WARRINGTON AMATEUR RADIO CLUB

The shack of Richard M3GYD



My shack is situated in my bedroom, the radios are on a piece of wood put on top of two drawers.

I often referred to my shack as 'a budget shack' or in my early days 'a typical M3 set up' as then it was just 2 metres with a $\frac{1}{4}$ wave magmount on a baking tray on top of my cupboard. I have progressed on since then after nearly a year, the set up is as follows:-



HF:- Kenwood TS-440S, Yaesu FC-700 ATU, half size G5RV (40M-10M) and a homebrew antenna for $80\mathrm{M}$

2M:- Yaesu FT-2800M (FM only), Slim Jim antenna.

2M:- Dymar, 5/8 wave magmount (for SSTV only).

70CM:- Kenwood TH-G71 handheld (covers 2M).

Most of this equipment was either bought 2nd hand or donated by kind club members (thanks). The only thing newly bought was the FT-2800M from the 2004 Norbreck rally and even that is the cheapest base radio!

I decided at the beginning of the year to make the 2800M solar powered, so I just connected up the 5W solar cell and the rig to the battery, but the battery goes flat sometimes and I have to put the rig on the PSU. My main mode on HF is PSK31 because its a lot easier to get contacts and control the power, as you know I am limited to 10 watts and want to keep in that limit, anyway, the PSU can't deliver any more than around 20 watts.

I do use SSB sometimes but not often.

I have also started to explore SSTV as well and that may be a growing mode for me.

Before I get to the end I would like to give thanks to Albert G3ZHE for helping me with everything and lending me the PSU and making me a HF antenna also teaching me things about radio, also thanks to the kind club members for helping me as well, a BIG THANKS!

Richard M3GYD

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Anyone wishing to contribute to the magazine should send or give their copy to the editor Ron, G0WJX preferably in MS Word, .txt format or e-mail.

Club Programme

<u>Date</u>	<u>Title</u>	<u>Speaker</u>			
May 24	Two Antennas An A Bit Of Noise	Albert	G3ZHE		
May 31	Something Wireless	Dave	G8KBB		
Jun 7	Speaker Needed				
Jun 13 - 17	St George's Island DXpedition				
Jun 14	Bar Night				
Jun 18	Museums Weekend				
Jun 21	St George's Island Dxpedition Discussion				
Jun 28	Bar-B-Que				
Jul	RSGB 80m Club Contest (4th- CW, 13th -	SSB 21st - Da	ata)		
Jul 5	Fox Hunt				
Jul 21	Thunder And Lightning	Richard	M3GYD		
Offers or ideas for talks to the programme coordinator Jim G3NFB					

Club Contacts

Club Secretary John Riley G0RPG Tel 01925 762722 John@johnriley8.wanadoo.co.uk Chairman Mike Isherwood. G4VSS Tel. 01925 444698 g4vss@btinternet.com Membership fees to the Treasurer John Blakeley M0ANM

Traditional Meeting



The German section of the G-QRP Club held its traditional meeting on 22nd to 23rd April 2005 in the Sports Hall of the school in Kirchenbirkig, Pottenstein, Germany.

The meeting was attended by about 45 QRP Club members from Germany, Austria, Switzerland and Britain - a truly international event. Many of those in attendance have been participating in the event for several years. Among these are the holders of call signs which are familiar to regular readers of SPRAT

Wives and partners of some of the OMs were also present and were entertained with a visit on the Saturday to a local forest to see the wild life. On Friday and Saturday evenings the ladies joined the gentlemen for a social evening with good beer, good food and good company.

The technical programme for the weekend was well organised and informal. It included something for everyone and audience participation was encouraged. The presentations were to a high standard, using visual aids and handouts. DL0VLF, the club station was activated during the course of the weekend.



It is evident that the DL section of the G-QRP Club is very strong and well supported. The equipment and technology demonstrated was, in many cases, state of the art and of a high standard of construction. Several of the rigs and test equipment displayed contained PICs and SMD. Even miniaturisation of antenna tuners was demonstrated. Portable antennas were also the subject of much discussion, including one for Fox Hunts with some very interesting historical photographs.

