GLOUCESTERSHIRE CAVE RESCUE GROUP

NEWSLETTER

Issue 11, MAY 2016

GCRG Depot, Littledean Hill, Cinderford, Glos, GL14 2TT

Phone – 01594 827999

SARCALL Response Number – 07537415551

Please ensure all SARCALL messages are responded to

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Editors note:

A big thankyou to everyone who helped to provide the articles and photos included in this edition of the N/L. Without your support and input GCRG would literally not have a newsletter.

If you have any comments about the content/layout etc of the newsletter (or ideas to improve it etc) then please get in touch as we need to make this as good as we can.

2016 DATES FOR THE DIARY

5 May: AGM at the GCRG depot

21 May: MREW meeting, Preston. *This will be the AGM in the morning and then a series of sub–group meetings in the afternoon, namely Medical, Communications, Vehicle, Equipment, Publications, Training. Although GCRG only has one vote at the main meeting any number of people can attend.*

5 June: Training at Cowshill

4 September: Training Day *(details to be provided)*

October: 50th publication to be published & distributed

7—9 October: SWERA training @ the DFSC

November: MREW meeting *(details to be provided)*

4 December 2016: Training Day *(details to be provided)*

GCRG INVOLVEMENT WITH OTHER ORGANISATIONS

Other than MREW, GCRG is also involved with the other following organisations:

LRF (Local Resilience Forum)

GCRG representatives attend LRF meetings, both for Gloucestershire (as our local group) and also for Avon & Somerset. These meetings bring together both the 'blue light' agencies and also the voluntary groups such as GCRG, SARA, Raynet etc. There are usually 2 or 3 meetings per year which are hosted by GFRS and normally held at one of their fire stations. The meetings generate the opportunity for discussions about how the organisations work together primarily for major incidents.

British Cave Rescue Council (BCRC)

In April each year the BCRC holds a Technical Day and AGM weekend. The idea of having technical training alongside the AGM has helped improve attendance and gives the opportunity for workshops, demonstrations and some training. Unfortunately for the last two years GCRG has not had a presence at either of these events. The AGM provides the opportunity for the election of the BCRC Officers.

South West of England Rescue Association (SWERA)

Holds 3 or 4 meetings per year, now being held at UWE Bristol. GCRG has been a member of SWERA for a great many years, although the association went through a difficult time when a number of members broke away to form another group. SWERA is still running and provides the regional body to which we are affiliated back through to the MREW, as a secondary route, apart from the BCRC.

SWERA brings together groups who would not normally be together, such as Avon & Somerset Cliff Rescue, DORSAR and WILSAR along with Mendip Cave Rescue. Pete Turier is presently the Secretary and Paul Taylor the regional rep for SWERA at the MREW Meetings.

This year SWERA is organising a training event that is to be held at the Dean Field Studies Centre (Parkend) over the weekend 7th - 9th October. GCRG is going to be involved with this and it would be good to see GCRG members supporting the event. GCRG Members are welcome to attend the SWERA Meetings.

A GCRG FACEBOOK PAGE?

Given that quite a few members of GCRG now have accounts on FACEBOOK and that this tool is used by a large proportion of the UK population, the committee has proposed that the group has a page on FACEBOOK (FB).

The GCRG page will only be used to promote what the group is all about, training events and other general matters including how to become a member etc. It will not be used to refer in any way to current/recent callouts.

It is proposed that GCRG will post on its FB page photos from appropriate GCRG training events and anything else that can be used to explain/promote what the group is about etc.

If any GCRG member has reservations about their face being included in photos posted or any of their photos being used then please contact the committee and we will ensure that this request is adhered to.

No members of GCRG will be 'tagged' in any of the photos on the FB page.

Volunteers?

A GCRG FB page will not run itself, so are there any volunteers out there who would be happy to help out and look after the FB page? For us, this can be a very good way of promoting what we're all about.

MEMBERS OF THE GCRG COMMITTEE

Chairman *Paul W Taylor* chairman@gcrg.org.uk 01452 505673 (H) 07803 539945 (M)	**Secretary** *Peter Turier* secretary@gcrg.org.uk 01452 539199 (H) 07462 181899 (M)	**Treasurer** *Liz Maisey* treasurer@gcrg.org.uk 01666 504647 (H)
Communications Officer *Craig Cameron* comms@gcrg.org.uk 01594 834481 (H) 07802 890153 (M)	**Information Officer** *Gareth Jones* info@gcrg.org.uk 01452 532014 (H) 07982 455650 (M)	**Training Co-ordinator** *Ian Healey* training@gcrg.org.uk 01594 811187 (H) Ian 01594 562444 (W) Ian
Equipment Officer *Nicky Bayley* equipment@gcrg.org.uk 07790 664278 (M) 01291 445716 (W)	**Medical Advisor** *Andy Harp* andy@palmcons.co.uk 07501 307391 (M)	**Ordinary Member [Newsletter Editor]** *Jon Maisey* jon.maisey@btinternet.com 01666 504647 (H)
Ordinary Member [50th Anniversary Publication] *Dave Appleing* Dappleing@aol.com 01242 581385 (H) 01242 669413 (W)	**Ordinary Member** *Kev Brockway* ozonekev@btinternet.com 01453 511100 (H) 07970 033345 (M)	**Ordinary Member** *Rachel Brown* brownrm@btinternet.com 01453 511100 (H)

GCRG WARDENS

Cheltenham, Tewkesbury, North Cotswolds	**Maurice Febry** 01242 242160 (H) **Colin Vickery** 01684 293202 (H) 07548 240124 (M)	**Dave Appleing** 01242 581385 (H) 07804 300598 (M) 01242 669413 (W) 01242 669348 (W)
Bristol, Chepstow	**Kevin Brockway** 01453 511100 (H) 07970 033345 (M) 01454 382133 (W) 01454 382100 x2133 (W)	
Forest of Dean	**John Berry** 01594 822823(H) 07979 791083 (M) **Greg Jones** 01594 827334 (H) 07974 008519 (M) **Dave Tuffley** 01594 824343 (H) 07799 617934 (M) 01452 711852 (W)	**Andy Clark** 01600 716970 (H) 07707 992510 (M) 07411 207149 (M) 01594 811303 (W)
Gloucester	**Pete Turier** 01452 539199 (H) 07462 181899 (M) 07789 903921 (W)	**Paul Taylor** 01452 505673 (H) 07803 539945 (M)

SARCALL INFORMATION

SARCALL Information for Team Members

When you receive a SARCALL message sent by a GCRG Warden, you should, ideally, respond by SMS text message to indicate your availability.

If you are unable to reply by SMS text message, please contact the originating warden directly, using the number given in the SARCALL message, or see overleaf.

