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Welcome to the September 1988 issue of P5. The Group would like to apologise for the gap between this and the last issue. This is partly due to the other commitments of the Editor and committee members who produce the newsletter, and also to the lack of material from you, the members. Please send G8VPG or G4YQR any comments, letters, articles or ideas which you may have, and which may be of interest to other members.

CONTEST NEWS

The Group entered its first contest as a joint entry on 12/13th March. The Spring Vision contest was an international contest for both 70 and 23 cms. The site we used was at the Crown Inn at Tolldown, which is 203 m ASL. This site has been used previously by the North Bristol ARC. The NBARC kindly allowed us to use their caravan and some of their aerials and cables. The Bristol RSGB Group lent us further aerials, cables, poles and a rotator. Ken G4XCB lent us his 4 kVA diesel generator, which supplied sufficient power to run all our equipment and 2 kW of electric heating !.

Conditions were flat and there was not a great deal of activity. Never the less, as a test run for future events it was a valuable exercise. Needless to say, there were some quite dramatic moments, mostly concerned with the aerials. We used a 28 ele quad loop for 23 cm, a pair of co-phased 88 ele multibeams for 70 cm and a 9 ele Tonna for 2 m talkback. The whole assembly was mounted on a glass fibre pole. We experienced some difficulties in getting this lot aloft at first, principally because we could not get the tension on the guy lines correct because of limitations of space at the site. We have some dramatic video films of 50 mm scaffolding poles bending like bamboo canes !. Finally, we reduced the length of the poles and got the lot up some 12' lower than originally planned.

It all worked very well until about midnight, when 2 m talkback started to give some trouble. The linear amplifier became very hot and it was diagnosed that the feeder cable had pulled away from the junction box on the 2 m aerial. The night shift had to give up operating for the night, and at 8 am, the whole array was dropped down. The offending cable was reconnected and the aerials pulled back up again. Your editor must confess to some sloppy assembly work as the cause of this minor disaster. Doubtless all present will check his work at the next event !!!

Apart from this, the remaining equipment all worked very well. Ken G4BVK's 70 cm TX was running the legal limit very comfortably, and a hastily constructed PA enabled us to run about 10 W on 23 cm.

The results have just been published and we did quite well. We were 4th out of 13 on 70 cm, with 2703 points from 26 QSO's, best DX being 247 km. On 23 cm, we were 4th out of 8, with 356 points from 10 QSO's, best DX being 58 km.

On June 11/12th, we entered the Summer Fun contest from a new, better location on the Mendip Hills. We had a large field to ourselves, near to a farm and also an even better pub. The roast beef for Sunday lunch was really quite superb.

We used the same aerials as in March, but this time succeeded in getting them up to the height we wanted at the Crown Inn site. With more space, the guy lines were much easier to set out, and Ivor's new hinge base made erection much easier. However, we underestimated the weight of the combined assembly and our first attempt at raising it all went badly wrong. One of the scaffold pole joining sleeves snapped in two and the whole lot crashed to the ground. Luckily nothing was badly damaged, but by this time it was 5 pm, cold, windy and starting to rain and we were somewhat despondant. A cup of Viv's coffee cheered us up, and we repaired the damage and at last got the aerials up. We missed the first hour or so of the contest, but soon caught up.

Ken G4BVK's equipment was working well, with the 23 cm power output now up to 20 W. There was an enforced close down on 70 cm when the linear got a little hot and

the solder on one of the tuning discs melted and it fell off. However, despite the flat conditions, we did a lot better than in March. The advance results have just been published. On 70 cm, we came 5th out of 12, with 5514 points from 37 QSO's, best DX being 220 km. On 23 cm, we came 3rd out of 10 with 1293 points from 14 QSO's, best DX being 213 km.

The next contest is the big one, the International on 10/11th September. We will be at the same QTH on the Mendips, hopefully with a crank up tower for the aerials. This should make the task much quicker and easier. On 23 cm, we will be using a new pair of 48 ele quad loops, so we are hoping for even better results on this band.

All members are asked to lend a hand if possible. In particular, we would like all active ATVers on both bands to work us, since every point counts. Also, you might be a little circumspect about working the opposition, since giving them points may push us further down the positions list.