The programme was widened with a discussion on "Adventure Radio".

The final topic on the programme was a discussion between all those present on how the meetings could be improved in the future and also where the meeting would be held next year. The pros and cons were discussed in a frank and friendly manner, leaving the organisers with some workable ideas.

The yearly meeting of the G-QRP Club German Section is recommended to anyone who has a reasonable grasp of spoken German and who has an interest in QRP techniques. The meeting language is German, naturally, but even if your command of the language is a bit shaky you will get a lot from attending and using your eyes. After all, many German OMs and YLs have a good command of English. Last but not least the food, the beer and the companionship (not necessarily in that order) are not to be missed.

Jim G3NFB

VK2ABQ Practice Session

F riday 27th of May saw a practice session for the erection of the VK2ABQ antenna that will be used on St Georges Island. It was to be the second attempt to build and then raise the antenna on the pole to be used on the DXpedition. As with all such ventures we knew that we would find out the hard way the right method to do the job. The antenna had been put together and raised once since Albert, G3ZHE, had constructed the components, but testing the resonance once it was at working height would be the final proving.



The kit was laid out ready for use and the recently acquired screw in post holder was screwed into the lawn. These excellent devices were on sale at Aldi and a few of our members were lucky enough to acquire them before they ran out. The top of the mast has been adapted to take the antenna and allow for it to be rotated by the arm-strong method. This top piece was inserted into the post holder so that construction could begin. The wooden base plate was first put onto the pole; this was followed by bolting on four wooden arms to complete the central hub Four bamboo canes were then added, secured with cable ties, to hold

the wire elements. At the same time 3 anchors were put into the ground to hold guy ropes for the full mast. This mast will also be used to support one end of the



Windom antenna.

The wire elements are two separate loops. Each loop is broken into two measured parts by buttons used as insulators. These then form a driven element and a director. With no indication of where the elements needed to be fixed to the bamboo it was a little trial error to find a spot that made the antenna symmetrical and kept it tight on the frame. For our session the elements were secured using tape to allow for adjustments to be made; at St Georges Island this will be done with cable ties. The second, outer antenna was fixed up the same way, the driven elements both connected to the chocolate block at the feed point. A brief check of the impedance was made at this point, with much concern, as it appeared that 7MHz was nowhere near tuneable! A check of the paperwork revealed that this was no problem, as the antenna was designed for 14Mhz, and 21MHz use! The antenna was well tuned for both of these bands.

Now the exciting bit! We introduced more poles at the bottom of the mast to push the antenna up to working height. At this point the Y shaped "pusher" was used to help steady and raise the antenna. This stops the bamboos touching or breaking against the ground while getting the pole into the upright position. The pusher has been designed to fit into the top of sections of the two-inch diameter mast. This allows the pusher to grow as the mast ascends. The two-inch diameter mast will be erected to hold the other end of the Windom so will not be in use until after the first mast is completed. Once at full height the analyser was again connected and all was found to be well.



A short break later and we began to dismantle the mast and then the antenna. The wire elements and bamboos were marked to indicate where they attach to each other. All the points where components join were marked to aid quick construction. A note was also made of various instructions that will ensure easy and correct assembly. We learnt many things that will be useful. Firstly, we need to attach a string to the wooden base plate for the "arm-strong" rotator, preferably before the mast is at full height! We need to fit the pulley and position it so that we have the fixing point for the Windom ready, preferably opposite a guy rope for added strength. It will take more than just Bill, Ron and myself to erect the antenna on the first day of the DXpedition!

This homemade antenna promises to be an interesting device and thanks are due to Albert G3ZHE, Bill G0PZP and possibly others for their contributions to the completed antenna.