*Send your SMS text message to **07537 415551***

*The SMS text message **MUST** take one of the 3 formats below:*

SAR ▲ Axx ▲ message if you are available
SAR ▲ Lxx ▲ message if you have limited availability
SAR ▲ N ▲ message if you are unavailable

Where ▲ = a space, **xx** = time in minutes until you will arrive at meeting point, **message** = relevant additional information, (free text)

Changes to your details? Email **info@gcrg.org.uk**

Useful phone numbers

GCRG Depot	01594 827999	
GCRG Wardens	Mobile	Home
David Appleing	07804 300598	01242 581385
John Berry	07979 791083	01594 822823
Kevin Brockway	07970 033345	01453 511100
Andrew Clark	07707 992510	01600 716970
Maurice Febry		01242 242160
Greg Jones	07974 008519	01594 827334
Paul Taylor	07803 539945	01452 505673
David Tuffley	07799 617934	01594 824343
Peter Turier	07462-181899	01452 539199

(Versionv3, May 2014)

Changes to your details? Email **info@gcrg.org.uk**

CAVE LINK

Communications is an extremely vital part of any rescue operation, be it for a Mountain Rescue Team or a Cave Rescue Team. Not taking anything away from the surface comms (which I fully appreciate can at times be quite difficult) however, in general, this is much easier than when a rescuer operating underground requires to communicate with the surface.

For this to happen then there are a number of options available from the very simple method of sending a 'runner' to the use of a physical cable-based 'telephone' system.

A 'runner'-based system

Using a runner to pass verbal messages unfortunately has its problems as "chinese whispers" may ensure that the information gets unintentionally garbled by the time the information has been passed through a number of people. Also, this can be very time consuming if the distance from the underground location to the surface is considerable.

A cable-based system

The use of a cable-based system involving the laying of a cable through a cave or mine can provide a direct link from the underground to the surface. Over the years this system has been refined from original ex-military field telephones (and ex-GPO headsets) to single wire earth systems of which the "France Phone" is a very good example (and which is one that is used by many teams including the GCRG). These wire-based systems can be run over many km and are very effective at allowing handsets to be connected very easily at any point along the whole length of the cable. Having a cable running through the system also provides a route marker for any rescuers who may be unfamiliar with the route through the cave/mine. However, laying out the cable and afterwards collecting it back up does take quite a bit of time and effort.

The new approach

Over the years a lot of work has been put into the development of alternative communications systems that would eliminate the need for a cable and would allow for voice transmission directly through the rock from underground back to the surface. This came as a step on from the radio location beacons that cavers were using to pin-point locations in caves and mines when they were surveying the passages to enable a much more accurate underground to surface relationship to be established. In Yorkshire Bob Machin produced the aptly named "Mole Phone" and in South Wales Andy Bell produced the "Ogof Phone". Both systems worked very well and through what can only be described as 'black magic' and gave the ability for a rescuer to deploy underground and communicate with a surface station without the need for interconnecting cables and through 100 -200m of solid rock (GCRG still has a working Ogof Phone that is still capable of working through 100m).

During the years that have followed further developments have taken place providing enhanced depth and performance, notably the 'Hey Phone' developed by John Hey and then over more recent years the 'Nicola Phone'. With the latter, work is underway to complete version 3 and it is hoped that this will be going into production soon and then delivered out to the cave rescue teams.

However, one of the inherent problems with any of these systems has been that they suffer from considerable interference due to the low frequency that they operate at. It has been likened to listening to 'galloping horses' and can after a time become quite annoying. I am aware that the latest Nicola Phone will be an improvement on this but I can't see that it will be eliminated completely.

So what else is there that can provide communications through the rock. One that has been developed in Switzerland is a system that is called 'Cave Link' and I first came across this when I attended a cave rescue training conference in Croatia in February 2013. I was invited by the Croatian Cave Rescue who very kindly paid for my air fare, travel and accommodation in exchange for a couple of presentations that I gave on SARCALL and an electronic 'T Card' system (I also attended on behalf of the BCRC a meeting of the European Cave Rescue Association in Zagreb) so it was a very full weekend.

The 'Cave Link' System

During the conference presentations pictures of Cave Link were shown and a brief indication of its capabilities given indicating that it was purely a text messaging system with no voice and so no Interference and also with a depth potential of 2 km. I have to say that I was very impressed by this. Another feature was that it could also interface with surface mobile communications via a GSM unit. Cost was not discussed but the suggestion was that it would be quite expensive, so to be honest I did not think much more about it until in January 2014 I received a phone call from Brian Jopling (from the South & Mid Wales Cave Rescue team) to invite me to a test of cave link (in Charterhouse cave, Mendip) using a number of sets that had been sent over to the UK for evaluation.

Meeting up at the Mendip Cave Rescue store was the first time I had seen an actual unit and I was instantly impressed by the compactness and quality of the units. Brian gave a brief explanation of how things worked and then it was off to the cave for a practical exercise. Two units were deployed underground and one on the surface. I was with the second unit which did not go as far into the cave as the first and I continued to be impressed by how simple the equipment was to set up and operate. I had taken my video camera and filmed this process which can be seen via the You Tube link at '1' and a second video '2' showing the units in use in Miss Grace's Lane cave in the Forest of Dean.

1 - https://www.youtube.com/watch?v=xKfF_K6mCBw
2 - https://www.youtube.com/watch?v=7WYUmULfS1g

The units are approximately 125mm square and 45mm deep. They have a small display screen and are equipped with a QWERTY key board. Operation is very simple. Deploy two antenna cables, attach earthing plates, test the quality of the earthing, select new message and which unit you would like to send it to, type your message and then send it. In reality there is a bit more to it than that but not much.

During this initial test not only were we able to send messages to the surface set and they to us we were also able to send a message to the unit that was further into the cave horizontally from our location. All of which was achieved without having to listen to the 'galloping horses' and if you left the unit you would not miss a message as it sat in its own 'in-box'. Overall, everybody was very impressed with the results but the down-side being that each end was around 800 Euros so not a cheap piece of kit.

However not being put off by this I arranged with Brian for the units to be made available to GCRG for testing in the Forest of Dean. Again, this proved to be overall be very successful and everybody who used the units commented on how easy it was to set up an operate. Further trials were held in South Wales and then the units made their way up to Yorkshire where both CRO and Upper Wharfedale Cave rescue teams carried out trials. Within GCRG we were very keen to go down the route of obtaining some units but the cost put them out of the frame.

However, for those of you who read about it in the last MR Magazine, GCRG received a very significant donation of £5000 from one of its members and part of the condition of that donation was that £3000 of it should be used to purchase Cave Link. So GCRG placed an order for 4 units. It was decided that they would not purchase the GSM Unit. Partly due to the cost being equivalent to another unit and also the requirement was felt to be not needed. Also we learnt that S&MWCRT were also going to be ordering Cave Link and they were purchasing the GSM unit. Mendip Cave Rescue (MCR) also placed an order for three units and a GSM. So there would be one relatively close by if required. The GCRG units arrived in time to be demonstrated at the BCRC Conference and also used on the training event. This subsequently led to the Scottish Cave Rescue Organisation ordering three units and I understand that CRO in Yorkshire have ten units and Upper Wharfedale, nine units. So this now makes six of the UK teams with Cave Link.

The units can be set up to route in a variety of different ways, from simple one to one to more complicated configurations where one unit acts as a relay to the next etc. All units are the same so even a unit that has nominally been allocated a surface role can be deployed underground and vice versa.

In the past GCRG has worked alongside both S&MWCRT and MCR on large rescues both within its own area and in providing assistance to those teams in their respective areas.

With all three now having Cave Link, the GCRG units and those belonging to S&MWCRT have been set up to allow the units from both these teams to all work together in one large network should the need arise. Mendip Cave Rescue have all the details to enable their sets to easily be programmed accordingly so that they can join the network. As was stated right at the beginning, communications is a very vital part of any rescue response. Cave Link does not provide all of the answers and there will be some who will still prefer to speak to somebody rather than text. However it does provide another excellent capability that will help rescuers keep in touch and enhance their response.