SUBSCRIPTION REMINDER

As most of you know, annual subscriptions were due from 1st April. The AGM did not increase these, so they still stand at only £5.00 per annum. Subscriptions form a significant part of our income and so it is very important that everyone renews promptly. If you wish the Group to carry on with its work for all ATVers in Bristol, please send your subscription to Bryan G4YQR, our new Membership Services Officer ASAP !!. We have been very fortunate so far because our income came in fast enough to fund the GB3ZZ construction programme. It is hoped that with your co-operation, our future plans will not be impeded due to lack of QRK !!.

SPECIAL OFFER FOR MEMBERS ONLY

At the BATC Convention this year, the Group launched a new product. This is a 70 cm ATV aerial. Following the pattern of our successful 23 cm aerial, this is a compact broad band device, particularly suitable for ATV use. However it will work well on narrow band modes. It is 900 mm long, has 7 elements and produces a gain of about 8 dBd. An end mounting design, it comes complete with a mast clamp suitable for a mast of up to 55 mm o/d. The normal retail price is very good value at only £10.00 each, but for members only, the last 3 of the first batch will be sold for only £8.00 each. First come, first served !!.

Following the sell out success at the BATC Convention, we are now once more in stock of our ever popular 23 cm broad band ATV aerials. Staggering to think, but we have now sold well over 100 of these little gems ! G8VPG and G4YQR both hold stock, at £14.00 each retail, or £10.00 to members. Postage is £0.25 extra.

Incidentally, our members discounts are intended as a "perk" of membership, and are for products bought for members own personal use. If you are buying for a non-member, he should be charged the full retail price.

NEW COMMITTEE ELECTED AT AGM

At our AGM in March, the membership agreed on the new title for the Group, Severnside Television Group (STG). A number of very good suggestions were made for alternatives, but in the end we settled for STG.

The AGM also elected the following as officers and committee for 1988/89 ;

Chairman - Roger Worth G4ZQF.

Chief Engineer & Vice Chairman - Ted Halliday G3JMY.

Honorary Secretary - Shaun O'Sullivan G8VPG.

Honorary Treasurer - Richard Williams G4NYK.

Committee Members ;

Bryan Collins G4YQR - Membership Services Officer.

Ivor Green G1IXF - GB3ZZ Site Engineer.
Ken Stevens G4BVK - Phil Smith G1HIA - Brian Kelly GW6BWX.

Since our coverage area extends well into South Wales, we are very pleased to see our first GW member of the committee. This of course, was the major reason behind our change of name to STG.

Otherwise, the AGM was a very pleasant evening for everyone who came. As always, the bulk of the evening was spent over one of our buffet spreads, with plenty of food and drink. GB3ZZ was on display and many members made the ascent to the loft to see it in action. It was having one of its fractious days, and the outgoing Chief Engineer was attempting a few tweaks to bring it back into line, so members were able to see right into the inside of the RX and logic module.

SOCIAL EVENING

Our next social evening will be held at the repeater site, Elm Park Parish Pavillion Hall, on Tuesday 6th September. The fun starts at about 7.30 pm. This event will follow the pattern of our previous socials, with all members and their partners invited to attend. Please bring a bottle or a few cans of beer. The committee will provide a light buffet and a prize raffle. There is no entrance charge, but I doubt if Bryan G4YQR will allow anyone to leave without buying a few raffle tickets !!

BRISTOL RALLY, 18th SEPTEMBER 1988.

The South Bristol ARC have kindly donated us some space at the Bristol Rally, which is being held in Brunels Train Shed at Temple Meads. The Group would like to put on a display of GB3ZZ, live if possible, and of course we will be selling our usual aerial products. Since this is a very local rally, it is hoped that we might collect some additional subscriptions.

Please come along to our stand and see us, and if you are able, lend us a hand to set up the stand.

Chairmans Notes P5

Well another P5 is now with you and as you will see from elsewhere in the newsletter a social evening is organised for Tues the 6th of September. Whereas the Committee and myself all hope you will all be at Elm Park on that Evening, we do realise that it may not be the best evening of the week for you to attend nor the best venue for you to get to. So we would invite comments from you all as to "How Where and When etc the Socials should be held. If you pass these comments on to any committee member we will discuss your views at the next committee meeting.