Chris G7GZB

Albert calls this "Buyer Beware" or alternatively "Beat the Postman"

L ast October (2004) I went to the QRP rally at Rochdale. Just inside the front door was a man selling test gear. I told him I was looking for a good RF signal generator with calibrated micro volts for receiver testing etc. He pointed at two in the front of his display and said they would cost £65 each, but as he had no mains leads or power at that location he could not test them. As we left I bought one and it needed Steve (a Foundation tutor) and me to carry it to John's car!

At home I plugged it in and it didn't work. The signal generator was of French make but the calibration labels on it suggested the company had been taken over by Marconi. On the web I drew a blank. The only reference I found was several dealers selling this model for £1800. No one could supply any details etc.

I e-mailed George Dobbs and he sent me the dealers phone number and said he was a last minute booker. I phoned him in Sussex. He was very surprised but said he had mentioned that it might need attention (but I didn't hear it) but he had some information and would copy it for me. That was the last I heard.

So this White Elephant stood in my shack grinning at me. At last I could take it no longer so took it to the local tip. As I placed it with other bits of electronic waste I paused and had a grin and wondered if it would turn up in someone's shack. On Monday 31st January Maurice announced that he had a great signal generator made by Marconi. I made a guess and on our 2 metre morning net said that it was made in France but Marconi took them over. Maurice came back with "How did you know that, I haven't told you about it yet?"

On Tuesday morning 1st February Maurice came on 2 metres with the comment that the local tip had a far faster service than the Post Office HI. Anyway Maurice was having a happy time pulling it apart for spare bits. I don't think I have had £65 worth of fun out of it yet. "Buyer Beware" 73 ...-.





WARC Club VHF nets

Main Net.Every Thursday 2000 - 2100 hrs local time on 2 metres FM.Most mornings.1000 - 1030 hrs or so on 2 metres FMMany evenings.1930 - 2030 hrs or so on 2 metres FM(The Coronation Street escape committee)

Nets normally start with a CQ on the calling channel (S20 145.500) and a move up or down to a nearby vacant channel. At busy times or if late switching on check 145.400 or scan the band listening for a familiar voice or call sign.

The Key to Success

(Part two of Tom's training in communications)

A fter a fairly basic, but rapid, familiarisation with the Compton Bassett regulations and layout, intensive classroom activity was the order of the day. Only after a brief introduction to the Morse alphabet and the numbers 0 up to 9 the serious business of teaching and learning Morse began. The instructor's method was to choose a certain group of letters and send them repeatedly for a short time and then select and send at random letters from his original group of five letters. At the beginning of the course the Morse code was left in view as a useful quick reference but fairly soon, as the lessons progressed, this helpful prompt was removed. The instructor's CW transmissions sometimes required verbal confirmation and on other occasions hand written hard copy- Speed at this juncture was at 5 w.p.m. (and remained so until the whole alphabet was completed). The next stage was to learn another set of letters and then after the testing procedure had been successfully negotiated, the original group and the second group would be added together and mixed up, then thoroughly tested.

This method of introducing a new group of letters, then learning and testing, then adding the group to all the other previously learned groups, continued until the alphabet was complete and all the recruits were competent at 5 w.p.m. The next stage was learning figures from 0 to 9. This seemed much easier after dealing with the 26 letters of the alphabet.

From then on there was a gradual increase in the speed of transmission and hopefully the reception of 5 character groups of random letters and figures. (sometimes mixed letters and figures) Gradually, short tracts of plain language were introduced, until over a period of time most recruits could manage to read a sizeable extract of plain language at 22 w.p.m. and blocks of 5 letter or figure characters could be read at 25 w.p.m.

Tests were held at regular intervals and the main weekly tests were used to make decisions on the progress [or lack of it] of the students in the class. Some recruits were removed from the course if there was a lack of progress, but some were given the opportunity to continue and were given extra tuition in a following class thus extending their training by a few weeks.

The final Morse tests at the end of the 18/20 week course were sent at slightly slower speeds — figures and letters at 20 w.p.m. and plain language at 18 w.p.m.