Testing Cave Link in the field

Following on from our initial tests with the demo units we have since carried out quite a few tests with our own units in both in the iron mines and the caves within the Forest of Dean. Excellent results have been obtained in Old Ham with the units set up to act as relay stations automatically passing the message from the surface set to the last one and back again. In Wet Sink we have already had very good results with the units deployed into the Upper Series and not only establishing a connection from the Chunnel to the surface but also down to Dryslade Passage and from the Chunnel to Hull Passage underground, a distance of 500m. Further tests are planned here to see how far apart we can have the units and still maintain contact. An initial test has been carried out in Big Sink but although this gave a result from Chernobyl Chamber to the surface and back it was not possible to carry out further tests from deeper into the system due to high water levels. Here it will be great to be able to not only link to the surface but also have a set to set link from either end of the 200m rift which would save a considerable amount of effort in laying a cable through this very awkward section of passage.

A very recent test at Miss Grace's Lane saw a total of six locations tested throughout the cave from the breakthrough point to Plummet Junction. Not only did this give 6 positives to the surface with the final location having an offset of nearly 375m from the surface location it also gave unit to unit links to all locations underground. Otter Hole is going to be the next site to be tested and this should provide some good results.

If, over the next few months you are planning a trip into the farther reaches of any of the local caves or mines please let the GCRG committee know as it would be very good to get a Cave Link unit taken along and some tests carried out. Each of the underground units are packed into a Daren Drum with all that is needed so we are not talking about a lot of additional kit to carry.

The GCRG committee are well aware that Cave Link is not a cheap form of communications but the results that are being achieved from the tests are proving without a doubt that the expenditure was fully justified. Of course there is still a role to be played by conventional wire communications equipment but this can be considered to be the add on providing a link from a casualties location back to a Cave Link unit that is then providing the link back to the surface and control.

We have been promised for many years by the BCRC the new Nicola 3 Phone system. This has not yet materialised and with no recent news, one wonders if it is ever going to be available. Cave Link has stepped into the void and filled it with ease. Some will argue that voice is better than text and in some cases I would agree. However overall, Cave Link has many advantages and capabilities that the Nicola Phone is not capable of performing and for anyone who has had the unfortunate role of being an operator of the Molephone, Ogofphone ,Heyphone or Nicola Phone there nothing more infuriating than sitting listening to the sound of galloping horse for hours on end. I can see Cave Link being around for a very long time.

This is a very brief insight into Cave Link. If you would like to know more or see the equipment please watch the videos and contact the GCRG Chairman via chairman@gcrg.org.uk

Paul Taylor (article), Andy Harp (photo)

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Page One

GCRG Cave Link Equipment

Set Up and Usage

DO NOT SWITCH THE UNIT ON TILL YOU HAVE CONNECTED AND SET UP THE ANTENNAS

1. Set up the equipment with the Underground & Surface Antennas as near aligned as possible*

**Confirm the alignment before going underground*

The antennas are fitted into the two Sockets on the **Right Hand Side** of the equipment box.

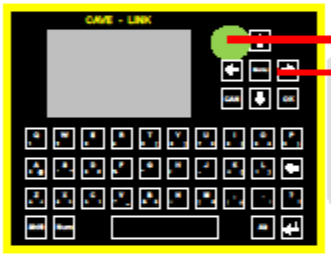
NOTE. *They can go in either socket*

Suggest to start that the Orange Wire is extended to its Full Length & the Blue Cable is extended to half its length.

NOTE. *The Earthing Plates must be attached into the socket on the wire where it has been removed from the coil and must not be attached to the length of wire that has not been un wound.*

Ground the metal plates as best you can by placing them in wet mud, under a pile of rocks or stones. If the ground is very dry then if possible use water to moisten the ground to improve the Earthing.

NOTE. *On the surface 1.2m Earthing Rods and Extended Antenna are also available.*



Green Flashing LED when ON

WARNING

DO NOT UNDER ANY CIRCUMSTANCES TOUCH THE EARTH PLATES DURING OPERATION. AN ELECTRIC SHOCK IS POSSIBLE

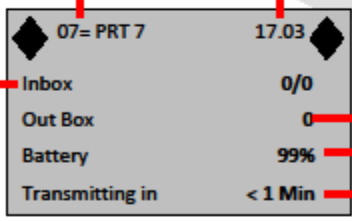
2. Switch on the unit by Pressing the Menu Button

3. Screen One

Unit Identification depending on the unit being set

06 = GCRGSurf 07= PRT 7 08= PRT 8 09= PRT 9

NOTE: *Any of the sets can in fact operate on the surface but 06 has been designated for Surface Use.*



The time is set for a 24hr Clock

Outbox = Number of Messages waiting to be delivered

Battery Condition as a % of charge

Inbox = X / Y

Where the first digit, X, is the number of Unread messages
and the second digit, Y, gives the number of Read Messages

Transmission in **< 1 Min** (this is the delay interval that is applied to all transmissions

NOTE. Before sending any messages it is essential to perform an Antenna Quality Check

4. Performing An Antenna Check

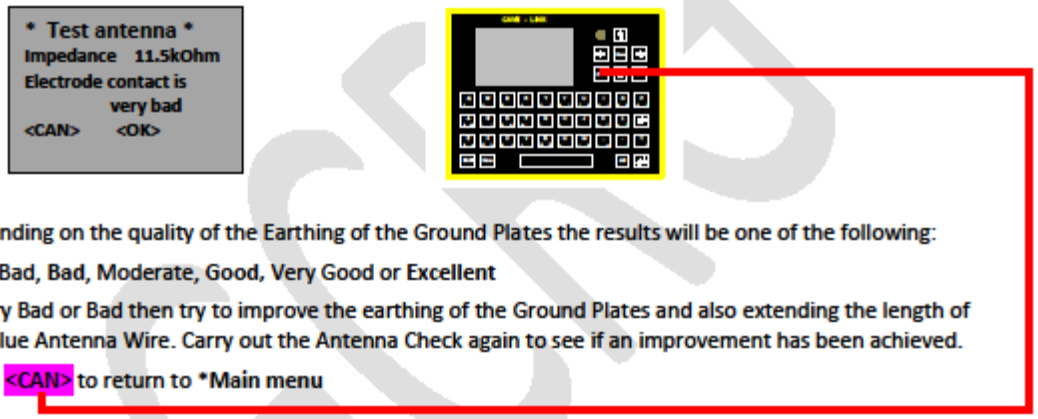
a. Press the **Menu** Button

This takes you to *Main menu

Use the Down Arrow to select **3 Test antenna**

Press **OK**

NOTE. The Antenna check is performed and a visual read out of the results will be given on the screen.



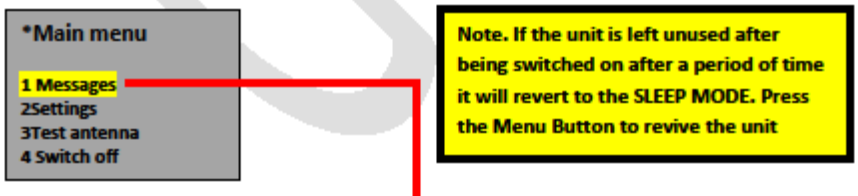
Depending on the quality of the Earthing of the Ground Plates the results will be one of the following:

Very Bad, Bad, Moderate, Good, Very Good or Excellent

If Very Bad or Bad then try to improve the earthing of the Ground Plates and also extending the length of the Blue Antenna Wire. Carry out the Antenna Check again to see if an improvement has been achieved.

