

THE

# SARC

MAGAZINE

Issue 6 - March 1985

## From your Chairman

Best wishes to you all for 1985. As I write these words in sub-zero temperatures, I long for a repeat of last Summer's heatwave - ideal for Field Days!

There have been several Committee meetings since the last newsletter. Remember, it is your club and the Committee exists to run it the way you want it. The last thing I want is for the Club to be run on a secretive basis. Recent items discussed have been the refurbishing of the Twyford House aerial systems, the purchase of an ATU (Barry G3HKA has very kindly offered to look into the possibility of making one) and the installation of the transverter (70 ca - Ed) into its own cabinet with psu.

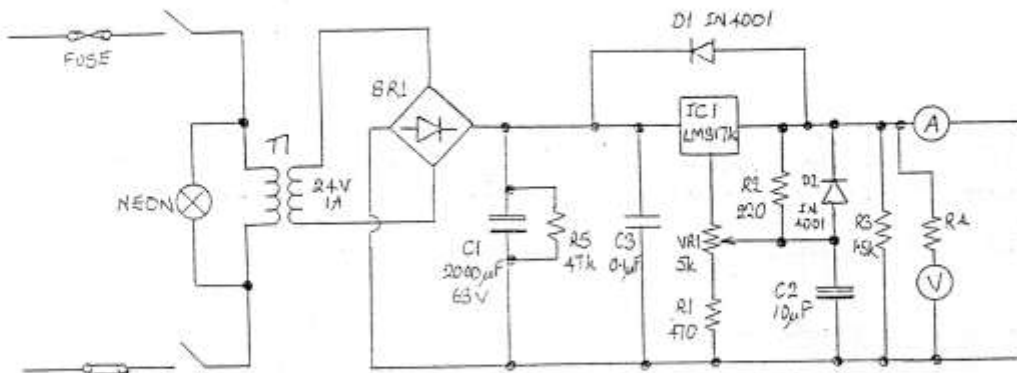
Our winter programme of events has taken place successfully and the Committee is organising a continuation into the Spring, using our now traditional system of talks etc. on alternate Fridays. Midweek evening visits are also being contemplated. Mention must of course be made of yet another highly enjoyable Beer & Skittles Evening - our thanks to Bob G4BWB for his superb arrangements.

Keep your fingers crossed for warmer weather. Personally, I haven't seen any snow for three years (having been away in warmer climes for a while) and I'm not impressed!

Dave, G4DPJ

SHIREHAMPTON AMATEUR RADIO CLUB  
Twyford House, Lower High Street, Shirehampton, Bristol.

## A low-power, variable-voltage psu



The circuit shown will give an output variable between 4 and 30 volts at up to one amp. It is therefore very useful for the experimenter who is tired of looking for a spare PP3 battery etc to power up the latest creation on veroboard. The regulator chip is said to be short-circuit proof and is protected against thermal runaway, so the circuit under test should go up in smoke before the power supply.

Construction is not critical. The whole psu should be in a metal box which is connected to the earth of the mains input. The negative outlet of the psu is not connected to the chassis, but could be if required. The LM317K is in a TO3 style package and the case can be used as a heatsink, with a suitable insulating washer. It is rated at 1.5A so should rarely become warm. Its maximum input is 40V dc, the above circuit produces 36V at C1.

### Notes on components:

T1 can be a 12-0-12V transformer wired to give 24V.  
 BR1 can be a suitably rated bridge or four separate diodes.  
 C1 must be a good quality electrolytic; the writer used two at 1000uF each. A useful guide for reservoir capacitors is said to be 2000uF per amp.  
 C3 is to prevent instability within the IC and should be mounted directly on it.  
 D1/D2 protect the IC in case of short-circuit conditions at its input or output.  
 R3 should be 2W rating or more and is there to provide a load for the IC if the psu is switched on with no external load.  
 R4 is a suitable value for the meter. The voltmeter and ammeter are optional extras; without them the psu could be built for less than £12 (if it is not, no claims for compensation will be entertained).  
 If T1 is rated at 12V ac and R1 is omitted, then the output will be in the region of 3-7 volts.

