2m Backpacking – 1972 style

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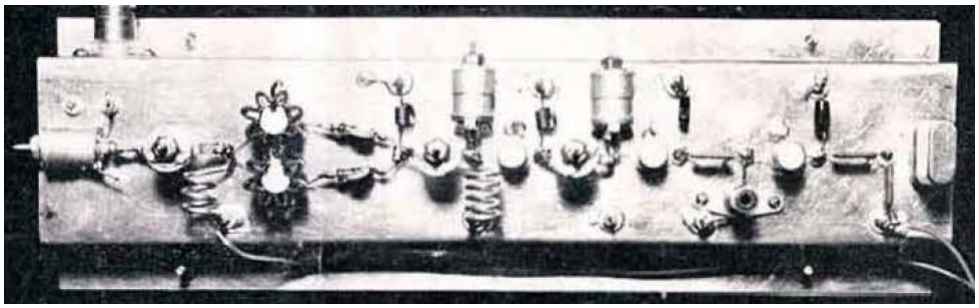
I'm far too old these days to enter Backpackers' contests in true backpacking style, so I enter the Hill Toppers section that allows operation from the comfort of a vehicle. Still, I was reminded recently of my first ever single operator contest on 2m, some 53 years ago, in true backpacking style even though we didn't call it that back then. I was a first year undergrad student at Manchester University, and I had received my Class B callsign, G8EQX, the previous year. Student accommodation was scarce in Manchester at that time, so I was living in lodgings with a lovely landlady, in a house in Romiley, Cheshire. It was a long journey into the Uni every day, but a lovely place to live in the north-east Cheshire countryside near the Goyt Valley.

I had done some VHF contest operation with my club back home (RS of Harrow, G3EFX), and now I fancied having a go alone. I chose the May 1972 144Mc/s contest. I searched the area (on foot with an OS map) for a suitable local high spot, and settled on a small hill called Werneth Low, about a one mile walk from my lodgings. Looking at Google street view today I see that the spot I used, Werneth Triangle, is still much the same now (see photo), although there seem to be a few more trees. The trig point there is at 243m, and although it's not a really great VHF location, it has a reasonable take-off in all directions except north-east. The QRA locator was YN50J (these days it would be IO83XK).

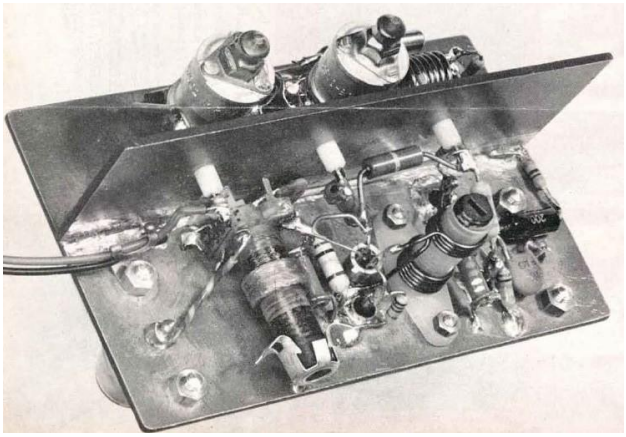
My antenna was a J-Beam 4-over-4 slot-fed yagi. Not the most portable of aerials you might think, but actually it collapsed down well, was quite lightweight, and easily assembled in the field. Anyway, it was all I had. My mast was a J-Beam portable mast, a rather flimsy affair made of 1½ inch aluminium tubes with three nylon guys. It did the job and was also nice and lightweight for carrying. Aside: some time later my Mother bought a rotary clothes drier to put in her garden, it was also made by J-Beam and I was amused to see that it was constructed mostly of the same components as my portable mast, including the guy ring. Well, my portable mast didn't last long except for that guy ring, which I am still using today over 50 years later!



Back to 1972: My TX was an all solid-state homebrew device using the "Snowflake" design that had been in the February 1969 RadCom. The photo here is from the

RadCom front cover, but mine looked just like that too. It was the first transmitter I had made that did not have valves in it! The output was a pair of 2N2218 in parallel, with a power of 1.2W. That's 1.2W *DC input* to the final stage, which is what we quoted in those days, being much easier to measure than RF power. The RadCom article says the efficiency was about 50% so I was probably running about 0.6W output. The feeder was lossy 75Ω TV coax, so really there was not a lot of power reaching the antenna! Amplitude Modulation was provided by a small AF amplifier coupled to a transformer in the supply of both the PA and the driver (another 2N2218). I couldn't use CW, of course, being a Class B licensee.

The TX was powered by a pair of Ever Ready 6V batteries intended for use in a handlamp. These were by far the most expensive part of the endeavour and meant I couldn't afford to do this sort of thing too often on my £400/year student grant.



On the receive side I had a MOSFET converter designed by Arnold G3HBW, which also appeared in RadCom in 1969. The photo here is from the RadCom cover, but mine looked the same. Note the 75Ω Belling-Lee sockets for input and output! Sometime before its publication it had been a club project at the Harrow club, where Arnold was a member and exhibited enormous patience in helping youngsters like me (I was 15) to get our converter to work. The 40602 MOSFET was extremely easy to destroy with static if you weren't very careful. Arnold tirelessly supplied replacements for free. The later 40673 had internal protection and was more robust. The complete kit of parts cost only a few shillings, very good value for a state-of-the art device.