Press **<CAN>** to return to *Main menu

5. From *Main menu



Use Up Down Arrows to select **1 Messages**

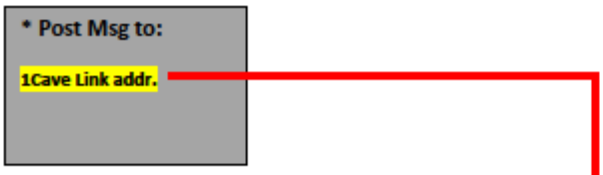
Press **OK**

This takes you to Messages menu

Use the Up or Down arrows to select **2 New message**

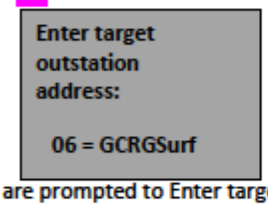
Press **OK**

This takes you to * Post Msg to :



Use the Up or Down arrows to select **1 Cave Link addr.**

Press **OK**



You are prompted to Enter target outstation address:

Note: In addition the GCRG Sets have the following added: 01 = LC1 02 = LC2 03 = LC3 & 04 = LC4

These are the Identifications for S&MWCRT sets

12 = MCRSurf 13 = MCRUG1 & 14 = MCRUG2

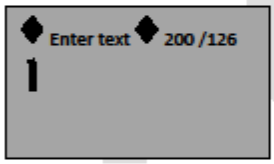
These are the Identifications for MCR sets

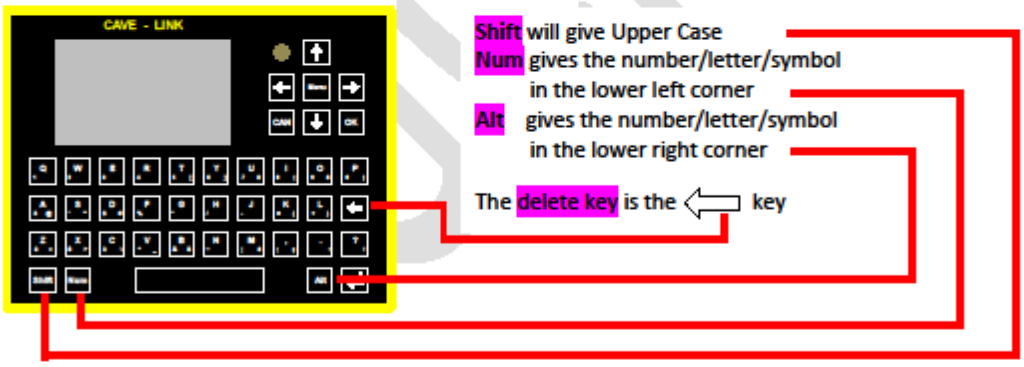
Use the Up or Down arrows to select the Target Station

06 = GCRGSurf 07= PRT 7 08= PRT8 09= PRT 9

Press **OK** when then one you require is selected.

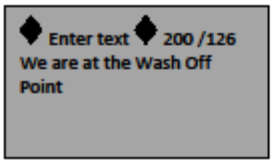
6. Type your message using the keyboard, it is a standard QWERTY layout;





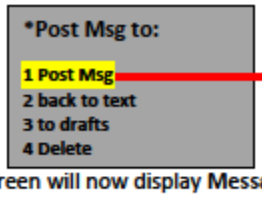
The **Up, Down, Left and Right** arrow keys around the Menu button allow you to move the cursor within your message

Message Example.



Once your message is complete press **OK.**

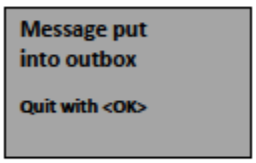
7. This will bring up the * Post Msg to: menu



Select 1 Post Msg

Press OK

The screen will now display Message put into Outbox! and Quit with <OK>

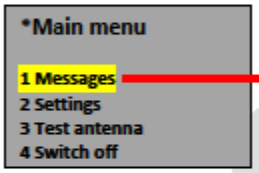


Your message should now be sent.
Sending is indicated by a solid RED Led.

Press OK

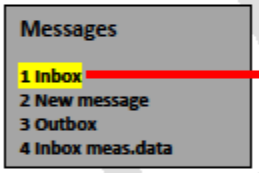
8. Incoming messages are indicated by a Flashing RED / GREEN Led and an audible sound

To read the messages go to * Main menu



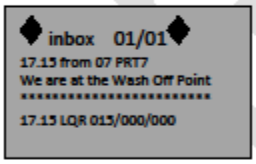
Select 1 Messages

Press OK



From the messages menu select 1 Inbox

Press OK

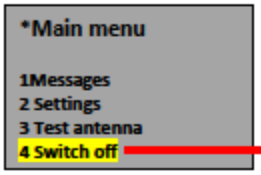


The most recent message is displayed. Use Up & Down Arrows for a long message. Use Left and Right Arrows to view earlier messages.

9. Switching the unit off

Press <CAN> & Press <CAN> again

This will take you to *Main menu



Use the Up or Down arrows to select 4 Switch off
Press OK Check the unit has switched off. Repeat if required.

Only Now May You Disconnect the Antennas from the unit

The Led may continue to flash GREEN for a few seconds after this - do not worry the unit is shutting down and switching off.

GCRG IN THE NEWS

JULY 15, 2015 11

Donations to the Cinderford based Gloucestershire Cave Rescue Team

Cave rescue teams flock to Clearwell

CAVE rescue teams from around the world including Canada, Hungary and Tunisia travelled to Clearwell Caves for the British Cave Rescue Council annual conference.

During the weekend the host group, the Gloucestershire Cave Rescue Group, was presented with a cheque for £5,000 by the chairman Paul Taylor and his wife Rose.

Mr Taylor explained: "I was planning to leave the group this amount of money in my will but, after having a heart attack last year, I decided to give it now so that I am here to see the benefit of it.

The money will go to buy a Rock Text Messaging Communications device which allows underground rescue teams to communicate with colleagues on the surface.

PRESENTATION: Paul and Rose Taylor hand over £5,000 to the Gloucestershire Cave Rescue Team.

Jointly organised by members of Gloucestershire Cave Rescue Group & Midlands Cave Rescue Organisation, the conference was based at the Dean Field Studies Centre at Parkend and on the Sunday around 100 people attended an underground training exercise at Old Ham Iron Mine Clearwell.

It was the first time the conference has visited Gloucestershire for 47 years.

Caver's dying wish raises cash to help others

FOREST of Dean caving enthusiast Steve Tomalin's dying wish came true this month when his collection of specialist underground equipment raised £4,500 at auction.

Steve, a long standing member of Gloucestershire Cave Rescue Group, died of liver cancer last year.

In his will, he asked that his collection of equipment be sold to raise funds for the group.

Group Chairman Paul Taylor said: "Steve was a very active member of Gloucestershire Cave Rescue Group and also a very active person within the outdoor world.