Dave, G4DPJ

SHIREHAMPTON AMATEUR RADIO CLUB  
 Twyford House, Lower High Street, Shirehampton, Bristol.

SHIREHAMPTON AMATEUR RADIO CLUB - Membership 1985

|       |                   |      |     |
|-------|-------------------|------|-----|
| G1DBF | John              | BS20 | 074 |
| G1HMQ | Jean              | BS13 | 065 |
| G1HQV | Ted               | BS11 | 073 |
| G11FJ | Ron               | BS8  | 075 |
| G3HKA | Garry (Committee) | BS13 | 062 |
| G3YHV | Colin             | BS9  | 015 |
| G4AYB | Addy              | BS11 | 067 |
| G4BWB | Bob               | BS9  | 031 |
| G4BWE | Steve             | BS15 | 001 |
| G4DPJ | Dave (Chairman)   | BS9  | 004 |
| G4DVV | John              | BS12 | 002 |
| G4EDP | Andrew            | BS10 | 018 |
| G4FRD | Garry             | BS9  | 036 |
| G4GAR | John (Treasurer)  | BS9  | 013 |
| G4GTD | Ron (Secretary)   | BS4  | 016 |
| G4KKU | Andy              | BS11 | 027 |
| G4KXD | Maurice           | BS12 | 044 |
| G4LSX | Gary              | BS19 | 005 |
| G4NAQ | Clive             | BS11 | 011 |
| G4NFS | Norman            | BS20 | 077 |
| G4DDW | Pete              | BS17 | 003 |
| G4RKY | Matthew           | BS13 | 043 |
| G4TDD | Don (Committee)   | BS9  | 054 |
| G4VWM | Chris             | BS9  | 076 |
| G4WBV | Roger (Committee) | BS9  | 021 |
| G4WGW | George            | BS9  | 066 |
| G4YTH | Terry             | BS4  | 060 |
| G6ESD | Harry             | BS20 | 024 |
| G8YJM | Nick              | BS4  | 009 |
| G8ZDE | Steve (Committee) | BS9  | 014 |

That's all at February. Congratulations to Jean on her passing the Morse test and hope the G0 arrives soon.

SHIREHAMPTON AMATEUR RADIO CLUB  
Twyford House, Lower High Street, Shirehampton, Bristol.

### Club Ideas

It has been suggested that Club members use the newsletter to advertise to a wider audience any test equipment that they are willing to lend out. Obviously those with brand new spectrum analysers in their shacks might be a bit reluctant, but amongst the members there is probably a wealth of bits and pieces that others might find useful.

For starters Garry, G3HKA has a cross-hatch generator and Dave, G4DPJ has a dc "dummy load" for checking currents trips up to 25A on 13V power supplies.

### Club "Request"

The Club has purchased RadCom binders for the magazines: anyone who has borrowed any RadComs is asked to return them as soon as possible. We can then keep a complete year's issues neatly together for future reference.

Dave, G4DPJ

### Club Apology

Some of you may have wondered where the Club magazine has been these last few weeks, well alright, months. I have to confess that the manuscript articles lovingly prepared by their authors have been languishing on my desk. Finally, I have found some time to type them up and many apologies to all if some thing are not quite topical. It will not happen again ... (I hope). So new authors, that is YOU, do not despair - articles still welcome for the next issue.

Watch this space.

Garry, G4FR0

### Club Happenings

- 10 May RF connectors & cable  
Talk by Steve, G8ZOE
- 24 May Rig check evening  
Steve, G8ZOE
- 1-2 June HF NFD
- 15 June Exhibition Station  
at Blaise Castle
- 30 June Longleat Mobile Rally
- 6-7 July VHF NFD

\*\*\*\*\*



SHIREHAMPTON AMATEUR RADIO CLUB  
Twyford House, Lower High Street, Shirehampton, Bristol.