C.C.P.C. Newsletter. January '98

D.C.R.O. Training Day at White Hall Outdoor Centre, 28th. September 1997.

About forty of us, from a number of caving clubs, assembled by 10.00 a.m., without really knowing what to expect, at least in my case. After an introductory talk we were sorted into five well mixed groups, and sent off to various locations around the centre for half-hour training sessions. my group started with 'Knots and rope management', then had 'Communications - radio and mole-phones', 'Engineering - turfa winch and hydraulic jack use', 'Stretcher loading and handling', and finally 'First-aid and casualty-care underground'. I personally found the knot-tying confusing, despite being able to tie the knots before we started (honest !), but the other sessions were useful and informative.

Lunch was provided, (soup, rolls and quiche) then we were sent to get kitted up in boots, oversuits and S.R.T. kit, before being re-mixed and sorted into 'rescue teams', each with a D.C.R.O. leader and a D.C.R.O. observer. The observer provided a list of equipment to be collected by the team, a map of the site marked with numbered locations, and the number that we had to go to. When we arrived the observer provided a slip with further instructions, telling us that we had to get the team and all equipment over a ten foot high wooden wall. No problem ! The next task provided by our observer was more difficult. We had to move a casualty, elected from our team, through a twenty-five foot long tunnel of tyres, with a dog-leg in the middle. The stretcher wouldn't pass through and there was no body-harness available, so we had to improvise one using slings. We managed, despite the incredible friction over the upstanding inner edges of the tyres, to get our casualty through the tunnel, followed by the rest of our team and all the equipment. Other tasks we had to complete included loading and raising a stretcher up a wall, using trees as belay points, and getting the team and all the equipment onto a tyre island in the middle of a pond, by constructing a bridge out of short planks. Our final task involved part of the team installing spits in blocks of limestone, while the rest of us raised a gritstone water trough (full) about eight inches, using the hydraulic jack and wooden blocks.

Other teams were equally busy on their own set of tasks, and there was plenty of opportunity for everyone to practise skills, or to learn from others, and there was lots of team building and co-operation taking place. All too soon we were out of time, and everyone returned to the main building for a hot drink and de-briefing. People I spoke to afterwards seemed to have got a lot out of the day. The organisation was excellent, and there were plenty of good quality handouts to take away and read later. I was left with the impression that cave rescue in Derbyshire is in good hands, and if I want to play my part I've got a lot to learn. Obviously the more hands-on experience the better, and real call-outs are not really the best time or place to learn, so I intend to get involved in any future training sessions I can, rather than depending on someone else knowing what to do. **Steve Knox**

Crewe C. P. C. Contribution to the DCA "Bolt Fund" and the installation of DMM hangers

I enclose a statement of the sales through DCA of "**Peak Rigging Guide 2**" to date. As you see, it comes to a total of £111.00 for this financial year.

I know that Crewe have donated profits from their own sales and this has totalled £199.00 to DCA, making a grand total your club has raised this year of no less than **£310.00**. A tremendous contribution!

The total coming in to the fund from all other sources this year, DCA Library sales, donations from others, has come to £111.43 - so Crewe's contibution is nearly 75% of the total of £421.43 raised this year to cover the costs of the programme.

We are also well aware that it is Crewe C. P. C. members who have done the bulk of the work in actually placing the DMM's this year - and we appreciate that the time and effort which this represents is way beyond calculation in terms of money.

Please pass on to all your members involved our thanks for all their hard work in so many aspects of this ongoing programme.

Yours sincerely,

Jenny Potts
Hon. Secretary/Treasurer

Bob Dearman
Hon. Chairman

Dated 6 October '97

cc. Mark Lovatt

DCA also recently received a National award (£1500) for "work involving volunteers." Jenny Potts and Bob Dearman came to our October meeting to say a personal thank you for our recent efforts with the bolting programme, Rigging Guide and Holme Bank Chert Mine not to mention other projects down Knotlow and P8.

For Sale.
Complete SRT rig, will split. Used but as new. Half price.
Sweat shirts. £9.00 **Plaid shirts/Khaki shirts £5.00**
Stitch plate £3.00
Ammo boxes and wet suit free to good home!!

You probably know by now that we finished bolting in Nettle (Thanks to Ralph, Tim, Dan, Paul H., Paul N., Darren, Tony) and that the cave was stripped of gear in one trip by Paul N. and Tim!!!

Janet Miller (of DCRO) has set herself up As a manufacturer of tackle sacks. They are around the same price as Caving Supplies and at first glance look quite good. She is also prepared to make stuff to order.

DERBYSHIRE CAVE RESCUE ORGANISATION

SOME BASIC INFORMATION

D.C.R.O. was formed in 1952 and is now one of sixteen voluntary underground rescue teams in the British Isles who provide the police with an underground search and rescue service. To date (September 1997) DCRO has been called out 263 times and has gone to the aid of 287 people and 38 animals. The number of callouts per annum fluctuates quite a lot, but in recent years has averaged around seven or eight.

MEMBERSHIP Full membership of DCRO is open to caving clubs or individual cavers. Application is made to the secretary and decided at a general meeting. Current subscription rates are £25 for clubs and £5 for individuals. Full members may vote at general meetings (April and November) with two votes for clubs and one vote for individuals. They also receive rescue reports, minutes and other circulars. It is possible to be a DCRO rescue team member without being a full member or belonging to a member club. Team membership is open to suitable and competent cavers who live close enough to the caving areas to make calling them out worthwhile (see "THE TEAMS" below). Team members do not pay a subscription, do not have a vote and do not receive all circulated material - only that relevant to training and social events.