"He also worked in Outdoor Education and took part in many activities.

IN MEMORY: Steve Tomalin.

"In his will he left instructions that all of his equipment from these activities were to be given to the local rescue group and sold to raise funds for the organisation.

"To this end, we held an auction at the Cinderford depot in St White's Road, attended by around 120 of his caving friends and from this a total of £4,500 was raised.

"This money is being split between the Gloucestershire Cave Rescue Group, the Midlands Cave Rescue Organisation and South and Mid Wales Cave Rescue Team.

"The Gloucestershire Cave Rescue Group share is to be used to provide an extension to our Training Wall as Steve was very much into Training, along with a kit washing and drying room.

TRIOSCAPE Highleadon, Newent GL18 1HQ

CHECKING PERSONAL SRT KIT

As you will all know GCRG have recently undergone a peer review in order to improve our operations. The process involved a great deal of scrutiny of our working procedures as well as presenting the team to outsiders. An awful lot of work was done by the team, and many jobs that had been on the “to do” list were finally completed.

Many, many thanks to everyone for all the effort that was put in to achieve our ‘thumbs up’! One of the more onerous tasks that we have in our procedures is an annual check of all our equipment - ropes, metalwork, harnesses etc. Obviously this is in everyone’s interests to ensure that everything we use is in good condition and that we know it's history.

This is the reason that the use of people's personal kit underground on a rescue is not desirable. Having said that, of course it is always better to be safe, so personal kit may be used if necessary as an initial aid, BUT it should be replaced with GCRG kit as soon as possible. This also protects our team members from any "blame" should there be a failure.
Which then brings up the subject of team member's personal equipment.....

Photo: Recent equipment inspection training held at ‘Total Access’

We all try to get the most use out of our caving gear, let's face it. However, we do have a responsibility to ourselves and to other members of our rescue team. If you attend a rescue your personal kit should be in good condition!!! Even a simple stretcher carry can put team members in awkward positions and require manoeuvres that wouldn't be done in normal circumstances. You may well have to rely upon your belt for a belay, hang in your harness, etc. If your kit fails you could be putting other members of the team at risk - therefore

IT IS UP TO EVERYONE TO MAKE SURE THAT EQUIPMENT IS FIT FOR PURPOSE.
Keeping everybody safe in GCRG is the responsibility of us all

There is a list below of things to be aware of both with your personal kit and the group equipment. If you see anything you think is dodgy – SAY SOMETHING. If anyone would like to go a course which covers how to inspect equipment please let us know, we have places available.

The following is a very simple check list for inspecting your kit.

TEXTILES: (harness, belay belt, slings, cows tails etc.)
Age; is it outside the manufacturers' recommendations for maximum life? (usually up to 10 years)
Abrasion, cuts, nicks and tears, broken stitches, frays
Damage from heat/chemical – discoloration/melting/distortion of the weave pattern
Check for damage under the buckles

CONNECTORS: (krabs, mallions etc.)
Mechanical function is not impaired
Ensure that springs, hinges and threads work smoothly
Wear on load points
Signs of deformation, wear, nicks, cracks or other deviations from the norm
If need to lubricate, use 3 in 1 oil.

ROPE CLAMPS/DESCENDERS:
Ensure that springs, hinges and threads work smoothly
Check inner face of cam– check if any damage of face of cam showing impact damage from fall
Check wear
Signs of deformation, wear, nicks, cracks or other deviations from the norm
Does it pass function test?
Check wear on bobbins, excessive play, scoring and corrosion
If need to lubricate, use 3 in 1 oil.

HELMETS:
Cracks deformation
Damage to harness
Excessive wear
Chin strap adjusts easily
Connector secure
No alterations – labels etc.

JOINT CAVE RESCUE TRAINING EXERCISE

Surface and Underground Search + Casualty Evacuation

Burrington Combe, Mendip

19th March 2016

When a major cave rescue incident is declared, be it within Gloucestershire or in the areas associated with our neighbouring cave rescue teams (Mendip Cave Rescue, S&MWCRT, Midland Cave Rescue etc) there is a very strong likelihood that one team on its own will not be able to deal with the incident.

For GCRG this was borne out with the rescue in 1994 of Laura Trowbridge from Otter Hole when 140 people across a number of teams were involved. Over the years there have been other rescues in the UK where this multi-team response has been implemented. Fortunately, these occasions are quite few and far between (long may this continue). However, without such incidents the teams do not come together much. Yes, a few from one team will join in with another team's training exercise which is very good but this is not the same as a full joint exercise. MCRO have organised a number of joint exercises over the years and for the BCRC Conference in 2015 GCRG did its part in bringing together around 100 cave rescue members from almost every cave rescue team and organisation in the country along with a sprinkling of people from Poland, Hungary, Tunisia and even Canada. This proved to be very successful.

The introduction of Cave Link *(see separate article)* to three local teams GCRG, S&MWCRT & MCR prompted the idea that the bringing of all of these units together would also provide for a great opportunity to bring team members together for a joint training exercise. Discussing this with Dany Bradshaw (MCR Warden) he put forward the suggestion of an exercise in the Box (Corsham) stone mines where a search for a missing party would easily require a lot of people and give a good location to test out Cave Link.

Although everyone felt Box mine would be ideal, a series of unfortunate circumstances resulted in the complex dropping out of the running and so a new venue was required and the MCR Team headed up by Adrian Vanderplank (MCR Training Officer) put forward Burrington Combe. At Burrington there are a multitude of caves within quite a compact area but where communications and party control would be quite challenging. It was also an area where it could quite conceivably be possible for a party of cavers or a person to head off to a site and not inform anybody of their intentions. Getting lost or an accident could easily result in the requirement for a lot of cavers to search the area and undertake a rescue.

The date was set for March 19th 2016 and invitations send out to a number of cave rescue teams to take part. Paul Taylor held a meeting with Adrian to discuss details with MCR taking the lead on the day and the supporting team members filling in the gaps so to speak and fingers were crossed for a nice day.

The meeting place/location of the MCR control was the lower car park below the Burrington cafe which proved ideal as it was used by a 'butty wagon' who did some extra early morning business from the arriving people. The MCR surface control in the form of an inflatable shelter was set up in the car park and it was not long before names of those attending were being added to a list. At least four cave rescue teams were represented and at the end of the day the total number registered with control reached 65 people which was very good.

Once the initial rush of people had been dealt with requests came out from control for teams to supply people to make up search teams and also man the surface Cave Link locations. Pete and Trevor took 06=GCRGSurf to Rods Pot with a team from MCR & South Wales making up an underground search party. Unknown to them at the time Jan, Jann, Colin & Kevin had sneaked into Bath Swallet (literally next door) with 09=PRT9. This caused some confusion later on when that set started sending messages from this unknown location!

Rachel joined the Control team and was given the role of keeping the event log. Two logs were kept, one for the comms and a separate one for events; this was found to be very manageable. Some of the entries were duplicated on both logs, but generally the event log kept details of when individuals/groups left and returned to control and when they entered caves. In addition, details such as request for additional help or equipment was also kept. Kelvin helped cover the radio and kept the comms log. Rachel and Kelvin worked together keeping the logs updated. Two additional team members kept the T-card board up to date with details of who was in each group, the caves entered and the equipment taken, and when they returned to control. A whiteboard with a sketch of the caves and position of each of the cave Links units was hung up in the Control tent; this was a great visual aid.

