

P5

*Newsletter of the Severnside Television Group
Edited by Shaun O'Sullivan G8VPG.*

P5 Chairmans Notes G4ZQF

It is with some regret that I probably write my last chairmans note for P5. I have as chairman not always contributed to the groups newsletter, I am not sure that you good people even read what I write but on this occasion I hope you all do. for one of the advantages of writing under the grand title of Chairmans Notes is that it doesn't get to chopped about by the editor. Before I get on to my departure from the committee I would like to say a few words on the Group.

When Shaun G8VPG and myself said lets build a TV repeater little did we know what we were letting ourselves in for, that was nearly 4 years ago. It was once we got into the project and all the ramifications of site approvals , planning permission, repeater application, repeater specification and the actual building of the repeater that it hit us how big the project was. we realised that we needed help, (fancy even thinking we could do it on our own). So we called an inaugural meeting of the Bristol FM TV Group, (now the Severnside TV Group) . As I write this, February 3rd , it is just 3 years ago to the month since the group was formed I have been privileged to have been chairman for all of the groups life to date. I think in that time we have come a long way . We achieved a record time from licence application to being on the air. A time yet to be beaten for a TV repeater licence application, and we now have a full working system on air, which covers a far greater area than we originally conceived, hence our name change.

To all those that made all that has happened possible I say a very BIG thank you . It is a project that I have really enjoyed being involved with. There are a lot of people that I would like to name but to avoid the risk of offending somebody by omitting them I wont produce a list of individuals. However, I feel that I can mention Shauns name as co founder of the concept and say thanks to Shaun for putting up with me especially in those early days.

The reason that I have said it is my last chairmans note, is that I have indicated to the present committee that I do not wish to stand for election at the AGM in April. My reasons are twofold ,one I feel that the group needs a new chairperson and two the role of that person has now changed, as I said earlier the repeater is built and on air and that was a challenge that I enjoyed . However, now the chairpersons job is one of coordinating all the different facets of the group which includes the new interest in satellite TV , contest and in the future I suspect 10 GHz gateways with inter linking with other repeaters. So there is still a lot to happen in the TV world and the future seems very exciting I shall still hopefully remain part of the group but maybe with a bit more time to actually get on air.

Once again thanks to all that made GB3ZZ possible .