ADMINISTRATION DCRO is run by an elected committee who meet at least four times a year. Normally, full or team members may attend as observers. The committee comprises chairman, secretary, treasurer, equipment officer, training officers, deputy officers and six to nine committee members. All controllers are ex officio members of the committee.

DCRO is a member of the British Cave Rescue Council (BCRC), the representative body for voluntary underground rescue organisations in the British Isles. Through the BCRC it is also affiliated to the Mountain Rescue Council (MRC), the representative body for mountain rescue in England and Wales. The BCRC and MRC work closely together to represent and support the interests of their member organisations and teams nationally and internationally.

FINANCES It currently costs between £2000 and £2500 per annum to run DCRO. In addition a contingency fund of several thousand pounds has to be maintained so that major equipment losses or repairs can be carried out when needed without affecting operational viability. Most annual expenditure is on new or replacement equipment, maintenance of the vehicle, the stores and equipment or on the training programme. Well under 10% of the total is spent on administration. Income is mostly from donations (very little from rescued cavers it has to be said!) and the fund raising efforts of DCRO and its members. Subscription income rarely exceeds £350 per annum. DCRO is a registered charity (No. 1017362).

OPERATIONS Almost all DCRO's search and/or rescue operations take place in the limestone area of the Peak District. About half take place in the caves and mines around Castleton and another third are shared more or less equally between the Eyam, Monyash and Matlock areas. Occasionally help is given to police forces outside Derbyshire, not only to incidents in caves or mines, but also in other underground places such as wells and tunnels. Through the BCRC, every police force has a cave rescue organisation upon which it can call for help. Because of the base locations of the rescue organisations, DCRO is the closest organisation for the following police force areas - Bedfordshire, Cambridgeshire, Cheshire (pt), Derbyshire, Greater Manchester (pt), Leicestershire, Lincolnshire, Norfolk, Northamptonshire, Nottinghamshire, South Yorkshire, Staffordshire (pt) and Warwickshire.

OPERATIONAL ORGANISATION The responsibility for organising and running DCRO operations lies with the controllers (currently nine) assisted by leaders (currently seven) and equipment officers (currently three). At most incidents there will be a controller in charge on the surface and also one in charge undergound. DCRO is always called out by the Derbyshire police and all its work is carried out in support of the police with whom the statutory responsibility for search and rescue lies.

EQUIPMENT DCRO's main equipment store is at Buxton police station. The equipment vehicle is kept there together with the bulk of the equipment. The van is kept loaded with all the equipment necessary to carry out most operations and further specialised equipment (for diving, engineering etc.) can be loaded on board if required. A smaller stock of equipment is kept at Matlock police station. This is sufficient to carry out minor operations.

THE TEAMS There are four DCRO teams - Central, North Staffordshire, Western and Diving. The total number of rescuers on all teams varies between 170 and 200. Most operations require between 12 and 70 rescuers.

Central Team - This is numerically the strongest team (usually between 110 & 120 rescuers) and as its members mostly live in the Peak District or on its Eastern and Southern fringes it is the one which supplies the personnel on most rescues.

North Staffs. Team - Membership for this team (usually between 25 & 30) is supplied by the Crewe C.P.C. and they often supply manpower to augment Central team on operations.

Western Team - Membership for this team (usually between 25 & 30 members) is supplied by the Derbyshire C.C. whose members live mostly in Greater Manchester and North Cheshire. This team assumes primary responsibility for the Alderly Edge copper mining area.

Diving Team - This is a specialist team for work underwater or beyond flooded passages underground inaccessible to non divers. Memberhip for this team is drawn from Cave Diving Group members and it is normally between 10 & 20 strong.

DERBYSHIRE CAVE RESCUE ORGANISATION

GUIDANCE & INFORMATION FOR RESCUE TEAM MEMBERS

ON BEING CALLED OUT.....

- When you are called out you should be given adequate information but, before ringing off do make sure you have been told what you really need to know (e.g. the correct rendezvous). The caller will be anxious to move on and call other team members and will not have time to chat or give a full briefing - that can wait until you arrive at the scene.
- If you really cannot attend an incident or are unfit to do so, please say so quickly (with a brief reason) and clear the line for other calls.
- During a callout, messages will not generally be left on answering machines because it takes too long and there is no guarentee that you will get the message in time to be of any help.
- Before leaving home, stop to think for a moment. Have you got all the necessary gear? E.g. SRT rig, cowstail, food and spare lighting (it could be a long job!), warm clothing and foul weather gear (you might be working on the surface "on a dark and stormy night!")
- Once you leave home do please drive carefully - it's much better to arrive a few minutes later than not to arrive at all!!

AT THE SCENE.....

