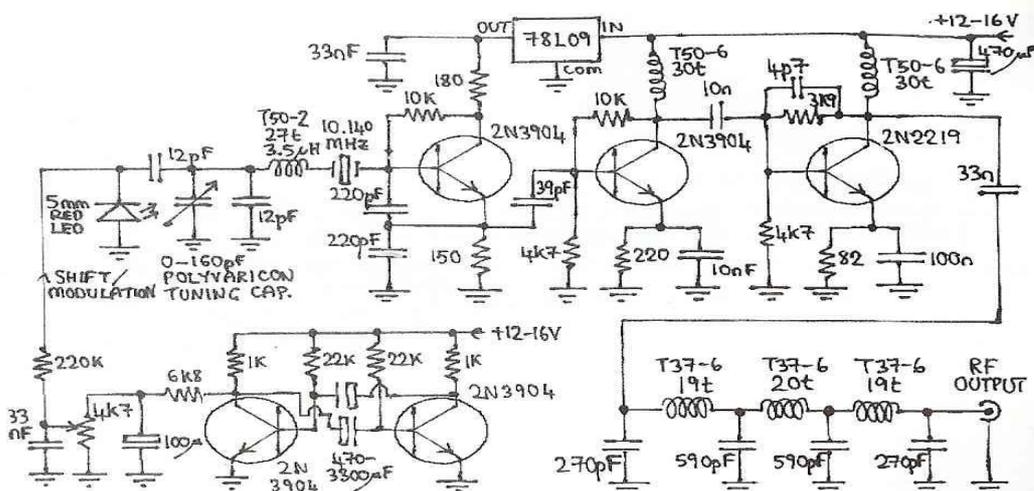
QRSS – The transmission and reception of weak RF digital signals by Richard G0VXG

For the CW guys amongst us, you will know that QRS is “Please send more slowly” one of my favourite Q codes! QRSS has become the name for very slow Morse. I first got to know about it when playing with 136kHz and this is how a few amateurs got signals over to the States. There are several pieces of software available on the web for receiving these transmissions. One is called **ARGO** and it is a FFT (Fast Fourier Transform) program. In essence it plots time on the X-axis and frequency on the Y-axis. The sending of a CW DAH can take anything up to 30 seconds, so it is not for the impatient! The program is fed from the audio output of your rig so the connection is very simple. In the last issue of **SPRAT** Hans Summers wrote an article about sending and receiving these QRSS signals <http://www.hanssummers.com/radio/grssjb/>.

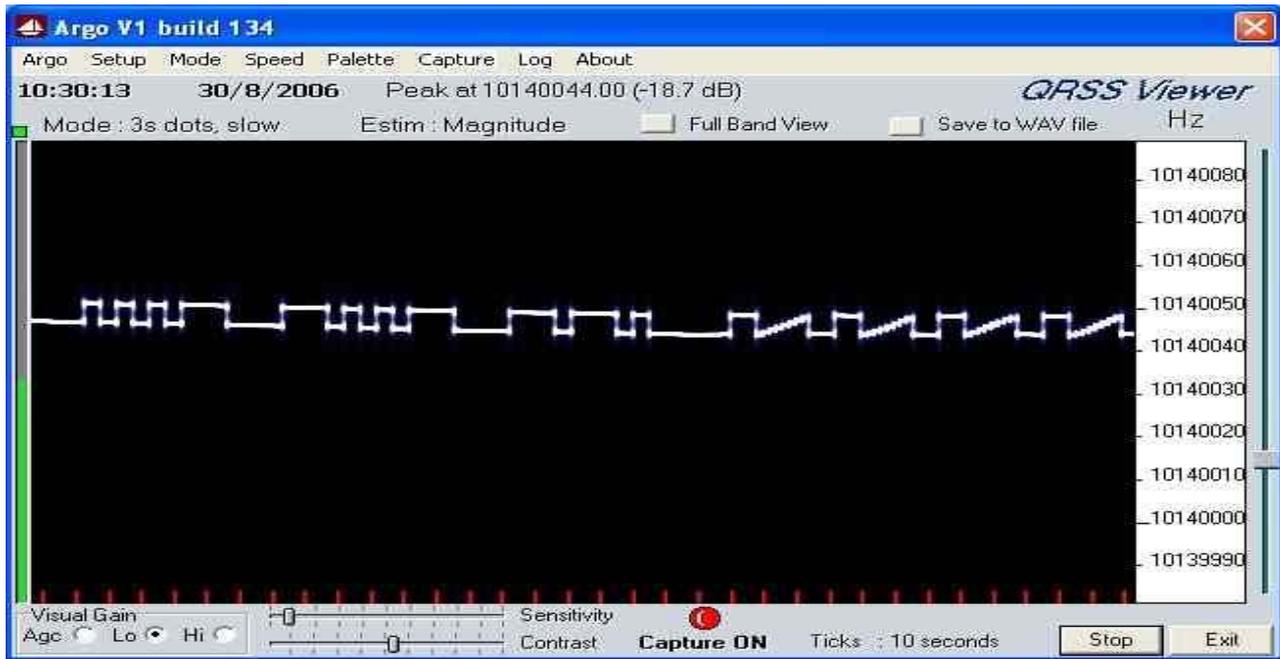
The transmitter is based on a 10,140,000 crystal and has a power of 360mW and a bandwidth of 5Hz; - see attached. A small forum has now emerged called the “Knights” where images (from ARGO) and construction projects are exchanged. The members of the group are based in the UK, US, Australia, Holland, Italy, Germany and Belgium and most mornings images are received in my email. To see who is transmitting you can visit the web site http://www.on5ex.be/clipboard_view_unreg.php (NB there are _ on either side of the word “view”) When I first read the article in SPRAT, I was a little dubious about the claims that VK stations were receiving these transmissions from the UK, but over the weeks I have been proved wrong and these low power transmissions do in fact get received all over the world. Hans’s station just uses an inside 30m dipole and he regularly makes it into VK. The 360mW transmissions now seem to be QRO and the Knights are now going down to 50mW and below – candle light power. There is a very good site run by Peter Knol PA1SDB <http://members.home.nl/peter-knol/live/> and this displays a narrow portion of the 30m band. His station is based near the German border and is refreshed every 30seconds. This means that you can see your signal and check that it is at least making it into northern Holland.