CHEERS and 73's Roger G4ZQF

THE "CONNEXIONS" SATELLITE RECEIVER

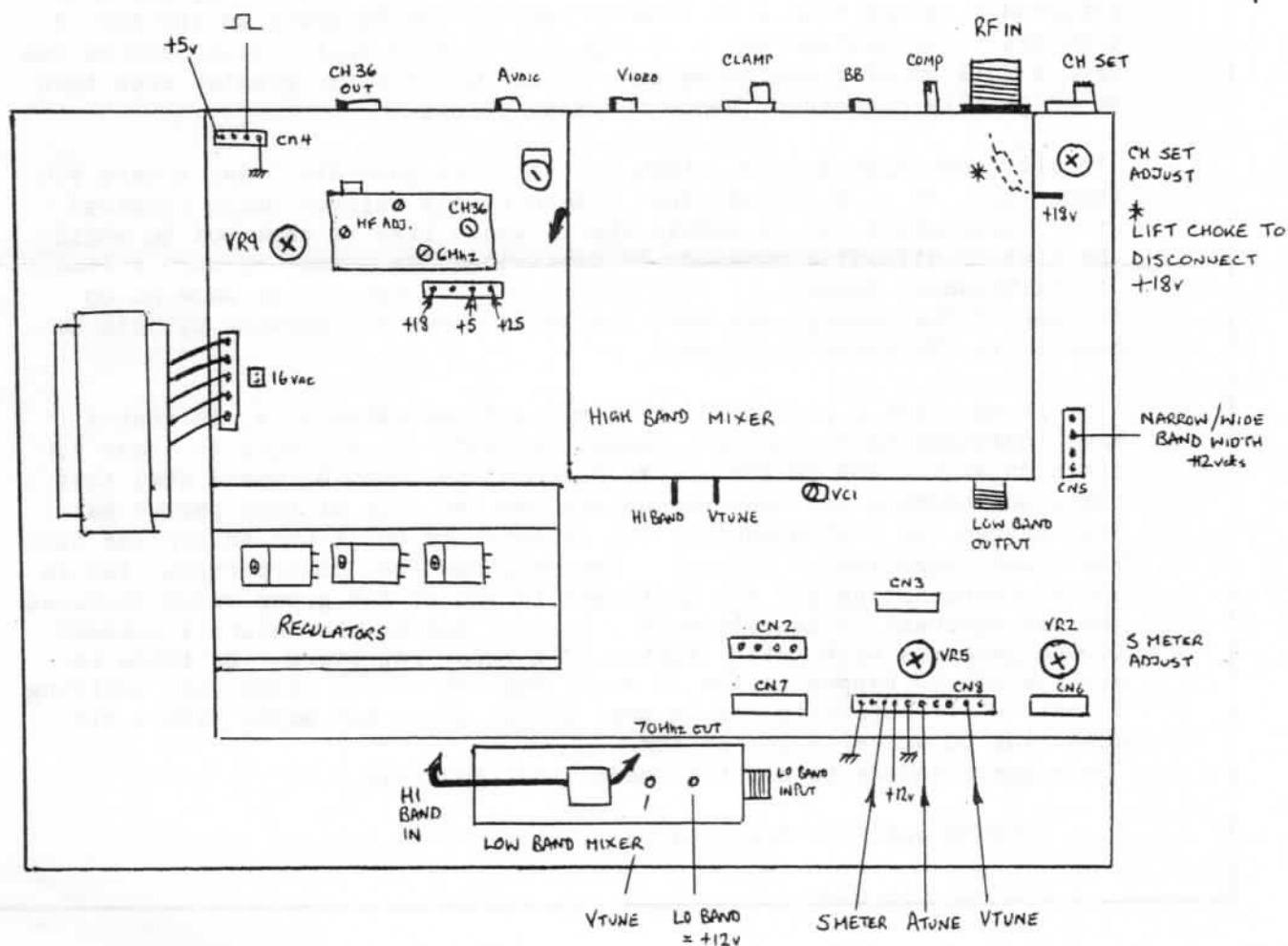
by
Steve Walsh G8KUV.

The receivers recently sold by the group come in two types. The Digital version and the Analogue version, both use the same RF section but the tuning voltages for the Digital version are generated by A/D convertors driven from digital memory.

It is very easy to obtain the parts required to use the receiver for it's intended purpose, receiving satellite transmissions from geostationary orbiting satellites, and a complete system may be put together for around £150. This is what I have done recently and I currently receive transmissions from the EUTELSAT "bird" and eagerly await the ASTRA transmissions in February. However the main reason for supplying the receivers to club members was to enable them to see GB3ZZ. This is very easy to because the receiver tunes 950-1700 Mhz and GB3ZZ's output is 1318 Mhz, check first that your receiver has had the LNB +18 volt feed disconnected or this will be shorted out as soon as you connect the club antenna to the RF input socket (see the diagram for location of the modification). Incidentally the LNB is the pre-amp, oscillator, mixer that sits at the focal point of the dish when used as a satellite receiver, it mixes the 1950-11700 Mhz from the satellite with 10 Ghz local oscillator to give the 950-1700 Mhz to the receiver.

The receiver is ideal for watching GB3ZZ because it is a wideband FM RX that covers the 24cm band and has a video output. It may be necessary to add a 24cm pre-amp between the antenna and the RF input if you live more than a few miles from GB3ZZ but many users get a PS in good colour with the basic set-up.

I have included a diagram of the main components inside the RX for those of you who want to modify or adjust the operation of the unit. I have added extra "mods" to my digital version to make tuning in simpler and these are also detailed.



SALES : Sales income is now the groups major fund raising item. The following items are now available, and will be on sale at all our stands at rallies this year.

AERIALS - Our famous 18 element wide band 23 cm aerial is now available from stock. With over 150 of these now in existence, it is better value than ever at only £14.00 each, or only £10.00 to Group members. Buy yours now, since we always sell out at the BATC Convention.

SATELLITE RECEIVERS - The Connexions Satellite Receivers have proven to be enormously popular. These used units are equally suitable for 23 cm reception of GB3ZZ or for satellite use - ASTRA compatible !! A separate data sheet is available from the Editor about these. Please send an SAE if you would like a copy.

