

**GLOUCESTERSHIRE REPEATER GROUP NEWSLETTER**GB3GH GB3CG GB3CCX GB7FD GB7GC GB7GH GB7RR  
GB7GLO GB7LGS

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**CHAIRMAN'S REMARKS**

One of the tasks of being a Chairman of any organisation is to encourage Committee and other Members to come up with innovative ideas and methods to encourage more people to join and support that organisation. This support needs to be in many ways. In the case of Gloucestershire Repeater Group we need Members that not only use the systems but also that understand the practical and technical challenges that operating a voice and data network presents. But that is not all. We also need those who are prepared and able to convert that understanding into a physical contribution. By that I mean those who are happy and enthusiastic to switch on their soldering iron, to get their spanners out, and to exercise their fingers on a key-board in pursuit of maintaining and developing the various systems we have around the county. Please contact Steve G4FPV if you would like to help. Coupled to these activities we require the financial means to fund the maintenance and development programme. This need is satisfied in part by Members annual subscriptions. Further funding comes from sales of donated surplus equipment at local rallies and occasional direct financial donations from local organisations and individuals.

In pursuit of maximising our income and thus being able to provide a better service to all concerned, the idea was floated some twelve months ago that we should see if any grants were available to assist the Group. We found that a number of options were available. However, we also found out that to qualify for certain assistance we needed to be a Registered Charity. Consequently advice was sought from the Charity Commission as to how we could pursue this possible option. After nearly a years negotiation the Committee are pleased to report that a new financial management arm has been formed for the Group. It is known as AThe Friends Of Gloucestershire Repeater Group≡, and is in the final stages of charitable registration. Further details can be found in the next section of this *Newsletter*.

**FRIENDS OF GLOUCESTERSHIRE REPEATER GROUP (FGRG)**

FGRG has been set up as a registered charity to manage the financial matters of Gloucestershire Repeater Group(GRG). It will be governed by the same Committee members as GRG and will have three Trustees. Initially these will be Nick G6AWT, Steve, G4FPV, and Stewart G0LGS. A new constitution has been written in co-operation with the Charity Commission and this will be put to all GRG members for adoption at the next Annual General Meeting. There are three main objectives of the registration. Firstly, it is hoped that members will renew their subscription to the group by means of donation via the Charities Aid Foundation (information on this will be circulated in due course). This will allow the group to claim an additional 20% tax refund on your donation. Secondly, the group will be able to apply for certain grant aid as a charity in its own right. Thirdly, we can now provide the loan of computer and related packet equipment to members and others who may not have the funds to purchase such equipment themselves through whatever circumstances. Again, further information on this scheme will be circulated in due course.

**Nicholas Negus G6AWT**  
*Chairman*

## **GB3CG 2M VOICE REPEATER**

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After over 9 months of operation GB3CG recently developed a fault such that the CW identification was not being sent. Despite resetting the logic system on several occasions the problem re-appeared within a few hours. A new programmable logic controller has been fitted which it is hoped will eliminate the problem, Users may notice a few minor differences in the way the system operates.

Following an exchange of correspondence between G.R.G and the Radiocommunications Agency, we have been advised that we should be permitted to change the Frequency of GB3CG to 145.725 / 145.125 MHz , it is hoped that we will get the official Notice of Variation (which is to be issued by the RSGB) so that the frequency can be changed before the end of the year.

## **GB7GH NODE**

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The link from GB7GH to GB7GC and GB7LGS has been upgraded with the addition of a further transmitter at GB7GH, this means that both links are now separate 1200 Baud full duplex circuits, this change should improve user access speeds at GB7GC. Further upgrading of these links to 9600 baud may be possible once other work has been completed and sufficient modem boards can be constructed.

Progress on the high-speed North & East bound link that will be provided by GB7RR has been slower than expected. (See the section on GB7RR for further information).

With the end of the summer months in sight, the problems seen in the past with the 23cm links between GB7GH, GB7FD and GB7GLO (G4FPV) suffering from dropouts during periods of Heavy Rain, Snow, Fog etc once have again re-appeared. The committee has looked at this problem in the past, but as we have been unable to obtain any suitable 23cm shrouded antennas at reasonable cost, there seems to be little that can be done to totally eliminate the problem.

Over the weekend of 19-20<sup>th</sup> September part of the GB7GH node (#GLOS:GB7GH-9) stopped functioning and was restarted on 3 separate occasions (each requiring a visit to the site).

At approx. 8.15pm on Monday 5<sup>th</sup> October a failure in the 11KV supply line that feeds a large part of Leckhampton and Ullenwood left the GB7GH node (and GB3GH) without power for several hours, our UPS managed to keep the GB7GH computer system running until approx. 9.30pm. Normal operation resumed when the power was restored at around 5.45am the following morning. (Further interruptions in the supply also occurred as the content of this newsletter was being finalised).

GB7WE (Abdon-Burf) which will be operated by FOURPAK has now been cleared for operation and a corresponding application for clearance of the link from GB7GH has recently been submitted. FOURPAK are currently waiting for a set of site keys for the GB7WE site (2 sets that were sent recorded delivery have not arrived) before work can continue with the installation.

## **GB7FD NODE**

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On 19<sup>th</sup> September response from GB7FD became very slow (with the G8BPQ software showing no buffers being available), a visit to the site to restart the computer system got the system back on air. However a further visit the following day was required to reset the KISS TNC used for the southbound link to GB7TJZ.