- When you arrive at the scene please park intelligently. Leave room for other vehicles to park, don't obstruct the highway or block gateways. If you are in any doubt about your car becomimg a possible obstruction, leave the keys with someone you know will be remaining on the surface (e.g. the equipment officer at the DCRO van).
- Report to the surface controller as soon as you arrive. If he cannot be found, report to the DCRO van.
- Do watch what you say to whom. Remember, you could be overheard by a casualty's friend, relative or even the press. Please refer all outside enquiries about the incident to the surface controller.
- Make sure that when you go underground or re-emerge it is recorded on the entry/exit log. Make sure that any equipment you are carrying is logged at the same time.
- At all times, your safety, and the safety of all those around you is paramount. Watch out for each other!
- It is vital that the controllers are kept informed of events. If you have completed a given task, or are unable to complete one, ensure a controller is informed as soon as possible
- If you are asked to perform a task which you feel unable to do - please say so straight away.
- Don't leave the scene without telling the surface controller and logging off at the van.

INSURANCE.....

Once you have been called out you will be covered by two insurance policies:

- Personal Injury Insurance - This covers team members against injury on a callout or at an official practice. The policy is provided by the police and the maximum benefit is currently (Sept. 1997) £115000 payable on death. The policy does not cover road traffic accidents - this is a matter for your insurance.
- Public Liability Insurance - This covers team members and DCRO against third party claims for loss or injury. The policy is provided by the Mountain Rescue Council and is available to DCRO because of its membership of the British Cave Rescue Council.

Any queries on either of these policies should first be directed to the DCRO secretary.

TRAINING.....

Each year a training programme is arranged with a mixture of evening and full day (at weekend) training sessions. The programme is circulated to team members in January. It is important that you try and get to at least some of these sessions to get to know other team members, to get to be known by them and to learn about DCRO's equipment and methods.

CHANGES IN CALLOUT DETAILS.....

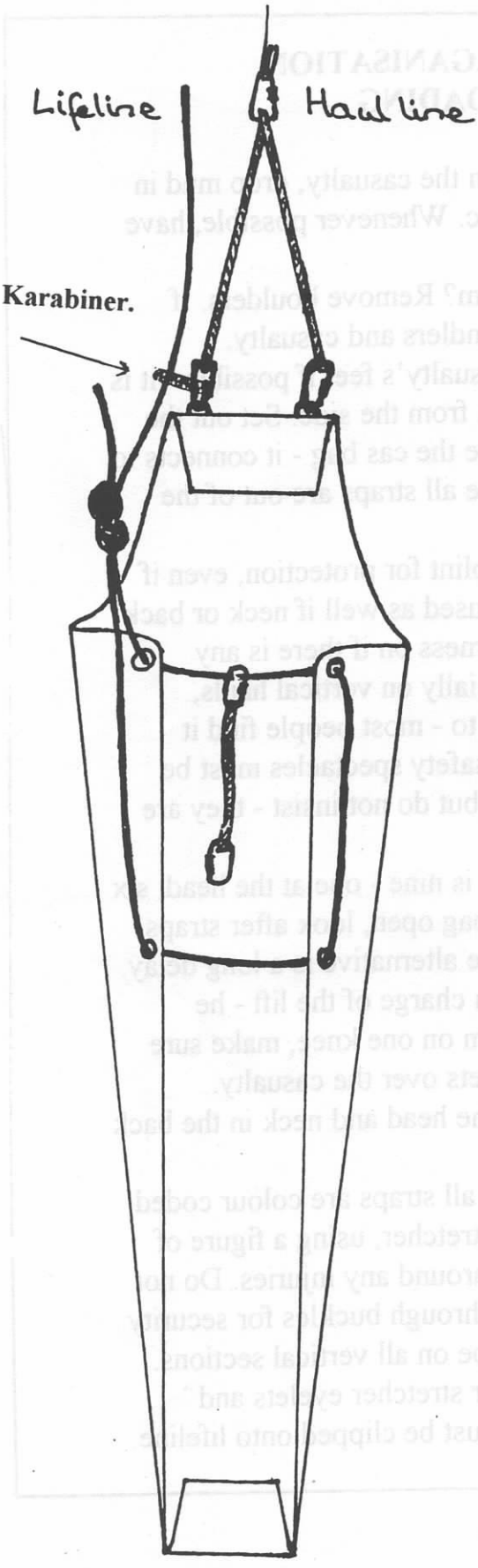
If you change address, telephone number or place of work please, please, please tell whoever amends your team callout list. If you don't, you can't be called out and ringing wrong numbers wastes valuable time in emergencies!