23 cm GaAsFET PRE-AMPS : This is a new line. G4BVK has developed a very effective 23 cm GaAsFET pre-amp, which has high sensitivity and a low noise figure right across the band. The unit is supplied ready assembled in a die cast box with N connectors, suitable for a 12 V dc supply. The unit does not include change over circuitry. Ken is producing these in small batches on a commercial basis, and they are available exclusively through the Group. The cost is a modest £48.00 each.

LONGLEAT RALLY - The Longleat rally will take place on Sunday 25th June 1989. Since there is no Bristol rally this year, this is our sole opportunity to promote the Group to a local audience. We have booked a space at the rally, and have also offered to run a BATC stand adjacent to ours.

However, several of our usual stalwart organisers of these events are unavoidably other wise occupied on that day. Hence help is needed from the members if we are to meet our commitments. This is an occasion for the members and not just the committee to take a leading role - please don't let us down.

COLOUR TV/MONITORS - A colour TV with video/audio inputs/outputs is a very useful addition to any ATV shack. However, one snag is that these features tend to be available only on the high priced top of the range models. You may not think of Boots the Chemists as a place to buy a TV, but the larger branches do sell a large range of TV, video and audio equipment. Two of the Boots own brand TV's have video/audio inputs/outputs. One is a 14" colour portable costing about £140, and the other is 5" colour portable costing £199.

Your Editor has bought one of the 5" variety, and it is a super little set. It appears to be a clone of the popular but more expensive JVC set. It lacks band I/III and SECAM colour, but it does have a MW/FM radio, a 2 year warranty and works from a mains or 12 V dc power source.

GB3ZZ - As regular viewers will know, GB3ZZ is working very well now. The last round of modifications and developments carried out last autumn seem to have exorcised most of the gremlins out of it. An increasing number of discerning ATVers are coming to appreciate the quality of 23 cm FM TV, and activity continues to grow at a satisfactory rate.

The next big change will be when the new logic is fitted. This should be happening in the very near future. Committee members Steve G8KUW and Brian GW6BW have put an enormous amount of time and effort into this project, and the near finished logic which I saw a few weeks back is a most impressive sight. It is based around a BBC computer main board, with switch mode PSU, and add on boards for test card generator, colouriser, sync detector and video switch, and DTMF encoder/decoder. The DTMF control facility will give viewers the ability to exercise a choice of special functions. These will be accessed by a simple DTMF coder which will send a signal on the incoming sound channel. Needless to say, the Group will be marketing an approved kit for this essential item, and we hope to achieve a target price of about £15.00. A telephone type key pad will then give you direct access to a state of the art logic, which must be one of the best of its type in the UK.

GROUP VIDEO FILM - Mrs. Jean Fletcher GOAWX is co-ordinating the production of a Group video film. This will chart the history and development of the Group from its start in 1986, featuring GB3ZZ through its various stages, our contest activities, BATC Convention, fancy dress on the air events and our ever popular social evenings. The films premiere will be at the April meeting of the Bristol RSGB Group, and we hope to have it on continuous display on our stand at the BATC Convention.

Tuning meter mods (Digital RX only)

The tuning from 950-1700 Mhz is done in two bands and it is useful to know which band you are in when looking for a station, this is done simply by adding an L.E.D. fed from the "Hi band" input to the High band convertor box via a 1Kohm resistor.

The 50 uA "S" meter's +ve lead can be taken to a SPDT push button's common output whose NC input goes to the original "S" meter feed and the NO input can now be fed from the 0-24 Volt VTUNE terminal via a 200 Kohm preset potentiometer. The preset can be adjusted for an FSD reading at 24 Volts. In this way a crude frequency readout can be obtained. This is equally useful when satellite hunting or when searching the 24cm band.

Audio tune preset.

An unfortunate feature of the digital version is it's habit of forgetting where the audio section was tuned to before power was removed. This requires the user to tune the audio in every time the RX is used. This is because the digital section remembers the band selected and vision tuning D/A value but has no room for the audio tuning D/A value. The chip-set used was originally designed for domestic TV receivers and the audio tune D/A value is the VOLUME output in the original design and therefore pre-sets to around 2.5 volts on switch on, however the voltage that tunes the audio sub-carrier section to 6Mhz to hear GB3ZZ's inter-carrier sound is around 5.5 volts. This annoying feature can be "cured" by snipping the blue ATUNE wire and taking it to the wiper of a 10 Kohm pot. across the +12v rail. Tune the pot for best audio and you will find that the audio PLL range will cope with inter-carrier signals between 6Mhz for GB3ZZ and 6.65Mhz for most satellites.

