

G7ATV/P enters International ATV Contest

Ross G0WJR reports from the Mendips

Having heard reports of, and seen film of the Group's entry into previous contests, I was delighted to have the opportunity to see it all first-hand.

The Group takes its contesting seriously, with a full four-band entry planned on 70cm, 23cm, 13cm and 3cm. As well as the callsign G7ATV, the Group also has a mobile 40ft tower, a caravan and a formidable set of antennas, which include an array of four long yagis on 70cm, and four 48ele loop yagis for 23cm. Ivor also brought along a 60cm dish for 10GHz, complete with elevation rotator. That poor tower and rotator would have some hard work to do over the weekend!



Ken G4BVK checks out the 23cm masthead unit

Despite the rather poor weather forecast, there was a good turn-out to help set up the station on the Friday night and Saturday morning. Apart from struggling by floodlight to repair the mains connection to the generator on the Friday night, all the preparations went quite smoothly. I was amazed to see all these antennas and bits of station arriving in different cars, and go together for the first time in two years with no problems.

In addition, this was the first year we were running 13cm transmit, thanks to equipment loaned by Ian G6TVJ, and that all had to be added to the masthead array.

We managed to dodge the few rain showers on the Saturday morning, and had the antenna

system in the sky just after lunch. The next task was to sort all the various cables, and wire them through to the equipment inside the caravan. The cables were fed through a draught-proofed letterbox hole cut in the side of the van, and were soon connected up.



The assembled array ready for erection

A set of tests were conducted with Phil G1HIA back in Bristol, and apart from a poor connection on the supply to the 3cm modulator (the problem was in the caravan, not up the mast, thankfully!) everything worked first time.

We had also been joined on site by Graham G8EMX, who had come down from Birmingham to observe the station, and report for CQ-TV.

Now we only had a couple of hours to wait for the start of the event.



The completed four-band array safely erected



Who called this business "wireless"?

After all the feeders were secured, the guy-wires fixed, and the photographs of the array taken, we chatted with Graham, and were also visited by Phil and Brian from the Thornbury Club, who called in to see the station. Finally, with the generator topped up with diesel, and the operators with tea, we were ready for the 7pm start.

The contest began with a flurry of activity, and working G1HIA on four bands in 15 minutes stretched our log-keeping abilities to the limit. Happily the paperwork was soon straightened out, and we settled into a business-like routine. To avoid mistakes being made, Ivor's sticky white labels were soon used to remind us which caption generator settings and monitor inputs were to be used on each band.



"Ivor the engine" fuels up the generator

A lot of teamwork was required in the caravan, with Viv sitting at one end running the 2m talkback, Ken operating the controls on 70 and 23cm, and Ivor switching between 3cm and

13cm. A new feature this year was the use of a laptop PC to calculate the distance and compass bearing to each station being worked.

It was quite remarkable to see the string of contacts which we had on Saturday evening from seven o'clock, until I left at half-past ten. Most of the time, we had a queue of two or three stations waiting to send us pictures, and certainly no CQ calls were required.

As well as local base-stations, there were a few hardy souls who had braved the elements to send back pictures from distant hills. Nigel G7JZP had gone out with a 3ft dish and multi-band feed, and Jim, Dave and Roger had taken all their gear out onto a Welsh hilltop site. As darkness fell, they had to resort to shining a torch onto their caption cards, so we could read them!



Ken performs tests on the 70cm system

We also contacted a couple of other contest groups down in Devon and Cornwall, contradicting our earlier decision to set the end-stop of the rotator in a South-Westerly direction, since there would not be any stations on that heading!

As night fell, we were warmed by the excess heat generated by Ken's 400W 70cm valve linear, and were joined by Phil, who had come up for the evening shift, allowing Viv and Ivor to nip off to use the facilities in the nearby Inn before closing time.

As I drove back into Bristol at 11pm, I could still hear a stream of activity on the talkback channel.



2.3GHz and 10GHz systems with elevation control

In contrast to Saturday, which started with a heavy rain shower, Sunday dawned bright and clear. By eight o'clock, I had loaded up my car, and was en route to the Cotswolds, to meet up with Bob G4JXC, who lives in Dursley.

By nine, I was set up with 23, 13 and 3cm equipment at the car park near the golf course at Stinchcombe Edge. Bob soon arrived on his mountain bike, and helped to keep the antennas pointed against the wind as I made easy contacts on each band. Even over a path of some 49km, the power amplifier was not needed on 13cm: I received a P5 report with just a few milliwatts at the antenna. Exchanges were made on all three bands within twenty minutes, even allowing a break for another station to jump in on 23cm whilst we were changing over leads to operate on the next band.



GOWJR/P portable station at Stinchcombe Edge

As we were packing up, Nigel arrived, fresh from sending some signals from nearby Nibley knoll. He told me of the difficulty of operating

in the even windier conditions the night before, when his wife had done a sterling job in keeping the dish steady!

My next rendezvous was with Richard M1ATD, at Purdown in Bristol, from where we were able to make another three-band exchange. This site was screened from line-of-sight by the East end of Dundry, and so the 10GHz contact was very difficult, and a power amplifier was required on 13cm. We were lucky to complete the contacts just before the Club station had to close at quarter to one, to ensure getting their lunches at the *Castle of Comfort*.

After lunch, I returned to the site to help with the dismantling. Jim GW3PYX and Dave GW0ROL had made the journey over from Penarth to give us very welcome assistance, and the entire station was dismantled in two hours. It seemed such a shame to have to take it all down after so brief a time, but the number of contacts made over those eighteen hours had certainly made it all worthwhile.

We now keenly await the results, but in the meantime hope that the enthusiasm shown by so many people during and in the run-up to the event is continued over the coming months, with an increased level of ATV activity in the area.

Many thanks to all concerned with organising the event, getting the equipment up to site, helping to set up, operate, and dismantle the station, and taking the time to come on air and give us contacts, especially those who ventured out portable in some pretty unpleasant conditions.

Same time next year, everyone?

In the meantime, there will be a series of activity weekends throughout the summer months: if anyone is interested in doing some more (maybe less elaborate) portable activity, please get in touch.

G7ATV/P Summary of Results



Graham had seen TV outside broadcast units less well-equipped than our contest station!

70cm

using 400W peak into four 21-element Tonnas, and a masthead GaAsFET preamp.

1446 points from 9 contacts, best dx: G4ZJY at 158km

23cm

using four 48-element loop yagis, each individually fed with 17W solid-state PAs, all at masthead, with GaAsFET preamp.

3300 points from 19 contacts, best dx: G8LES at 111km

13cm

using synthesized 750mW masthead transmitter and S-band LNB, with separate 25-element Tonnas for transmit and receive.

1510 points: 4 two-way contacts, best dx: G0WJR/P at 49km; also one-way GW7JZP/P at 65km

3cm

using 60cm prime-focus dish with flared waveguide feed, on elevation rotator. Remote-controlled waveguide switch for changeover, with 1W transmitter and LNB fitted behind dish.

4100 points from 12 contacts, best dx: GW7JZP/P at 65km

A total of 10356 points from 45 contacts with 21 different stations.