Central Team members should notify changes to Bill Whitehouse on 01298.871661

DERBYSHIRE CAVE RESCUE ORGANISATION
NOTES ON STRETCHER LOADING

1. **Be considerate of the Casualty** - Do not step on the casualty, drop mud in his face, burn him with your carbide lamp etc. etc. Whenever possible, have electric lamps on dip.
2. **Prepare the Loading Site** - Is there enough room? Remove boulders. If necessary dig out a safe working platform for handlers and casualty.
3. **Prepare the Stretcher** - Position stretcher at casualty's feet if possible - it is much easier to load the casualty 'end ways' than from the side. Set out the cas bag in the stretcher, and the back splint inside the cas bag - it connects to the stretcher through slots in the hood. Make sure all straps are out of the way and cannot get trapped under the casualty.
4. **Dressing the Casualty** - Always use the back splint for protection, even if there is no back injury. The neck collar must be used as well if neck or back injury is suspected. The casualty must have a harness on if there is any vertical hauling. A helmet should be worn, especially on vertical hauls, unless there is an over riding medical reason not to - most people find it more comfortable with a helmet on. Goggles or safety spectacles must be offered as protection against drips and splashes, but do not insist - they are very claustrophobic.
5. **Lifting the Casualty** - Ideal number of handlers is nine - one at the head, six to lift, two to manoeuvre the stretcher, hold cas bag open, look after straps, provide lighting or whatever - but use fewer if the alternative is a long delay. The person looking after the casualty's head is in charge of the lift - he counts to lift and to lower. Lifting position - down on one knee, make sure you are stable, no leaning forward clashing helmets over the casualty.
6. **Positioning the Casualty** - Correct position of the head and neck in the back splint is the key, everything else will follow.
7. **Securing the casualty** - Secure back splint first, all straps are colour coded. The foot loop secures casualty's position in the stretcher, using a figure of eight loop round his feet. Use plenty of padding around any injuries. Do not over tighten straps. Back thread stretcher straps through buckles for security.
8. **Lifeline** - Must be used in addition to hauling rope on all vertical sections. See diagram over - lifeline passes through all four stretcher eyelets and through Krab on haul rope. Casualty's harness must be clipped onto lifeline.

Refer to diagram overleaf for further details.



Mate stuck? Injured? Could you help?...

You'll probably need a short piece of "spare" rope. Can't undo your footloop? Then try the setup shown.
P. Ton.

Bowline on the bight.

Fig.8

Bowline (with stopper)

P8, Maskhill, Oxlow, Nettle, Knotlow, Hillocks
If you are planning to visit any of these can you contact Ralph first. You can probably help with the distribution of Rigging Guides.

Reduction in rope strength when tying knots.

Thought you might be interested in perusing the following information on residual rope strengths after tying knots. I've not translated their names into English cos' A) it's time some of you plebs learnt another language and b) it could be the makings of a future competition! I suspect you may find the "reef knot" particularly interesting!!
P.Ton (Equipment advisor to CCPC)

NOEUDS D'ATTACHE

	Noeuds	Aspect	Remarques en cours de traction	Rupture en Kg	Résistance Résiduelle en % de RO (1)
1	en Neuf			1640	70 %
2	en Huit			1290	55 %
3	de Chaise Double			1245	53%
4	de Chaise			1215	52 %
5	Papillon			1205	51%
6	de Vache			1175	50 %
5ex	de Nylon			1175	50%
8	de Cravate			1160	49 %
9	en Tête d'Alouette		Glissement puis blocage (sans clef)	1070	46%
10	de Pêcheur			1010	43 %
	de Batelier		Glissement à 440 (2)	—	—

(1) RO = 2350 kg ; (2) Ne glisse pas sur dispositif d'amarrage rugueux (arbre) ou de plus fort Ø

NOEUDS DE JONCTION

	Noeuds	Aspect	Remarques en cours de traction	Rupture en Kg	Résistance Résiduelle en % de RO(1)
1	de Pêcheur Double			1320	56 %
2	en Huit			1120	48 %
3	de Tisserand		R 1	1055	45 %
4	de Sangle			1035	44 %
5	de Pêcheur (même sens)		R 2	970	41 %
6	de Pêcheur (sens inverse)		R 3	925	39 %
	Plat		R 4	220	—

R1 : Glissement sans clef à 400 Kg ; pas de glissement avec clef.

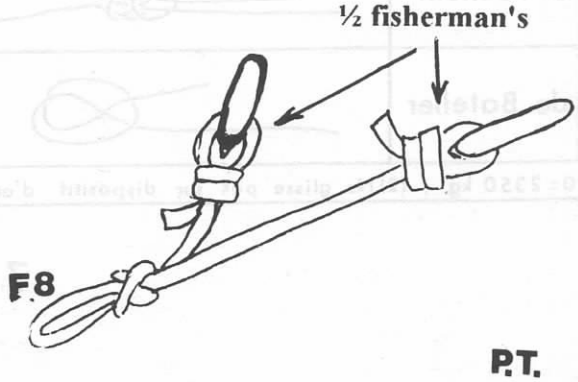
R2 : Glissement avec fusion de la gaine ; échappe à 970 Kg, avec ou sans clef.

R3 : Glissement puis stabilisation et rupture.

R4 : Echappe à 220 Kg !

(1) RO = 2350 Kg

Can't get "retainers" for your Cows -tail carabiners? Not happy with bits of bike inner tube? Try this set up. Crabs are secured with ½ a double fisherman's, central fig.8 as usual. Knots must be <u>TIGHT</u>.



P.T.

Saturday, 23rd. November 1997 : Cascade Cavern, Lathkill Dale.

Caves Of The Peak District, Page 183. : - N.G.R. 158 664. Length: 125ft. Depth: 60ft.

This was another one of those entries in the guide that I kept coming back to and wondering why I'd never made the effort to actually go and have a look. It's tempting to say that having been, I now know why I never bothered before, but I think that's unfair, as it actually turned out to be an interesting little trip.