The converter IF was 2-4 MHz. The image response must have been awful but there were no other VHF signals to worry about in those days. Back home I used a 19 Set as the receiver IF, which worked well, but I could hardly carry that up the hill! So I borrowed from a friend a domestic portable radio that had a "trawler band" covering 2-4 MHz and had an external aerial input. It worked just fine with the G3HBW converter.

The final item to take was a tent. I had a tiny ridge tent that had been a plaything in the garden when I was much younger; it was not ideal and I had to crawl in, but it did the job of keeping the sun and wind off (fortunately there was no rain). All this fitted in a cheap rucksack except the antenna and mast, which I carried by hand. Oh, and a nice packed lunch provided by my landlady!

Those of you old enough to remember 2m AM operation in the sixties and early seventies will know that everything was done split frequency. You would call CQ on your fixed frequency and then tune the entire band ("high to low" or "low to high") looking for anyone calling you. Calls in response to a CQ had to be long, so that the operator could find you while tuning. So the QSO rate in a contest was much slower than later once VFOs had been invented (or, rather, made stable enough). I had only one crystal for my Snowflake TX, it put me on 145.45 Mc/s. I just had to hope that no-one else would be trying to use the same frequency.

My log (see the extract below) shows that I started operation about half an hour late at 0936z, and stopped at 1633z. I don't know why I stopped then, maybe those expensive batteries ran out, or perhaps my landlady was expecting me home for tea. Anyhow I had made 38 QSOs with a best DX of

AMATEUR RADIO STATION LOG.

DATE	GMT Start	GMT Finish	FREQ Mc/s	STATION Called/Heard	CALLED BY	Phone C.W.	Input Watts	STATION heard/worked R	S	T	MY SIGS R	S	T	QSL sent	QSL rcvd	Op's Initials	REMARKS
21/5/72	1226		145·45	G8DTF	G8EQX/P	A3	1·2	5	9	021	5	9	011			NT.	YN39F 8K NW C. MC/R
"	1234		"	G3UEV/P	"	"	"	5	9	022	5	9	022			NT.	YN1ØE 8K SW SKIPTON
"	1241		"	G4AFI/A	"	"	"	5	9	023	5	9	001			NT.	YN5ØJ Glee Cross
"	1245		"	G8BEV	"	"	"	5	9	024	5	9	005			NT.	YN5ØB STALEY BRIDGE LIKE MCR
"	1305		"	G8CFQ	"	"	"	5	9	025	5	9	004			NT.	YN49B Mc/R ANY
"	1308		"	G8FDL	"	"	"	5	6	026	5	9	025			NT.	YN38A 5K SW BOLTON
"	1312		"	G8EEW/P	"	"	"	5	9	027	5	9	027			NT.	YN37D WINTER HILL 5K N. BOLTON
"	1317		"	G4BDM/P	"	"	"	5	9	028	5	9	014			NT.	YN39B 6K NE ROCHDALE
"	1346		"	GW4ALE/P	"	"	"	5	9	029	5	7	015			NT.	YM04F 10K S CORWEN
"	1349		"	G8FBX	"	"	"	5	9	030	5	9	011			NT.	— 5K W WARRINGTON
"	1354		"	G3NUT/P	"	"	"	5	6	031	5	9	006			NT.	— C. MC/R
"	1413		"	G8ARG/P	"	"	"	5	8	032	5	8	037	15/6	23/3	NT.	YM38E 4K SW BRIDGEMORE
"	1435		"	G3KUE/P	"	"	"									NT.	
"	1439		"	G3VVG/P	"	"	"	5	8	033	5	9	003			NT.	— 5K N NELSON
"	1510		"	G4AEQ	"	"	"	5	9	034	5	9	020			NT.	YN48J 10K NW MCR
"	1545		"	GW3OXD/P	"	"	"	5	9	035	5	9	135	11/6		NT.	YM55F Beacon 3K 145 Km NEW RADNOR
"	1808		"	G8EZG/P	"	"	"	5	7	036	5	7	008			NT.	YN18B 4K N CLITHEROE
"	1623		"	G8BMS	"	"	"	5	9	037	5	9	003	11/6	23/3	NT.	YN79C 5K N NEWCASTLE
"	1633		"	G3WEC	"	"	"	5	9	038	5	9	006			NT.	YN5ØG STOCKPORT

just 145 km. When the results appeared in August 1972 RadCom (see extract below) I was placed 55th out of 59 portable stations. Not very impressive, but a fair effort given that I was running a fraction of a watt output power.

The thing that seemed remarkable about this operation was that my station was *all solid state*! Not a valve in sight. A fully-transistorized station, we would have said back then. And, actually, a lot of fun too.

PORTABLE STATIONS

Posn	Callsign	Score	QSOs	County	Best dx	Km
1	GW8ERP/P	915	203	DB	G4AJC/P	353
2	GW3OXD/P	907	161	RN	F1BHL	388
3	GW4ABR/P	580	117	BR	G4AJC/P	315
4	G8BHH/P	527	97	HD	G8AUN/P	201
5	[illegible]IES/P			HE	G8W[illegible]	
52	G4A[illegible]		18	CL		345
53	G8FCV/P	81	41	KT	GJOBD/P	160
54	G8DXS/P	70	30	YS	GW4ALE/P	155
55	G8EQX/P	64	38	CH	GW3OXD/P	145
56	G8CMU/P	54	20	LR	GW4ABR/P	180
57	G3RWW/P	50	26	CH	GD2HDZ	154
58	G8DOH/P	39	19	KT	F6ALH	130
59	G3OHW/P	30	22		G3VPR/P	93