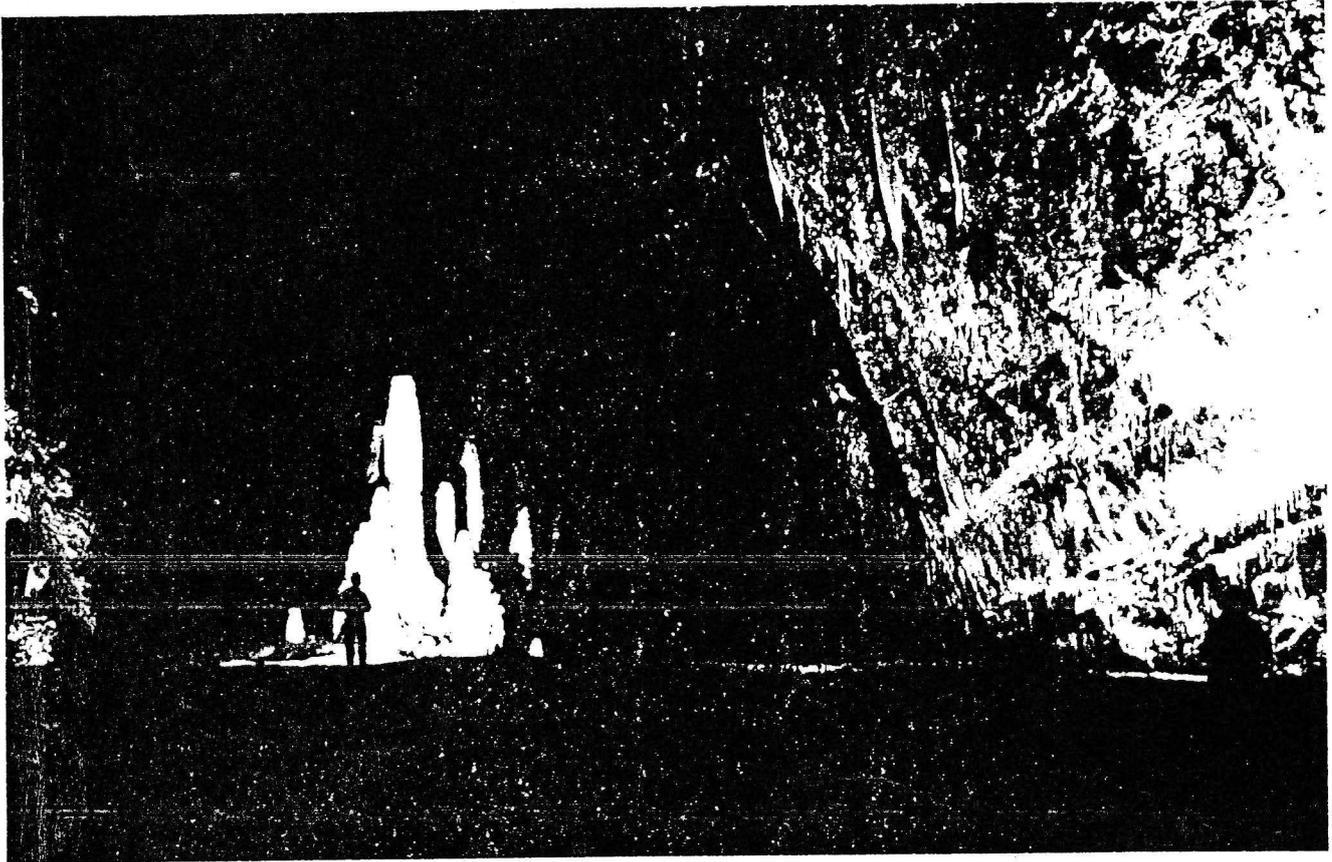


CREWE CLIMBING AND POTHOLING CLUB



Gouffre Berger Expedition

1983

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In the Hall of the Thirteen.