Paul Nixon and I had a lazy start to the day, followed by lunch at Ed's, before getting permission at Rowson House Farm (right in Monyash village, just past the village hall) and heading off to park at the head of Lathkill Dale. The entrance is at the top of the slope, behind the water pumping station and the new toilets, and is easily recognised by the typical Knotlow-type steel lid set in concrete between concrete sleepers. The guide describes the entrance as 'a wide mineshaft 40' deep', but the situation is no longer quite so straight-forward. The shaft is completely covered over, and pivoting the lid to one side reveals a large, rectangular metal tank, about 6' by 4', by 4' high, apparently jammed in the top of the shaft. Some kind soul has hacked a jagged hole through the bottom of the tank, revealing the continuation of the shaft below. There is a good bar in the entrance opening for the main belay, and rings in the concrete sleepers for a back-up, so the rope hangs neatly through the jagged hole below, however there is a rub point on the bulging wall about ten feet down which is difficult to avoid. We found the pitch to be no more than 30' (10m.), so a rope of about 36' (12m.) would be adequate.The landing is at the top of a rubble slope with scattered metal and timber debris, leading down into a large, natural chamber with a flat roof. In the opposite direction there is a passage beneath stacked deads which are supported by rotten wooden stemples, so we never bothered with it. Down the slope there was a step down in the floor of about 6', with a decaying wooden ladder leading down past the remains of an old farm waggon to the lower rubble floor and more junk. The wall up to the left is much more attractive, with a small inlet trickling and spattering down a slope of light brown flowstone from a tiny opening above. The roof lowers ahead to walking height, with a large muddy passage turning off steeply downhill on the right, surrounded by digging equipment. This area is littered with plastic plumbing pipe which brings water from another inlet further on and discharges it close to a cleft in the floor where it disappears. A mined shaft in the floor near the end of the passage drops about 15' to a rubble floor, where the top of a cross-cut is just visible, though it is totally filled. We each descended the shaft using the old, timber-sided ladder which is in place, with a safety rope tied to a metal rail-line across the top. The main passage finishes just beyond the shaft, where there is a low working face in vein material, with a solution cavity above containing sharp edged chert blocks protruding from the walls. There was only the dig passage left to investigate. It descended steeply round a couple of corners, with a low crawl through to another drop to a very low section containing a pool of water. It was impossible to say whether the dig is still being worked, though it looks promising. The guide says: 'Natural phreatic clay filled passage has been dug by D.C.C.'. We had collected plenty of mineral samples by this time so we headed out, taking great care on the entrance pitch to keep the rope as much off the rub point as possible, and well away from the jagged metal edges of the tank. You get an interesting view of the metal tank and the other junk jammed in the top of the shaft as you look up from below !! The whole trip probably took about two hours, and left us feeling that without the junk it would be quite pleasant. Unfortunately it would be very difficult to get the rubbish out through the tank.

Steve Knox. 25.11.'97.

Descenders.

You no doubt recall information in the last newsletter re. problems with fig8 descenders causing the gates to fail on krabs. The BMC point out that the gate of a krab should not be considered to be a load bearing component of any system. If a load is likely to be anything other than a straight pull a maillon rapide should be used. Lyon Equipment re-issue their advice that there is a very small chance of a maillon opening the gate of a Petzl Stop. (even an 11mm maillon!) They recommend a semi-circular model as being the best for the job. Personally I would recommend a 10mm krab, bayonet, twistlock or screw. (in that order) P.Ton.

"Darrens Delights" 1998

Jan 11 Bull Pot (Y) 31 Lancaster (Y)

Feb 15 Knotlow/Hillocks (D) 28 Gavel/SD (Y)

March 7 GG/Flood(Y) 14 Link (Y) 29 Simpsons (Y)

April 12 Ogof Draenen(SW) 19 Hurnell Moss(Y)25 JH (D)

May 10 Vespers(Y) 16 Maskhill/Oxlow(D) 23/24 Manor F./Rhino(SW)

June 6 Little Hull(Y) 14 Black Shiver(Y) 20 Slaughter S.(SW) 28 Diccan(Y)

July 5 Pippikin(Y) `11 Eldon(D) 25 Lost Johns(Y)
Dan Yr Ogof(SW) to be confirmed.

Aug 1 Whitescar(Y) 15Penyghent(Y)23 OFD (SW) 29/30 GB/Longwood(M)

Sept 12Lanc.(Y) 20 Little N.(SW) 26/27Provi/Dow/Sell/Gill(Y)

Oct 10 GG/Dis (Y) Agen Allwedd to be confirmed.

Nov. 8 Pant Mawr (NW) 21 Notts Pot(Y)

Dec. 5 Tatham Wife(Y) 13 Darren Cilau (SW)

Results of recent Rope Tests. Autumn '97

I made a couple of visits to Whitehall this autumn to test our ropes, I thought this would be quicker than using the NCA service. My own feeling is that the Whitehall test is a "harsher" one than the NCA one. The results are detailed below.

10mm Edelrid, bought for Berger 91, 6 ½ years old. Tested annually since '95 by NCA. All samples passed test, Nov 97.

10mm Edelrid. Four years old. Bought Oct 93, Tested and found to be OK. NCA '96.
Nov.'97 two samples tested at Whitehall, one failed.
Dec. '97 Test repeated, two samples tested at Whitehall, one failed.

10mm Edelrid. Three years old. Bought Dec'94. This rope has a chequered history. On its first trip (Rumbling) it developed "rub points". I contacted Caving Supplies and Edelrid and was told it was due to poor rigging. **I can personally vouch that this was not the case**. Although I didn't rig it I did do the trip. The rope was not used for some months while we waited for Edelrids reply but was eventually put back into service. Some time in '97 the rope again developed a "rub point" and I was assured by the user that he was not aware of any reason for this. (He was not aware of our previous problems)
Nov. '97 two samples tested, one failed.
Dec.'97 Test repeated, two samples tested, one failed.
All failures occurred inside the bowline knot.
The Whitehall test consists of a 2m length of rope, soaked overnight, with fig 8 and bowline knots tied to give a 1m sample. The rope is subject to 2 FF1 drops.