It is very interesting to see how propagation changes throughout the day and how signals in the UK will change relative to each other. To identify your station a CW call is normally sent – but not always. The call can take the form of a square wave. If we think of the waveform having a top and bottom line, then the bottom represents the spaces between the DAHs, DITS and letters and the top line shows the actual Morse code – see attached. The Knights seem to vi with each other to get distinctive patterns and some create actual alpha numeric characters (slow Hellshreiber). Hans’s TX uses a slow running astable to create his pattern but Dave EIX and myself have moved on to PICs to create our patterns.

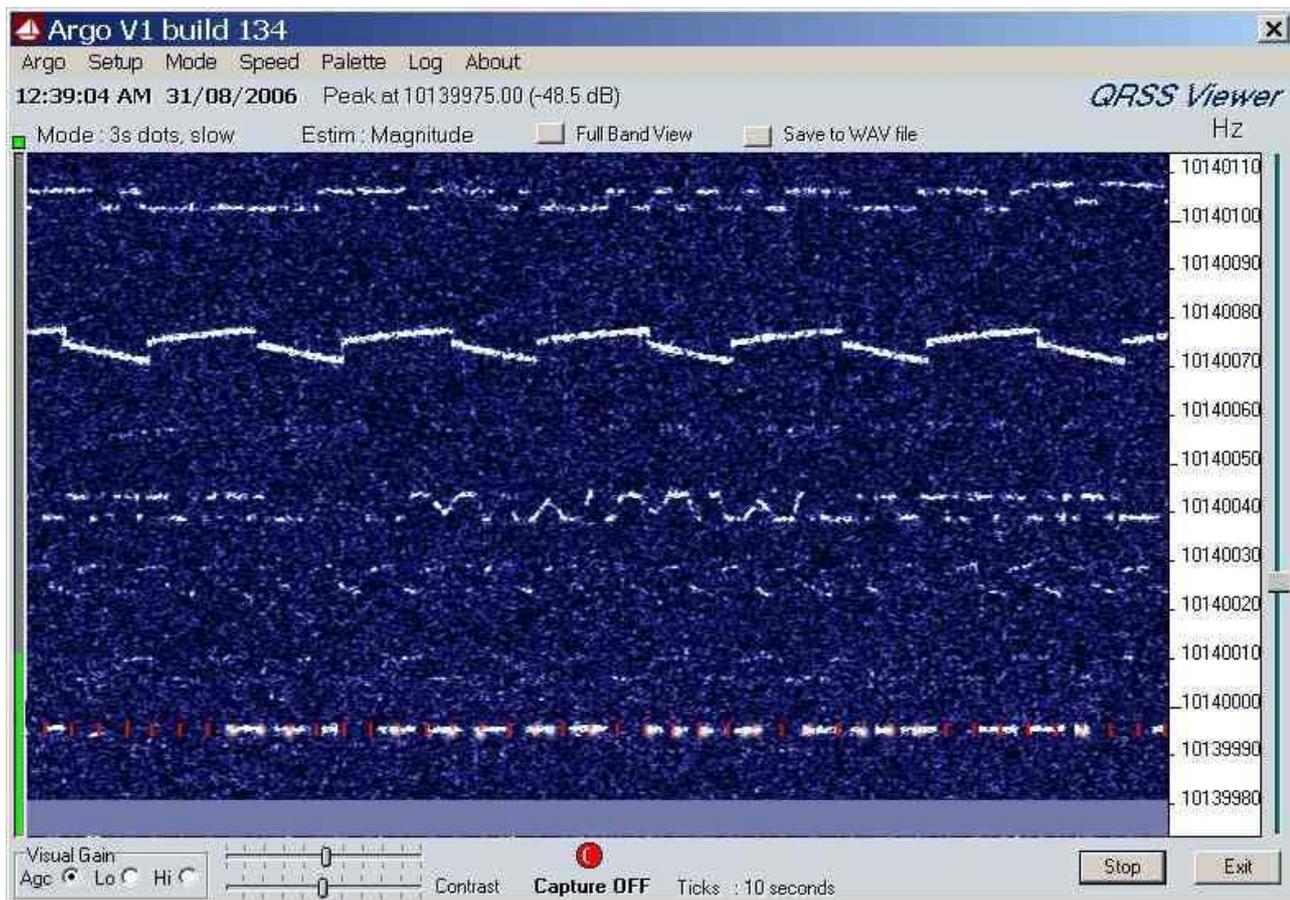
Circuit Diagram of 360mW Transmitter: Source Hans Summers’ website.