NEWS FROM THE EDITOR.

There seems to be many items of interest to Group members this time, so I will waste no time or space and launch straight into the news.

CONTESTS : The next contest which the Group will enter is the Joint European Spring Vision, which will be held on 11-12th March 1989. We hope to be at our usual site on top of the Mendip Hills, complete with the 60 foot crank up tower for the aerials. Five members of the Group have clubbed together with their own money to buy a new 70 cm aerial system. This will comprise of four 21 ele ATV special Tonna beams, stacked and bayed with a power splitter. It is hoped that we may have a higher power PA available for 70 cm. However, even if this is not possible, the new aerials should produce a significant improvement in our performance.

Do have a look at page 25 of CQ-TV 145, where you will see us listed as the leading UK station for the 1988 International Contest on 23 cm. Please help us to keep our lead by working us on 11-12th March. Every contact and every point counts.

BATC CONVENTION : The 1989 BATC Convention will take place on Sunday 30th April. This year it is at a new venue in Coventry, which is slightly nearer to Bristol. Full details are contained in CQ-TV 145. As in the past two years, the Group will have a stand and we would appreciate some help in manning this during the day. This event is one of our major fund raising occasions of the year, and so it is really important to put on a good show and sell plenty of aerials etc.

The BATC are also appealing for some help during the day. If you have some spare time, it would be nice if STG were seen to be helping our national organisation on their big day of the year.

VHF CONVENTION : The RSGB National VHF Convention will take place on Sunday 16th April 1989, at its usual venue of Sandown Park Race Course, near Esher. This event is always worth a visit, with many items to interest the VHF/UHF/ATV enthusiast. We hope that we may be able to be represented on the day.

The Bristol RSGB Group usually run a coach trip to this event - further details from Shaun G8VPG.

ANNUAL GENERAL MEETING.

NOTICE - Formal notice is hereby given of the Annual General Meeting of the Severnside Television Group. This will take place on Tuesday 11th April 1989, commencing at 7.30 pm, at the Hall, Elm Park Parish Pavillion, Elm Park, Filton, Bristol.

NOMINATIONS - Nominations are now requested for the following posts ; Chairman, Chief Engineer & Vice Chairman, Honorary Secretary, Honorary Treasurer and Committee Members.

The constitution provides for up to five committee members in addition to the four officers posts. Only fully paid up members of the Group may be nominated, and each nomination must be proposed and seconded by two fully paid up members of the Group. A member cannot hold more than two posts.

Nominations must be deposited in writing with the Secretary (S.P.O'Sullivan G8VPG, 15,Witney Close, Saltford, Bristol BS18 3DX) not later than 28th March 1989. A printed nomination form is contained within this newsletter, but a seperate sheet of paper following a similar format is acceptable.

In the event of more than one nomination being received for an officers post, or six or more nominations for committee members being received, an election will be held at the AGM. Members will be elected to posts in the order given above.

RESOLUTIONS - Members wishing to propose resolutions at the AGM must submit them in writing to the Secretary on or before 28th March 1989. Each resolution must be proposed and nominated by two fully paid up members of the Group.

Members should note that whilst minor items for discussion will be dealt with at the AGM under "Any other business", major items or constitutional changes must be submitted as formal written resolutions.

SUBSCRIPTIONS - Members are reminded that their 1989/1990 subscription will become due after the AGM. The rate will be set at the AGM. Please renew promptly, since a regular cash flow is essential for the Groups continued development.

SOCIAL EVENING - After the formal AGM, which is usually quite short, we will hold another of our very popular social evenings. Guests are always very welcome, but of course only fully paid up members may speak or vote at the AGM. Please bring some liquid refreshment to the social, the committee will lay on the customary buffet.

RETIREMENTS - Several members have indicated that they will be retiring from the committee at the AGM. As you will have read elsewhere, our founding Chairman Roger Worth G4ZQF is giving up the chain of office. Without a doubt, Roger has been one of the driving forces behind the Groups success, and we all owe him a considerable debt. In particular, it was Roger who found us the site for GB3ZZ and who developed our very successful 23 cm aerial.

Our Treasurer Richard Williams G4NYK is relinquishing control of the cheque book. Richard has presided over a period of healthy financial consolidation of the Group, and has cheerfully borne up to the many demands of the engineering team, who always have several new items to spend money on.