Saturday, 6th. December 1997 : Holme Bank Chert Mine, Bakewell.

Caves of The Peak District, Page 242. : - N.G.R. 213 694. Length: 2.2 miles (approx).

'The Gate !!'

Holme Bank Chert Mine seems to have been mentioned at just about every Club meeting since December 1996, when Nigel Cooper responded to the initial enquiry, re-routed to our club by D.C.A., about whether anyone would be willing to have a go at gating an open entrance. A look at the survey reveals eight numbered entrances, and it was entrance 6 that the owner wanted closed for safety reasons, in particular to keep the local children out, as the mine is situated within easy walking distance of the middle of Bakewell.

Nigel inspected the site and found that the opening was about 8' wide and 9' high, requiring a substantial amount of 'brick-work' to support any gate that was fitted. Making the gate itself would be a considerable undertaking. At this point a friendly brick-layer, Mark Goulding, accompanied Nigel to the site and agreed to do whatever was necessary, without payment, once the gate was ready to be installed. Throughout the Spring Nigel welded whatever steel could be scrounged by members to construct the gate itself, then in May, as he was cutting steel for the framework, a piece fell and broke his toe. Finally the construction was completed, but installation was delayed, at first by bad weather, and then by the sheer size and weight of the finished gate and frame. (The assembly is 8' high and 5' wide, weighing about 250 Kg..) At last everything came together, and on Sunday, 21st. September 1997, with a supporting cast of Club members and their families, the gate was fixed in position, and Mark Goulding did a superb job of constructing the supporting masonry.

You might have thought that after nine months work, Nigel would have had enough of Holme Bank, but at the end of November he was back, taking part in the D.C.R.O. exercise, and then a week later he was there again guiding Paul Nixon and me round the place !

The Tourist Trip

We parked just behind the row of houses at the end of Holme Road, where the track comes down the hill from Smith's Runners Ltd., block works. The present owner of the mine owns the works which are situated in the quarry where entrances 2 and 3 are situated. Nigel had warned us that this is a dry trip, quite suitable for a cotton boiler suit over furies, and there are no pitches, so no need for any S.R.T. kit. Amazing ! With nothing else to carry, we took cameras. We entered the mine through Entrance 1, in a huge cutting off the track (to the right) with concrete walls carrying railway track overhead. The opening is walking size, and is supported by steel arches, and there is a pair of heavy metal gates, which looked chained closed, but the chain was only wrapped round. This was the 'Bottom Level', and was typical of most of the accessible passages.It was basically square in section, about 8' wide and 8' high, with a smooth floor which sloped gently down away from us into the mine. The walls were of dry-stone construction, from floor to roof, and were in fact 'packs' of waste material, filling the void created by removal of the 'product'. The roof was the smooth underside of a massive bed of rock above, and as we progressed through the mine this bed seemed to be more or less continuous. The miners seem to have removed a complete layer of material from the hillside, like taking the ham out of a sandwich, and have replaced it, as they worked, by vast areas of 'packs'.

Only a short distance along the Bottom Level we came to a Y junction, the first of dozens we were to pass later, and we turned right, downhill, to join another parallel level. Here a sharp turn back to the right into a rock-strewn passage, revealed tree roots hanging down through cracks in the roof, and a large pile of empty drinks cans and discarded sandwich packaging. We rejoined the downhill route which soon led us to another Y junction with standing water visible in each branch ahead, so we took the larger, right hand passage to Dynamite Chamber with the remains of a rising-main emerging vertically from the clear, blue-green water in an enlargement of the passage. Immediately in front of the pipework was a signalling device, and we could see down through the water for at least 20' into a flooded shaft. A diver's line stretched ahead across the chamber and disappeared where the sloping roof of the passage dipped beneath the surface. There does not seem to be any information available about how extensive the workings are below the present water level, but the pump work would indicate that the mine extended for a considerable distance. This flooded area was used during the D.C.R.O. search and sump-rescue the previous weekend, and apparently is often used for diver training. We turned back uphill, and resumed our tour of the drier passages above.

It would be impossible to describe our route in any detail, and there would be little value in doing so. A look at the survey will reveal the complexity of the layout, but will also show that most of the main passages run NNE-SSW, being linked at the northern end by an irregular, and at times contorted passage, known as M1 Passage, which leads from the upper entrances in the hill-top quarry downhill to the flooded

zone, following the dip of the bedding. Examination seems to indicate that this passage represents the latest period of working, especially at the upper end, and includes many sections of 'working face'.

We found a way from Bottom Level to Smithy Level, and on, to eventually join M1, examining en route a cast iron(?) windlass, and a section of passage littered with rock-drill bits and associated metalwork. One dead-end gallery had a timber framework, covered with old carpet and boarding, near the end which partially blocked off the passage. Beyond the framework the passage walls, roof and floor were covered with powdery white impact scars, and the 'pack' which filled the gallery ahead was unlike any other observed in the mine. Each individual rock was apparently rammed into the pack, rather than being built in, and the rocks were unusually even in size. Nigel later suggested that this might have been the result of using a 'stowing' machine, a system long banned on safety grounds. Basically waste rock was fed into the machine via a hopper, and was then mechanically reduced in size before being 'fired' at the space being filled. The resulting 'pack' had an unusually concave surface. We assume that the timber and carpet frame was to protect the machine operator from ricochets, but the noise he had to endure must have been incredible !