The last part of Richard's Callsign "VXG" is shown clearly here:-



This second image is from an Australian (VK) station, and Richard's pattern of transmission is visible as G0VXG in morse characters shows clearly at the bottom of the screen. Not bad for 360 mW from Jackfield! (- Editor)



Mike's Piece

The TDARS annual trip up the Long Mynd for VHF NFD has been and gone again. Will we win the Mix & Match section again for the 5th year on the trot? Who knows, as conditions were poor, with contact numbers well down. This piece is really directed at those TDARS members who *didn't* take part, as I thought they might like a glimpse into the running (and problems) and the fun of a big field day.

Let's take the weather to start with. We have been very lucky for many years with the weather being kind over the weekend. This year it was 'b' hot! But what might have happened if it had not been so? If it were wet and windy, getting the tents up early is essential to ensure that there's adequate shelter. Providing no one forgot the groundsheets, the radio gear won't get wet and the people keep dryer too. If there's wind, tents are a so-and-so to erect. If there were only have few people on site, on time, all hands will have to muck in and put up one tent at a time. Three tents takes ages. So, even if you could not come for the whole of the contest, a little help putting things up on the Saturday at 1030 a.m. and taking everything down again at 3pm Sunday would help out enormously, as the everyone is naturally a bit tired by then.

What about the gear? Well it's a good job that the 3 team managers do their homework and get the equipment needed checked out before the day. As usual, the burden falls on the few who do a great job. Masts to be serviced, rigs, PSUs, rotators and aerials checked over, coaxial cables and their terminations tested and checked for compatibility. Coaxial adaptors must be taken just in case they're needed.(which they were!) The diesel generator must be serviced and fuelled. Mains wiring checked out and lighting thought about. The previously terrible chore of hand writing and scoring the logs is now done on Lap-top computers is now the norm for all contests. Have you got an OLD lap-top that the society could have?

What about food and drink? Nowadays everyone seems to cater themselves. This is a good thing in one way as each person can then bring what they like and have it when they feel the need. In times past, Field Day groups had a central kitchen, providing hot drinks on demand, day and night, with food coming up, as and when. But that meant another tent to put up and also 2 people to run it. This year Richard 'RKH came up trumps providing yummy hot spicy mince Fajitas with sour cream for us all, followed by hot bananas and blueberries in a chocolate sauce. Phew! Maybe someone else could do something similar for next year's event! Please, please, please !!!!

Having enough transport is usually no problem.....provided there are enough cars with tow bars to get the two mobile masts and the diesel generator trailer up 'the hill'. Because the Burway access road up to the Long Mynd from Church Stretton is very narrow, we usually convoy up and down together, with a lead car halting the opposing traffic in the lay-bys. This is because the masts are quite long and the car drivers have a problem negotiating the sharp bends with them in tow. We never seem to have quite enough towing vehicles. If you have a tow-bar on your car, could you help us out next time?