Congratulations are in order to our contest team they achieved a very creditable performance coming 3rd in the 23/24cms section and 4th in the 70 cms section. Of the last TV contest organised by the BATC. However, what is a little sad is that only 6 or 7 members of our 50 strong membership bothered to 'GIVE' points to our team. If everybody had bothered to switch on and work our team even if it is only on one band. The Severnside TV Group could well become the TOP UK team. It only takes about 5 minutes to do your bit. Even if like me, you are not a contesteer I still feel it is a very necessary part of belonging to a Group. So be ready for the next one: 1800 GMT Saturday Sept 10th to 1200 GMT Sunday 11th September.

Our contest group will be out there monitoring 144.750 which during contest is only used as a calling channel of course.

If you are making out cheques to the TV Group please make them payable to "SEVERNSIDE TV GROUP" the account has now been changed at the bank.

Well thats all for now see you all at the social. CHEERS and 73's Roger G4ZQF

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23cm RECEIVE VIA ASTEC TVRO MODULES

A system for receiving 23cm amateur TV transmissions is described in CQ-TV No. 135. It employs the ASTEC AT-1020 tuner unit and the ASTEC AT-3010 IF/demodulator unit with supporting circuitry on a printed circuit board offered by BATC.

Being an avid populator of PC boards I made up a receiver a long time ago but could not find the moral fibre to lash out on the ASTEC modules. Enter young Cliff, GØFDD, who decided that the ASTEC route was the one for him if we could get hold of the modules at a reasonable price. We almost did, too, only we could not honestly envisage a use for five receivers each! To cut a long and painful story short we ended up with a set of modules each and proceeded to do the necessary with fingers firmly crossed - quite difficult,. actually.

There was no real difficulty in assembling the PC boards and, as usual, the really hard graft was in doing the hardware side and wiring up the controls. If one read the instructions about 40 times one was liable to end up with a properly assembled project. A typical BATC touch was the provision on the board for a decoupling capacitor without a parts list number. Another one was an error on Cliff's layout sheet which showed a wrong connection to VR2 (the volume control).

The main DC voltages required by the receiver are +12 and +18. There is an onboard +5V regulator but we decided to add another to drive an RF modulator plus anything else we might subsequently think of (e.g. in my case, a LED indicating DC on). We did not follow the DATC design for a power supply because we had no suitable transformers. Our transformers are 20V output (100 VA) with conventional rectification and smoothing. Regulation is by +18V, +12V and +5V regulators (1 amp 78XX series), cascaded in the obvious order and with the capacity of the two higher voltages enhanced by 3055 pass transistors. I must admit that I viewed this arrangement with some trepidation but it worked off load and since we have been "soak testing" the completed receivers we have noticed no problems with the power supplies.

The tuning arrangement we have employed is alternative (d) on Page 15 of CQ-TV No. 135. The tuning potentiometer is the usual 10-turn item controlled by one of the R.S. 10 turn indicating controls.

The first practical off-air test was accomplished using my "group" yagi which is temporarily mounted on a 20 foot scaffold pole (non-rotatable) and I was surprised to see a locked and fully readable (albeit noisy) test card from BG3ZZ. This from a relatively insensitive tuner designed to be preceded by an efficient low-noise block for satellite use. Connecting the station JVL loop yagi with Cantech preamp at masthead brought a virtual P5 with colour (via an ASTEC 1233 RF modulator into an old 20 inch ex-rental TV). Initial tests on the FDD model in Chepstow were equally promising and gave rise to speculation on what results would be obtained in Lydney at an arguably better take-off site. (We knew it could see GB3ZZ on a 70cm yagi!). In practice, using a borrowed "group" aerial temporarily supported inside the shack, a very successful QSO was enjoyed via GB3ZZ with G4BVK (bless him!).

We need much more experience of a variety of signals in order to evaluate these receivers properly but our view so far is that they are a very viable proposition with, possibly, their insensitivity rather overstated from the point of view of anyone with a nicely sited QTH. and a reasonable aerial system. Doubtless snags will appear, like my current ability to produce irritating sound on vision if I "optimise" the intercarrier sound. I have no information on the reason for this but, anyway, an interesting thought is the possibility of building a separate tunable sound board for 23cm.

Should anyone be considering following the ASTEC route - a word of warning. Cliff was told that manufacture of these modules has ceased so I suppose that sooner or later the BATC board will cease to be available. If a pair of modules could be obtained quite cheaply though (e.g. via Radcom or CQTV members' ads), this system could be an economic way of achieving 23cm RX facilities without the need for a second mortgage.

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