Throughout the mine there is clear evidence of the enormous downward pressure of the layers of rock above pressing down onto the supporting 'packs'. In many places the walls of the 'packs' bulge outwards, and there are areas of collapse, with the 'pack' spilling across the passageway to make partial or complete blockages. Supporting columns of stacked rocks are usually topped with timber blocks or wedges, and in every case these timbers have been squeezed to almost nothing, with the rocks below showing major cracks or signs of compression. In some of the more recent workings the miners used breeze blocks to construct pillars, and these are crumbling and splitting apart as the roof drops. As the 'packs' compress at different rates, depending on construction and density, stresses in the roof have produced fracture lines, and in some places large blocks have become detached and have fallen into the passageway beneath. (In 1924 a miner was killed when a block of limestone fell from the roof. - Ref. 1.)

Many of the passages still contain railway tracks on timber sleepers, or the regular hollows where sleepers have rotted away or been lifted after the tracks were removed. It seems the method of working the chert involved undercutting the base of the chert beds to a depth of about two metres along the length of the working face, while temporary supports of piled up rocks prevented the chert bed from collapsing. Rollers were put in place and then the supporting pillars were knocked out so the large blocks of chert dropped. The blocks could then be transferred on to the waiting trucks on the rails, for transportation to the surface, before being processed and sent on for their eventual use as pavers in the china clay grinding process in the Staffordshire potteries. (You can still see this at Cheddleton Flint Mill, near Leek.) Many heavy-duty trucks remain in use in the block-works quarry, outside entrance 3, and it may be that these are original mine trucks. They consist of an oval loop of substantial steel girder mounted on two axles with solid metal-flanged wheels, and would seem to be ideal for transporting large blocks of stone. In one of the upper, sloping, haulage levels, close to the hill top quarry (entrances 5, 6, 7 and 8) we examined a suspended timber 'truck-stop', designed to allow trucks to be pulled past it on their way up, but it would catch runaways on their way down ! There are many working-face areas in the upper levels of the mine that look as if the miners just walked away when the mine closed in the 1950s, leaving the undercut beds of chert waiting to be dropped. These particular areas need extreme caution during exploration. Little is known of the history of the mine, although it is thought to have been worked only from the latter half of the 19th Century.

As we were close to 'The Gate' (entrance 6) we used it to regain daylight, much to the surprise of a couple of National Park Rangers who were using the shelter to eat their lunches! We ended up taking them on a short guided tour round the upper passages and out through entrance 8, the one which is set to become 'Son of Holme Bank' in gate-making circles, as it is in an unstable state, with an unfinished attempt to gate it, which looks several years old. We left the Rangers and strolled down the hill to look at the run in shaft which is entrance 4, just through the five-barred gate and off the track to the left. From below we had already seen the soil cone spilling out into the end of one of the levels, and apparently this was open until very recently for ventilation purposes. In the block-works quarry we gained access to entrance 3 by climbing an 8' metal ladder to the obvious entrance door at the back of the works. Immediately inside were the remains of a ventilation blower and a passage leading to a large open space with a line of supporting pillars. Two small areas of floor were taped off to protect dripstone formations and the early stages of cave pearl formation. Outside again, we looked at entrance 2 which has been lined with timber and seemed to be blocked off a short way in to turn it into a storeroom for wooden wedges and blocks, all well coated with dust so perhaps they were more related to the mine working than the block works.