A small Group of Expedition Members.
Photography Chris Sowe

REPORT OF THE 1983 C.C.P.C.GOUFFRE BERGER EXPEDITION

Summary

This report outlines the main events of the 1983 Crewe Climbing and Potholing Club Expedition to the Gouffre Berger. Excerpts from the expedition log and photographs are used to record some of the experiences obtained. Appendices are provided to guide future expedition organisers in planning, obtaining permission, and organising a similar trip. Expedition statistics, equipment lists, and other useful information are also provided. The expedition objectives were as follows:-

1. To mark the Club's 25th. Anniversary by a descent of the Gouffre Berger.
2. To provide an up-to-date written and photographic record of the descent.
3. To organise a collaborative expedition with several British and foreign caving clubs to promote friendly relations between clubs.

Introduction

The eternal beauty and grandeur of the Hall of the Thirteen attracts cavers to the Gouffre Berger like moths to a candle. In the winter of 1981 this irresistible force, advancing age, and the desire to celebrate the club's twenty-fifth anniversary drove John Gillett to write to the Mayor of Engins for permission to descend. The Mayor, with Gallic aplomb, ignored the letter as was his usual opening gambit for such requests, but undeterred, John wrote to several prominent French cavers to enlist support in convincing the Mayor of our existence and credibility. A further letter couched in impeccable and slightly dry French produced a prompt reply. The Mayor was unable to grant permission for 1982 as the cave was fully booked, but promised first choice of the 1983 bookings. A preliminary reservation was made, after some discussion at a club meeting to agree dates, and the 1983 C.C.P.C. Gouffre Berger Expedition was on!

Good news travels fast and club members were soon clamouring for further details, so a meeting was arranged to gather opinions, support, and ideas for organising the venture. From this point onwards a diary of meetings and events was kept, and most of the ensuing saga has been drawn from this.

Preliminary Manoeuvres

Sufficient information was gleaned from journals and discussions with other cavers about previous expeditions to the Gouffre Berger to enable John Gillett, Ralph Johnson, Paul Holdcroft and Tony Gamble to make a preliminary assessment of what would be involved in the descent before the first formal expedition meeting was convened. This eventually took place on 26th. May 1982 at the 'Bleeding Wolf', Kidsgrove where John, Ralph, Paul, and Tony were supported by club members Terry Ball, Liam Kealy, Tony Reynolds and Alan Scragg. Boyd and Jenny Potts of the Orpheus club also attended to give advice and as potential expedition members. The advantages of enlisting the help of other clubs had been discussed previously, and it had been agreed that friends should be contacted to provide extra effort and expertise.

This first meeting raised many questions about equipment, telephones, costs, provisions, and expedition organisation. John and Ralph agreed to be responsible for organisation, Paul and Tony for tackle, and Terry for telephones. After some discussion, it was decided to use 11mm. 'Bluewater' rope for tackling, and to budget for about thirty members on this basis. The choice of rope diameter, affecting costs and tackle burden, was one of the most critical decisions taken. Full of enthusiasm, the participants drove off into the night fully aware of the magnitude of the task in hand.

Three more meetings were held at the same venue on a monthly basis with the same core participants, and by the end of September an expedition Bank Account had been opened with a starting balance of £60 donated from C.C.P.C. funds to get things moving. More than forty firms were contacted to try and obtain free or discounted goods, and a few replied with offers of help (see Acknowledgements). The equipment requirements were assessed, and preliminary cost estimates based on thirty cavers indicated that a deposit of £30 per head should be adequate. Alternative transport arrangements were studied including Minibus hire, towed trailers, and the use of personal vehicles. Several friendly caving clubs had expressed a willingness to participate and the French club Ziloko Gizonak had been invited as some recompense for their hospitality in various trips to the Pyrenees.