Finally, Bryan Collins is going to put his feet up for a while, and spend some time playing with his new HF rig !! Bryan joined the committee as joint Secretary and Treasurer in the pioneer days, and has latterly been our Membership Services Officer. As you will all know, Bryan is a talented fund raiser and has extracted many a fiver from reluctant members.

The full list of the current committee is as follows ;

Chairman	Roger Worth G4ZQF.
Chief Engineer	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).
Brian Kelly GW6BWX.
Phil Smith G1HIA.
Steve Walsh G8KUW.

SEVERNSIDE TELEVISION GROUP.
NOMINATION FORM.

We wish to nominate (name) (call)

for the post of : Chairman.
Chief Engineer & Vice-Chairman.
Honorary Secretary.
Honorary Treasurer.
Committee Member.

Proposer (name) (call)

..... (signed).

Secunder (name) (call)

..... (signed).

I agree to this nomination and will serve as indicated if elected.

..... (nominees signature).

VIDEO ON THE RIGHT LINES
by
Pat Janes GW1SXU.

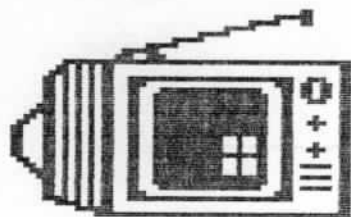
The American model train firm, LIONEL, is now advertising an on-board video camera which gives a drivers eye view of the trackage ahead. The video signal is sent back via the rails to be viewed on a domestic TV set. Doubtless there is some sort of interface between layout and television set.

As far as can be judged from the advertisement, the camera is installed in the engine in the form of two or more interconnected PCB's. Although traditional Lionel trains are to a rather larger scale, they do claim that the kit can work with HO scale models (slightly smaller a scale than British OO).

At this stage the video signal is confined to monochrome but who would be brave enough to aver that colour will not be forthcoming in due course.

While it is highly unlikely that many Group members will rush up to the spare room to start on a model railway layout, the introduction of modular video equipment into that hobby, at prices at which the gear will sell, must be of interest to ATV enthusiasts, I think. What intrigues me is how they have managed to cope with the inherently very noisy electrical environment of the model railway when sending video through the rails.

Most pertinent, perhaps, is the possibility of the eventual availability of robust camera equipment at relatively affordable prices, cheaper than the current new surveillance kit and vastly cheaper than the commercial prices of the sub-miniature cameras we have been shown from time to time.



Severnside

Television Group

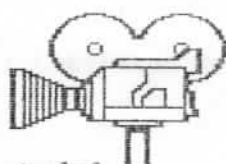
Affiliated To R.S.G.B.

GB3ZZ A.T.U. F.M. Repeater



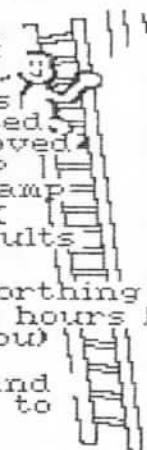
Fancy Dress

The fancy dress evening on the 1-1-89 was well attended with at least ten operators dressing up or undressing as some chose to do. Also a strong contingent of drag artists was present, is that what ATU does for you??? look out.



Engineers News

The antenna modifications that G3JMY Ted constructed is working well with improved overall coverage. With help on the receive with a pre-amp designed & built by G4BUK Ken who also cured the faults with the W&D 1240 tvf pll which was replaced by a worthing transmitter built in a few hours by G8KUN Steve (what kept you) our thanks to you all for keeping the repeater up and running without the need to distrust transmission.



CONTEST NEWS

CONGRATULATIONS

Yes we have finally made the headlines with winning the 1988 U.K. International 24cms contest We hope that this can continue with the recent acquisition of 4 70cms yagi's by certain members in the hope of obtaining more contest points on 70cms which has always been the weak link in the past.

GOOD LUCK G7ATV/P



SHOCK WAVES

ELECTRICITY IS DANGEROUS BE CAREFULL

FOR SALE

24cms PREAMP



These Preamps Are Designed By G4BUK And Built And Tested By Him These Low Noise Gas Fet Preamps Will be An Ideal Addition To The Satellite Receiver That Many Of You Have Purchased The Price Is Very Reasonable At 48 Pounds And Reflects A Small Advertising Fee To The Severnside T.V. Group.