Ian helped with Control and later acted as a radio-relay point mid-way up the Combe and Paul having given another team who were going into Lionel's Hole a briefing on the operation of Cave Link joined up with Duncan Price to form a third surface Cave Link station located outside Lionel's Hole.

All of the major cave sites within the Combe were searched with a series of cards being located by the search teams as they progressed through the sites. Their findings were then reported back via Cave Link back to the surface stations who in turn passed the information back to Control via the radio. Some stations having a direct link and others having to rely on relay stations.

Excellent results were obtained with Cave Link with surface stations not only receiving their respective underground stations but also from neighbouring locations, some of which were located on different sides of the valley. This did get a little confusing with not knowing exactly who was who. So a good lesson learnt is to ensure that each Cave Link station has a list of which other sets have been deployed and to where. The best surface-to-surface unit result was around 800m, 06=GCRGSurf located above Rods Pot to 07=PRT7. This was a very pleasing result and in addition to this, 07=PRT7 was also in contact with LC4 located on the surface by Goatchurch Cavern and also 12=MCRSurf located at Sidcot Swallet, both approximately 400m away to the east. As part of the work, Keith Goodhead (who was operating LC4 remotely) sent a command to 12=MCRSurf to act as a relay station so that when 07=PRT7 sent a message for LC4 it was automatically passed on by the unit without the operators having to do any work. This was again another good piece of work and it is interesting to note that this would not have been possible using Nicola Phone type-equipment.

As the searching of the underground sites was completed it was reported to control that two casualties had been located in East Twin Swallet and one of which would require a stretcher evacuation. Our location at Lionel's Hole surface became crucial to the ongoing response as not only were we able to receive the messages from the underground cave link but even though only located just across the valley approximately 200m south of our location radio contact from the entrance to control was not possible so we also acted as a radio relay.

The conclusion to the day's training exercise was to rescue two casualties from East Twin Swallet. The initial team attending quickly found both casualties not too far apart. The first casualty found had a badly injured leg from a rock fall and he was lying in a narrow bit of passage. To look for the second caver two of us had to carefully climb past casualty 1 to continue searching. She was found only a few metres further on through a boulder choke. She was in very good physical condition other than appearing agitated and a bit confused. I asked her whether she was diabetic and received the expected positive answer. It was then a matter of rustling up some glucose or something. There didn't appear to be any glucose tablets in the first aid kit but one rescuer did have a chocolate biscuit bar that got passed forward. This appeared to do the trick although we did request further nutrition to be brought into the cave.

Two of us then escorted the diabetic casualty to the surface as 'walking wounded'. Firstly we had to get past casualty 1 and one rescuer sensibly used his body as a shield whilst we climbed over. As we exited we could see that the rigging teams were setting up belay ropes on a couple of the steeper sections of the cave to protect the stretcher casualty.

After handing over the diabetic casualty to the people on the surface I returned into the cave where the team were packaging casualty 1 and beginning the stretcher carry. The nature of the cave dictated that most of the carry was a case of passing the stretcher hand to hand which requires a fair few people. Fortunately the request for more help arrived at the surface as another team turned up to lend a hand.

From the little I saw of the stretcher carry it looked to me that the Underground Controller was very on the case. This will have provided a good role model for all those involved. It was "No stop there…I want another two people in that gap!... Ok on three… right we need as many people through ahead as we can." Etc. These awkward carries certainly need a good Underground Controller to organise people to ensure the stretcher is carefully manoeuvred, not only for the safety of the casualty but for the safety of the stretcher team. With these effective stretcher commands the casualty was soon at the surface.

All-in-all this was an extremely productive day that saw 65 people attending from at least four cave rescue teams. Thanks go to all from GCRG who supported the event at to Mendip Cave Rescue for hosting the event. It is hoped that a similar Joint Training Event can be held each year moving around the various areas.

Report compiled by Pete Turier, Ian Healey, Rachel Brown and Paul Taylor

PLUGS, FEATHERS AND ROCK SPLITTING PRACTICE

Mine Train Quarry

27th February 2016

One of the items from the programme for the BCRC Conference in June 2015 was a visit to Mine Train Quarry which is located very near to Cannop Ponds. This was for a practical exercise on the process of rock splitting using Plugs & Feathers. This was over- subscribed and the GCRG members were asked to relinquish their places to allow people from out of the area to attend. This was on the understanding that a further session would be set up.

Over the past couple of years John Hine and Paul Taylor have been assisting the quarry (Mine Train) owner, Jon Tainton, by undertaking a survey of the underground mine workings that exist within the quarry and also acting as safety cover and guides for the bat workers undertaking bat surveys as part of the owner's work in relationship to a planning application for an extension of the quarry.

The fifth visit to assist Jon was set to take place in February 2016 and with Jon's approval and support it was arranged to add to this visit a rock splitting session and also an opportunity for those attending to visit the underground workings.

Initially contact was made with those GCRG Members who were not able to attend the previous event and once confirmed it was then offered to a few others who it was felt would be interested and find it beneficial. Numbers were limited to a maximum of 12.

Presently the mine workings can be accessed from two points. Firstly, an original entrance located in the quarry face which presently involves a scramble and climb to reach it and then a descent down into the workings via a series of short pitches and climbs. The second entrance was produced when quarrying activities broke through the roof of one of the underground workings. However, this second access point is not normally left uncovered as it is secured by the placing of a very large rock over the opening which requires the use of a 20 Ton 360-degree excavator to remove it. Once this is removed, the excavator arm and the Ripper Hook provide the belay point for the ladder and rope for the short descent into the mine workings.

If you would like to see what the quarry and excavator look like then have a look at the video on You Tube channel 'Redhouse Productions Glos', this was shot in 2015.

https://www.youtube.com/watch?v=PNxhzz92RQ8

For this visit Jon had already prepared the hole and positioned the digger arm so once the ladder and rope were set up it was time for those going underground to kit up. John Hine went down first armed with an oxygen meter . This was purely precautionary as no bad air problems have been experienced during any of the visits.

The Mine Workings are not extensive but are very different from those found elsewhere within the Forest of Dean in that they are very narrow and linear in their development and generally aligned on a north-south axis and developed through two distinct periods both before and after the development of drilling. With the upper being the former and the lower being the latter. Initial exploration by cavers probably took place in the late 60s and early 70s with surveys being completed by both Tony Day and Ian Standing & Di Court and at which time it was referred to as Birch Hill Iron Mine and more likely to have come from its former name with the latter reference being drawn from the name of the quarry Mine Train. A copy of the Standing and Court survey is available from the GSS Library and although this is very good, no survey notes or data could be tracked down and it was this shortfall that led to the re-surveying by John Hine & Paul Taylor which subsequently provided the ability to produce line plots for inclusion on maps etc in relationship to the planning application. When compared the two surveys fitted very well together although quarrying activities have resulted in some of the workings being lost.

Those underground not only counted 18 bats which showed a fairly consistent population making use of the site but also some were able to venture down into the very lowest parts of the complex which was most evident from the quantity of mud now seen when they exited on their caving kit.

With everyone back on the surface is was time to move onto part two of the day's activities, the rock splitting .