## **GB7GC NODE**

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As the link from GB7GH to GB7GC and GB7LGS has been upgraded to separate full duplex circuits, with the addition of a further transmitter at GB7GH and a change in the corresponding receiver at GB7GC user access speeds at GB7GC should be better than in the past. Additional work to upgrade the link to 9600 baud should be possible when the 'G3RUH' modem boards are completed.

## **GB7RR REGENERATIVE PACKET REPEATER**

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Problems that have arisen with the equipment that was installed by Nick (G6AWT) & Steve (G4FPV) for GB7RR at the end of May have necessitated its removal and further work and bench testing is currently in progress. It is now hoped that the equipment can be refitted and that on air testing will be completed before the end of November.

## **GB7LGS TCP/IP MAILBOX**

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An intermittent fault with the 70cm link transmitter at GB7LGS has occurred several times over the last few weeks, the problem causes a significant reduction in the RF power delivered to the antenna, and hence degradation of the link. The problem seems to be in the Transmitter RF filter, but each time I start to investigate the problem disappears.

### GB7LGS MODEM ACCESS

Work on providing a modem port at GB7LGS has been a little slower than I would have liked, but is now operational (speeds up to 33600 baud are supported).

Access to the 'bulletin' type messages from the packet radio network (and some Internet newsgroups) requires the use of Windows 95 or Windows 98 Dial-Up-Networking and a suitably configured newsreader (i.e. Netscape, Internet Explorer, Agent etc). MSDUN V1.2 or V1.3 is also required for Windows 95 (These are available from the system).

Private messages to packet radio users can be sent using almost any standard terminal program.

For further information or to request an account for access to the system please contact me (only licence holders will be permitted access).

**Stewart Wilkinson.**  
G0LGS

## **NEW NODE SITES**

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We have now reached an agreement with the owners of the M48 Severn Bridge crossing to use one of the towers for a new node site, GB7RC (Severn River Crossing) is the callsign that has been reserved for this site. The site will link via GB7RR to provide an additional route from our area to sites in Bristol and South-Wales, it could (subject to finding an interested party with a suitable site) also be used to provide a link to North Devon.

We have also gained permission to use a 'spare' dedicated (wire) link between Gloucester and Swansea Railway Stations. The link is capable of carrying traffic at 9600 Baud Full-Duplex (either Synchronous or Asynchronous) and will be used to provide a link to Swansea University.

FOURPAK have been notified that GB7CL (Clee Hill) has been cleared by the Radio-Communications Agency and the NOV for this new site will thus be issued shortly. The antennas, equipment rack (a recycled Traffic Signal Control Box) and mains supply were installed by Steve (G4FPV) and Nick (G6AWT) in early September, the remaining equipment is currently undergoing final testing and will be fitted shortly. The site will link to GB7PZT to provide a 2m-user port for the Leominster area.

FOURPAK are also awaiting formal written permission from the owners to use a further new site in Worcester. The callsign for this site is expected to GB7WR. If all goes well this site will link to GB7GLO and will provide 2m and 70cm user access ports, it may also link to the Bromsgrove Radio Club's site on Lickey Hills for DXCluster traffic.

Further information on these and other FOURPAK projects will be available on their new web site at <http://www.gb7lgs.demon.co.uk/fourp/> (currently under construction).

## **HIGH SPEED MICROWAVE LINKS**

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The Committee has recently been approached with the question 'Is the group prepared to look at and experiment with high speed (56k or faster) links on Microwave bands'. Whilst the committee is always interested in improving linking speeds, we currently do not have anyone with experience of using 'narrow-band' data modes in the bands above 23cm, and so would require help with the design and construction of suitable equipment.

Anyone who is interested in setting up or helping with a pilot project to install such a high-speed microwave link is asked to contact Nick (G6AWT). If sufficient interest is shown we have been advised that another interested group may be able to make funds available for such a project.

## **TREASURERS REPORT**

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The group had a stand at the Stroud Radio Society Rally on 16<sup>th</sup> August. As well as selling a number of items to raise £87.90 we purchased some 70cm duplex cavities for £15.00 and recruited 2 new members (G0LFP and G3TEV).

Other recent purchases include 2 Tiny 2 TNC's for £150.00, and 20 x ZN429E-8 D to A converter IC's for £50.00 which are required to build the modem boards that we will use to upgrade several existing 1200 baud links to 9600.

**Stewart Wilkinson.**  
**G0LGS**

## **LOGO COMPETITION**

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The Committee have decided that it could be worthwhile the group having its own Logo that could be used on the Newsletter and other group Correspondence, and have therefore decided to hold a competition for group members to design a G.R.G Logo. Designs can either be hand drawn (between 50 x 50mm and 150 x 150mm please) or provided in any of the commonly used graphical file formats (ie: BMP, GIF, JPG, WPG, CDR etc).

The Committee will examine all submissions, and may decide to adopt the use of one or more Logo's on group correspondence and other literature. In the event of the committee being unable to make final choice then the ones they consider to be the best will be printed in a future newsletter and all members will then be invited to comment.

Computer generated submissions should be supplied on disk (3.5" or 5.25" DOS/WIN95 formatted only) although a printed example would also be useful (disks will be returned only if submitted with Stamped Addressed Envelope).

Colour designs may be submitted, but remember that they do not always reproduce well in Black on White.

Bear in mind that the final design may well be reproduced at sizes from around 20mm x 20mm up to a full A4 Page.

The Committee may award one or more prizes as deemed appropriate.

The chosen design or designs will become Copyright of GRG.

Completed Entries should be sent to G0LGS to arrive no later than 30<sup>th</sup> November 1998

**DO NOT SEND SUBMISSIONS BY EMAIL UNLESS SPECIFICALLY REQUESTED TO DO SO.**