On completion of the course most of the group expected to be dispersed and be posted to R.A.F. outposts world wide. Instead, we were offered the opportunity to do a further 12 weeks specialist training in receiving various levels and standards of Morse at R.A.F. Wythal just south of Birmingham. Not every one in the

group chose this option. Some preferred to obtain a permanent posting either in the UK or abroad. Several others and myself opted for this new aspect of the course and hoped to emerge with a W.OP. (A) — Wireless Operator Class A qualification after the extra training.

We all found a tremendous difference between the two courses. Previously, the Morse received by the group during the 18/20 week session, was free from any electrical or radio interference. [A pure Morse tone in fact] But then, for the new course we were presented with new earphones and a rather large AR 88 receiver, which after a short introduction to the finer points of operation, we were allowed to familiarise ourselves with the skills of tuning in.

Being subjected to real live CW transmissions which included QRM, QRN, QSB and Morse which was quite often unbelievably inferior, initially caused many of us to ponder our decision to opt for this particular course. But the carefully dropped hints and comments by the various instructors that there was a possibility of a posting to the Far East, kept us all working. In fact there were a number of possible postings available i.e. UK stations, Germany, Hong Kong, Cyprus, and Habanya. [some where in the central Iraq desert]

By the end of 3 months every one had had enough of listening intently to, and recording as accurately as possible, foreign wireless traffic. Our next posting was the dominant issue on our minds, and it couldn't come soon enough. Eventually, we were informed that we would be flying out to Cyprus, after a short period of home leave and a few days at R.A.F. Gloucester, where we would be 'kitted out' with our K.D.'s [khaki drill kit] R.A.F. Gloucester proved to be a transit camp for a few days whilst all the relevant kit was issued and all the necessary paper work was completed. The medical examination seemed to be routine as all the required injections had

been administered previously at R.A.F. Bridgenorth and at R.A.F. Cosford [where I was lucky enough to be selected, along with a few others to have a flight in a R.A.F. Anson aircraft.] The night before we left Gloucester it was unanimously decided to have a "night out" on the town. Retrospectively, it wasn't a good idea. Consequently, the early start that had been planned for the following morning was less than welcome. By 9 a.m. two canvas covered Bedford trucks were parked up ready to be boarded by a rather tired and subdued group accompanied by their kit bags and other assorted belongings. The first intended stop on our journey was R.A.F. Hendon, and after several hours of sitting on long wooden seats, which extended down each side of the truck, we were glad to alight from the vehicle in order to exercise and try some light refreshments in the NAAFI. [The previous nights' activities meant that most of the group declined the offer of food.] Then, when all the administrative processes were complete, we were despatched to Southend Airport ready for transportation to Cyprus, with a refueling stop at Malta. The aircraft used was a DC. 4. which landed just before dawn at Luga Airport, Malta. Next stop Nicosia, Cyprus.

73,s Tom G0MYN

Dry Run 2

The preparations for the DXpedition to Looe (St. George's) Island continue and are hotting up as the dates get nearer. Whilst the two Mikes, G4VSS and M0ACK, basked like seals in the driving rain in Cornwall to get to grips with the arrangements to get our motley crew and untidy cargo of antennas and gear to the IOTA location those who stayed at home again visited Saltersford Farm to check out the antenna erection. We were rewarded with sunshine which made the job much more pleasant although it wasn't hot enough to solidify the visiting cards left by the bovine former occupants of the field and large samples of their output were taken home in the treads of our trainers.

It was a useful exercise that highlighted how to break the VK2ABQ cane supported beam and (hopefully) how to raise it in one piece on one of the masts. The screw in line post base recently sold off cheaply at a cut price Supermarket proved to be very effective and I, for one, wish I'd gone shopping earlier and bought one.

When we eventually overcame some shortcomings in our equipment and hoisted the Carolina Windom 160 Jim was able to check the SWR on various bands, verify that an ATU will be essential, and make a /P contact or two. Proof of our luck with the weather can be seen in the photos.



Above Jim sets up his /P station







Above One end of the Carolina 160 Windom with the partially assembled VK2ABQ aloft



Below "Finding the bits!"

Photos by Jim G3NFB