Jon had already sorted out some blocks of stone and had laid them out in an area away from the main working area of the quarry and had also pre-drilled them. This saved a lot of time and of course noise and dust on the day. First of all, Jon gave an explanation around the theory and practice of using Plugs and Feathers and also the methods that he employs within his quarry.

Plugs and Feather sets are made up of three pieces. The 'Plug' is like a wedge that is driven down the middle of the two 'Feathers'. The latter being like a wedge that has been cut down the middle to make two halves. Lubrication of the components is very important and does without doubt make a considerable difference. Gear oil or chainsaw oil is perfect.

Plugs and Feathers provide a very effective method of dealing with the breaking up of rocks or the removal of a rock edge in a rescue situation where the use of explosives would not be appropriate with a casualty located or trapped in close proximity to the point requiring attention.

The key points relating to this method are:

Look, plan and execute.

The looking aspect is based around looking at the rock and determining where the right place is to drill the holes and get the right results. Work with the beds rather than across them if you can. Plan the drilling sequence. A good straight line of holes is much better than just random drilling and also drill as deep as you can. Execute is carrying out the actual splitting with the emphasis on taking your time and let the rock do a lot of the work for you. It's not all about hitting the plugs with as much force as you can. You will be amazed how little effort is needed.

The first rock that was to go under the hammer was quite large at around 1.75m long nearly 1m wide and 0.75m deep. Jon had drilled this on Friday with three holes and placed one set of his plugs and feathers *(Just the same as GCRG but much larger as he has the luxury of a compressed air drill*) in the central hole and driven these in and then left the rock. Overnight a crack had appeared along the whole length of the rock along the line of the bedding. Setting up his sledge hammer Jon gave it one gentle tap and the whole rock split. To be honest it happened so easily and quickly cameras were not ready fast enough to record the event although as you can see from the picture the result was very impressive. Even Jon was a little caught out by how quickly and easily it split off. (Pic 50).

A second hole in this rock then had a set of plugs & feathers inserted and although this still split relatively easily the level of effort was greater over a shorter period of time.

It was now time to try out the GCRG plugs and feathers; Jon had identified a rock that was nicely bedded and already had the signs of a crack on the one face. The GCRG sets require a 14mm dia hole and getting the size right is very critical. Too small and the sets will not fit in correctly and too big and they will be loose and very ineffective. Initially a 12mm dia hole was drilled to a depth of around 275mm and then the 14mm dia drill was used to open up the first 150mm of the hole. Five holes were drilled in a line across the top of the rock following the line of the bedding and approximately 150mm back from the edge. However only Three sets of plugs and feathers were inserted (Pic 34*). It is worth noting that although the GCRG sets are held together using a thick rubber band, care is needed when lifting the plug when inserting the sets into the holes as if lifted too high this releases the tension on the rubber band and the feathers can drop out and go down the hole.* **Ask Kevin about this. Fortunately the lost feather was retrieved later.**

A small amount of hammering onto the plugs soon produced a change in tone or ring as the pressure was applied and it was not long before a significant crack appeared across the top face passing through all of the holes and with a little more tapping the rock was split away.

It was then time to move onto another large piece of rock for another test of the GCRG plugs and feathers. Jon had pre-drilled this one ready just in case the GCRG ones did not do the job. Again a series of holes were drilled in a line across the top of the block. (Pic 40*).* Four on either side of the larger central hole and then eight sets of plugs and feathers added. (Pic 44*).* Gentle tapping of the plugs soon produced a crack which can just be seen in the next picture (Pic 45*).*

It was not long before the rock was split completely in half. All were amazed by how little effort had been required. Jon finished off the session by setting up three sets of his plugs and feathers in a large slab of rock (Picture 0036*).* In this instance he was splitting the slab across the beds rather than with them and it was clear to see how much additional effort was needed to achieve the end result.

This was a great day for which we are very grateful to Jon Tainton for the time and effort he put into this and for allowing everybody to visit the quarry. Everyone went away very impressed by what they had seen and been involved with.

Before we all left Jon sealed up the entrance hole into the mine workings by closing the door. The door being a 6 ton slab of rock moved into place with his 18 Ton excavator.

Since the session at the quarry one of the large lumps of limestone at the GCRG depot (in the Training Area) (Picture 0047*).* has been experimented on using 3 sets of plugs and feathers. A good result has been obtained although not quite as effective as when at the quarry but this rock has a number of 12mm thru bolts in it which are holding it together so this dramatically influenced the result. However again for the effort put in the results/rewards were very good. Also Jon has brought up to the depot one half of the block that was split off in picture 0045 so that this can be used for further trials**. Details will be circulated when this is going to take place.**

Thanks to everyone who took part in the day and especially Jon Tainton. We have sent him one of the 1 Pint Tankards and a copy of the BCRC Conference Film as a thankyou.

Videos taken on the day can been seen at the following locations

https://www.youtube.com/watch?v=hLO8Q2Q88Qo (Ian Healey)

https://www.youtube.com/watch?v=NS_5NYHDn7A (Paul Taylor)

Following on from this exercise GCRG have now made up a "Rock Splitting Kit" containing the Plugs and Feathers , 12mm & 14mm drills, Lump Hammer, Oil, Safety Goggles and Mask

Paul Taylor

GCRG DEPOT WORK

Some time before Steve's untimely death I discussed with him some of my thoughts about expanding the Training Area at the GCRG Depot. To these he added his thoughts and we drew up a rough plan to put these into fruition in the not too distant future. You are all aware that events took their toll and Steve lost his battle with liver cancer and died in July 2014. There is no doubt that this left a very big hole in all of our hearts and within GCRG. However out of this loss has come a lot of good and the fantastic auction day on July 4th 2015 where all of Steve's equipment and clothing went under the hammer is one that will be remembered by all who attended the event and contributed to the very significant sum of money that was raised. Acting as Executor of this part of Steve's instructions, I decided that as he also had strong links with the MCRO it would be appropriate to split the proceeds equally between the two teams and also make a donation to S&MWCRT. This was all completed some while back and in January of this year Pete Turier (GCRG Secretary) and Liz Maisey (GCRG Treasurer) both attended a MCRO training exercise at Total Access and made the formal presentation of the big cheque.

Adding to the GCRG share of auction were the proceeds from the BCRC Conference and also a proportion of the money given to GCRG by Paul and Rose Taylor. In total this came to quite a sum and it was decided to use the money to proceed with the construction of the Kit Washing and Drying Room in the rear section of the second of the 3-bay open building at the GCRG depot. Not only would this provide the rooms as described but it would also provide an extension to the Training Wall enhancing both GCRG training facilities but also allow for an expansion of the SRT training. This was one that was very dear to Steve Tomalin's heart and one that was discussed with him before he died. It was felt that completing this would be a fitting memory of Steve who you all know had 'Training' running through his blood.

So with a plan based around Steve's thoughts and ideas, work got underway to prepare for the construction. Unfortunately during this preliminary work a major unexpected problem manifested its self. The steel columns that support the roof were found to be in a very sorry state at ground level due to rusting and in some cases significant holes

were found in them. Potentially rendering the building unsafe *(Pic 1*). Action was needed fast. It had already been the intention to build concrete block pillars around two of the columns *(Pic 2)* so the simple answer was to extend this to the remainder and in doing so build a dwarf block wall around the remainder of the sides of the open bays. This would help to keep out the weather and debris.