Then there's the actual operating? Well, yes, things are always a bit hectic to start with, so the better operators usually go on first. However, they need a 'logger'. Basically another set of ears to help the operator be accurate with the log and keeps him supplied with food and drink! In the past the logger wrote down all the contact information and kept a 'duplicate' list going, so the operator did not work stations twice. Lap-tops do the log and dupe checks now. Remember that you don't need a license to be a logger or a member of the RSGB for that matter to operate, just be a TDARS member. Sitting beside a good operator can teach you much. Great on-the-job training. They were all contest novices once and have learnt from others and from experience. You could too! Later in the contest things always slow down, with many CQs on lots of antenna bearings needed. No, you won't lose your voice as all our rigs now have 'parrot' CQ recorders to do the talking for you. Why not come along the next time there's a contest on and have a go? It's great fun, really!

Some goings-on from this year's event. The area next to our usual site had been cleared, as a fire break we think, making setting up so much easier. I took along my electric fan to keep Martyn and me cool but it was pinched to be a load for the generator, to stop the engine hunting! It got so hot we ended up on the Sunday afternoon with the canvasses being removed from the frames early as it was so hot. Simon's van STILL leaks water! Mike 'NKC' lost' his pre-amp (again) Fortunately, Jim 'UGL had a spare. The new loo tent is brilliant but becomes a sauna bath when it's hot! Again, lots of walkers sighted but fewer questioners this year. The NT wardens were much in evidence below our site but there were no visits from them or an RSGB adjudicator. TDARS is seriously overdue for a visit! Derek 'EYX still has no license for exposing his knees in public. Keeping the sun off my delicate skin using my XYLs little parasol was not appreciated by anyone except by ME! There'll be photos of the event on the society web-site in due time. Oh yes, we all got a bit of a sun-tan too. And, oh yes, we all enjoyed the shared experience as always. See you on the next one? I, for one, hope so.

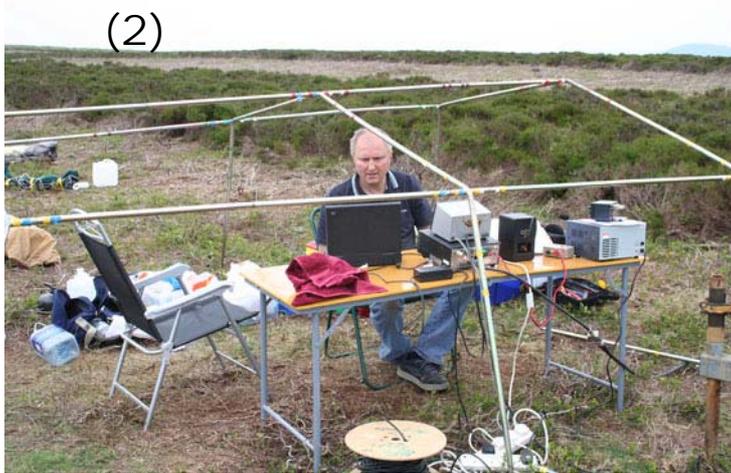
That's it. Vy 73 Mike G3JKX 01952 299677 Note: New e mail address 'mjstreetg3jkk@blueyonder co.uk'

VHF NFD July 2006
Long Mynd IO82NN
Cameraman G8UPF?

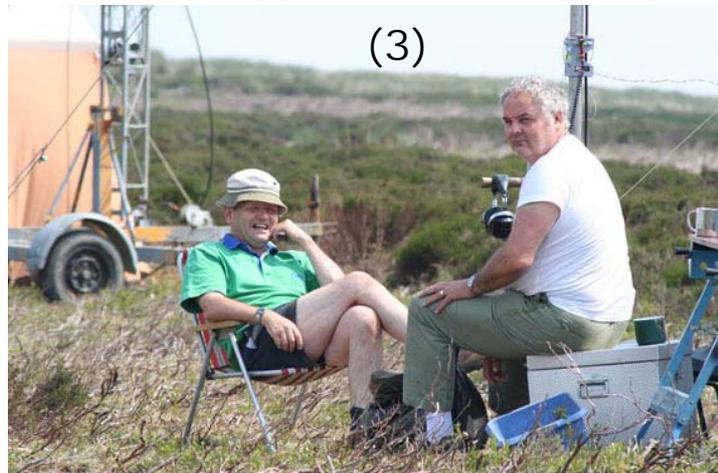
(1)



(2)



(3)



(4)



- 1) Most of the gang on Long Mynd, except camera man & late-comers! Site rental in G3UKV's hand—extreme right
- 2) Mike 'NKC in his hamster cage. (2 minutes to closedown.)
- 3) "You'd be surprised"...."Yes, I would."
- 4) Shrewsbury contingent at inter-club Quiz

Thanks for Newsletter contributions
from GOVXG, M1RKH, G3JKX