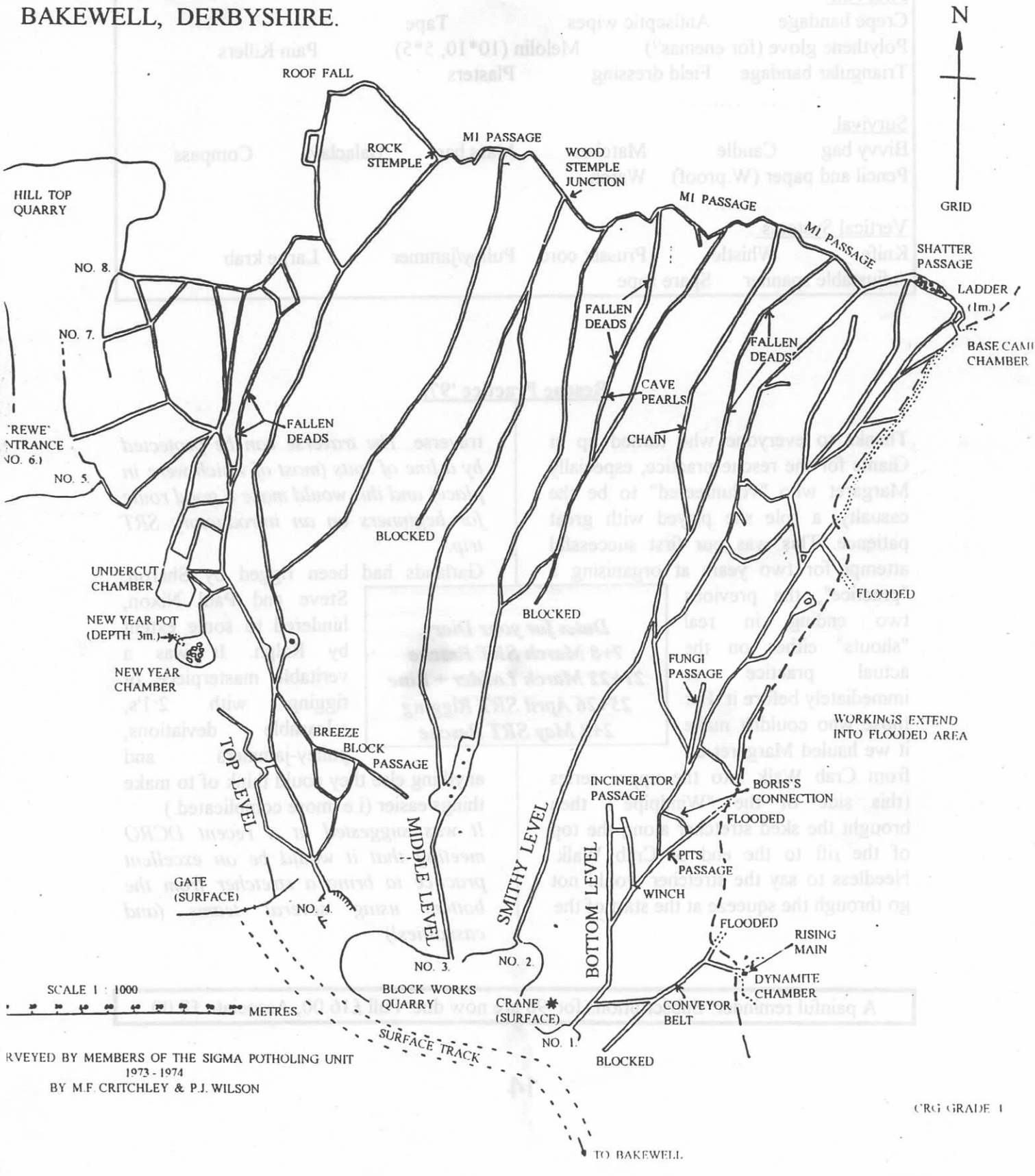
Other entrances which we examined were: Entrance 7 - almost completely blocked by the bulldozed entrance ramp down into the hill top quarry, and Entrance 5 - open, close to the newly gated Entrance 6, but in a dangerously unstable state, with large hanging blocks to crawl under. We did manage to miss out the only natural part of the whole place ! New Year Pot is a natural shaft 3 metres deep in New Year Chamber, leading to a silted bedding plane. It is somewhere up a side level in the upper part of the mine.

Colin 'Steve' Knox, 11-12-'97.

Ref.: 1. Brown I.J., 1969, 'Mine Fatalities in the Derbyshire Metalliferous Mining Area, 1874-1939'. Bull. P.D.M.H.S., Vol. 4, No. 1, pp. 59-66.

2. Critchley & Wilson, 1975, 'Holme Bank Chert Mine, Bakewell', Bull. P.D.M.H.S.,Vol. 6, No.1, pp 1-5, including Survey.

HOLME BANK CHERT MINE
BAKEWELL, DERBYSHIRE.



"Emergency Kit"

This is a list of recommended kit that I know you all carry!! Some of it can be packed into a BDH, some of it round your neck and the poly bag stuffed down your welly. Nothing (except your head) should go inside your helmet.

Lighting

Spare bulb for main light. Emergency light (on helmet) Spare light (Petzl?)

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First Aid.

Crepe bandage Antiseptic wipes Tape
Polythene glove (for enemas?) Melolin (10*10, 5*5) Pain Killers
Triangular bandage Field dressing Plasters

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Survival.

Bivvy bag Candle Matches Mars bar Balaclava Compass
Pencil and paper (W.proof) Watch

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Vertical Systems.

Knife Whistle Prussik cord Pulley/jammer Large krab
Adjustable spanner Spare rope

Rescue Practice '97.

Thanks to everyone who turned up at Giants for the rescue practice, especially Margaret who "volunteered" to be the casualty, a role she played with great patience. This was our first successful attempt for two years at organising a "practice", the previous two ending in real "shouts" either on the actual practice or immediately before it. For those who couldn't make it we hauled Margaret up from Crab Walk into the upper series (this side of the "Windpipe") then brought the sked stretcher along the top of the rift to the end of Crab Walk. Needless to say the stretcher would not go through the squeeze at the start of the traverse. *The traverse can be protected by a line of spits (most of which were in place) and this would make a good route for beginners on an introductory SRT trip.*

Garlands had been rigged by Sharon, Steve and Paul Nixon, hindered to some extent by Ralph. It was a veritable masterpiece of rigging with 2:1's, releasable deviations, pulley-jammers and anything else they could think of to make things easier (i.e. more complicated.)

It was suggested at a recent DCRO meeting that it would be an excellent practice to bring a stretcher from the bottom using several teams (and casualties!)

Dates for your Diary
7+8 March SRT Rescue
21+22 March Ladder + Line
25+26 April SRT Rigging
2+3 May SRT Rescue

A painful reminder: Subscriptions for '98 are now due. Full £16.00, Associate £8.00