When GCRG purchased the green steel Cladding that was used to re-roof and cover the walls of the main building, a good few years ago, enough additional cladding was purchased to enable the front of the 3-bay building to be covered-in. With the Drying Room project getting underway it was felt that it would be good to at least clad over the front of the garage and the first open bay. This started with a timber frame *(Pic 3*) and then the door head timber was added *(Pic 4*) which was then covered in the cladding *(Pic 5*). With the need to build a pillar around the steel column on the right hand side and with the cladding work progressing very well, it was felt that to leave the last bay open would be a waste. Although additional timber would be required to make the necessary frame, the additional cost and work was felt to be well worthwhile. With the openings filled in, with two pairs of doors and a personnel door added as well for ease of access. New plastic large bore guttering has also been installed and although there

will still be quite a bit of work to complete the fitting of all of the various flashings around the doors, the end result of all this effort is a total transformation of the front face of the building along with increased security and weather protection (Pic 6).


Pic 3


Pic 4


Pic 5


Pic 6

Before work could commence on the next stage, the actual construction of the interior rooms, it was decided to hold a working day so that a lot of collected rubbish could be got rid of, steel scrap disposed of and also the removal of a few small trees, one of which had fallen over onto the rear roof section around the back of the building. The latter proved to be a slight understatement and miss-judgement from a brief glimpse along the back of the building. The one that had fallen over was in fact around 750mm dia at its base and proved to be a bit more of a job. However at the end of the day a loaded trailer and various car boots filled with timber stood testimony to a job well done.

Although there are still more block pillars to build, three more of the offending columns have had concrete cast around their bases to secure them. Time and effort could now be devoted to continuing the building of a completely new block pillar half way across the open bays. This would be in-line with the front central pillar but also half way towards the back. This would not only provide for additional support for the roof when it reached up to the apex but was also to carry some steel work from which a timber bridge would be constructed back across to the existing platform. This has all been constructed and is decked in 19mm plywood sheeting. It has been left with two holes in it one at each end and on the underside of the timber beams a series of 12mm Eye Nuts have been provided so that a hanging traverse can be undertaken during SRT Training. This is the first real part of Steve's plan and I have to say it was a very rewarding and at times quite moving phase of the construction. He would be so very pleased to see this.

The next stage is to have another good tidy up and start the preparations for the construction of the rooms with the ceiling of these being constructed from sufficiently sized timbers so that again ply sheeting can be added so as to provide another working area for training. Work continues.

To all who helped on the working day thanks very much, Greg for taking away the scrap steel work and a special thanks to Gareth Jones and John Cliffe for all the work they have put in to get us to where we are already. Further working days are planned which will be advertised.

Paul Taylor

RAISING FUNDS FOR GCRG WITH 'EASY FUNDRAISING'

GCRG needs all the funding we can get, just look at all the work that has been carried out recently at the depot and there's more that still needs to be done.

"Easyfundraising" is a very simple way to raise income for GCRG by simply shopping online, something that we all do. There is no catch.

Donations are made by the retailer when an order is placed with them and with almost 3000 retailers registered including many of the well-known high street names ie Screwfix, Argos, Staples etc", there is plenty to choose from.

What do you have to do?

1 - Go to the website www.easyfundraising.org.uk

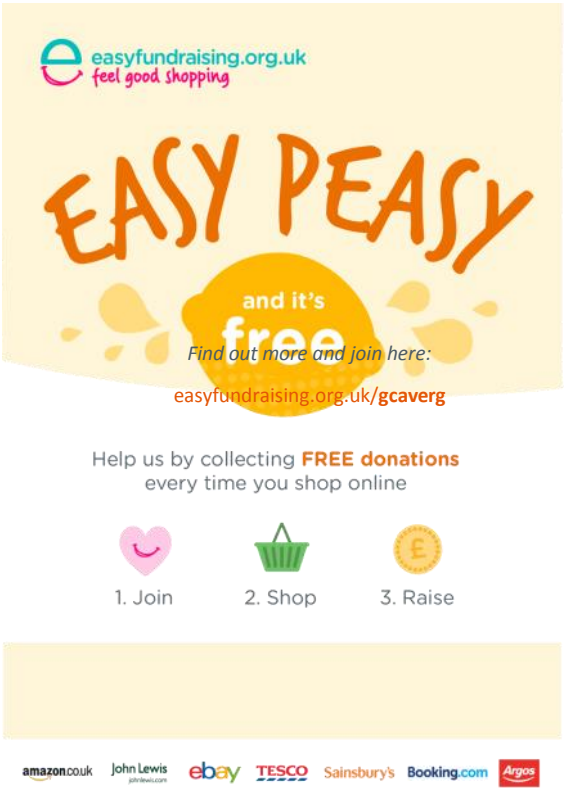
2 - Click on '**Find a cause**' and select the cause you wish to support (just search for "Cave Rescue" and you'll find GCRG).

3 - **Fill out** the quick form to register your details.

4 - Find the retailer you want to shop with.

5 - Click to visit the retailer, then shop as you normally would.

6 - Your donation will be shown in your easyfundraising account within 30 days.



Visit **easyfundraising.org.uk/gcaverg** to see how much has been raised for the group since easyfundraising was first identified by the Treasurer (Liz Maisey) as a source of funding back in 2014.

Since 2014 the use of easyfundraising has enabled GCRG to receive £540.14 with little effort whatsoever.

A really big thankyou to the following top 5 users of easyfundraising who between them have raised £419!

Paul Taylor: £185, Liz Maisey: £92, Greg Jones: £54, Anonymous 1: £51, Anonymous 2: £37

GCRG 50th ANNIVERSARY PUBLICATION

As part of GCRG's official celebration in 2015 of the group's 50th anniversary (GCRG was officially formed in May 1965) and as part of the anniversary celebration it was proposed that a special publication be compiled in order to record and promote the last five decades of the group.

Unfortunately this publication was not ready for 2015 but Dave has been asked to have a draft document to be available for the AGM and for it to be finally completed, printed and distributed to the members later this year.

This is GCRG's chance to compile and record for current and future members of the team (and posterity) the last 50 years of history of the group and the great changes it has made since 1965. It will also act as a valuable tool to help promote GCRG in general.

OTHER WAYS TO PROMOTE THE GROUP AND RAISE FUNDS?

We currently have for sale GCRG metal badges and Nicky's excellent hand-made mugs but are there perhaps other things we could do to fly the flag for the group and raise a few pounds?

How about the following, quite a few of the Mountain Rescue teams have things like this so why not us?

Christmas Cards: — How about a suitable festive GCRG cartoon or series of festive GCRG-related photos on a set of caving-related cards?

GCRG Car Sticker—Designed to show that we are supporters of GCRG and what it's responsible for etc. Other rescue organisations have these, perhaps GCRG should have too?

GCRG Recipe Book— Other organisations have done this and it could literally cover everything from members favourite home-made hedgerow liqueurs to desserts, main meals, chutneys, sauces etc. In short, anything that members make at home and which is a definite favourite. All this needs is input from the membership to make it work.

GCRG sew-on badges—We currently have embroidered clothing with the GCRG logo but is there the demand to also have the badge as a separate sew-on item too?

GCRG embroidered clothing—Does anyone want any more GCRG clothing with the embroidered badge?

Anything else? - Is there anything else we could potentially do to raise funds and fly the flag for the group?