By the end of 1982, twelve club members and four Orpheus members had paid deposits and a further fifteen cavers had promised to pay, so it looked as though the budgetted costs would be met and the tackle burden handled effectively. An overall plan of all the activities necessary prior to the descent was drawn up so that the critical activities could be defined (See Appendix 5.). Detailed studies of alternative tackling arrangements and descent strategies were made. It was decided to form teams of about four cavers, each of whom was well-known to the others, and to plan descents on a team basis to simplify management. By Christmas the organisation seemed fairly well defined and we moved ahead confidently into the New Year.

The Warm-up Month by Month

January was a month of hectic activity albeit on phone and paper. The outbreak of Histoplasmosis on the Mexico Expedition had resulted in heavy claims on the B.C.R.A. Insurance, and we were warned that the premiums that we had budgetted for could well be doubled. Several alternative insurance firms were contacted, but their premiums were all more than double those budgetted, so a reappraisal of expedition finances was carried out. The costing was performed in some detail as it had been decided to approach the British Sports Council for a grant, and a complete financial and organisational statement was required as part of the application procedure. The budget for about thirty expedition members, assuming a trailer was used to transport tackle, came to about £6000 including about £1000 for rope and hangers. Luckily the Westminster Speleological Group, the Wessex Caving Club, and several other clubs provided enough additional members to enable the costs to be met, as well as providing an injection of continental caving expertise. A Newsletter was circulated to the many far-flung members to inform them of the current position, including estimates of personal costs, personal tackle needs, and dates of practice meets.

During February, the Mayor of Engins wrote asking for the expedition dates to be confirmed for him to complete his diary of expeditions to the Gouffre Berger for 1983. He asked that a leader be nominated to be totally responsible for all activities during the period booked, and John now took on this role with Ralph as deputy. We requested the Mayor to reserve the 1st. to 12th. August for us, as this promised to provide the best weather and suited the holiday arrangements of most expedition members. Having fixed the dates and studied all the alternative routes to the area, the ferry bookings were made. The optimum route for length, cost, timing, and ferry availability appeared to lie via Dover, Calais, then down the Autoroutes via Paris, and Lyons to Grenoble. We had obtained a discount from 'Sealink' ferries and most members took advantage of this, although some obtained discounts through personal contacts.

At the end of February the Ghar Parau Committee interview for the British Sports Council awards took place in Castleton. This provided an interesting experience, but unfortunately the committee of well-known cavers considered our expedition was only a holiday excursion and unworthy of a grant. We were very disappointed and felt quite strongly that there should be more support for ordinary sporting activities underground as well as for the more esoteric research projects. We were advised to approach our local Sports Council for help which seemed quite promising at first as the initial contacts were helpful. Unfortunately however, the area in which we met and lived fell between the jurisdictions of several local Sports Councils who each in turn passed our request on in a circular route from which we gained nothing.

In March, a caving conference on expedition organisation was organised by the B.C.R.A. at Buxton. Several expedition members attended and although little was learned about expedition planning several useful contacts were made and an entertaining account of an early Gouffre Berger expedition was heard from Dave Allsop. Paul Ramsden provided details of his flood stricken trip to the Gouffre Berger in 1982 together the descent plans for three teams and the latest tackle list. He said that the cave was very cold and advised wearing furry suits and waterproof overalls, with a rubber 'Pontonière' for the canals. He also stressed the importance of each caver being self-sufficient for food and light as it was easy to become separated and trapped if a sudden storm occurred. The B.C.R.A. Insurance Officer, Geoff Wells was also there, and although he could not provide a firm insurance quotation before Easter, confirmed that the premium was likely to be double that of the previous year due to the recent heavy claims.

The first expedition practice meet was also held in March beneath Leck Fell in Notts Pot and Lost John's. Seventeen cavers turned up and a planning scheme devised by John to test out some of his ideas was used to enable teams to rig Notts and Lost John's simultaneously, swap over, and derig likewise. Both potholes were very wet, and the roaring torrent in the bottom of Lost John's swept a couple of cavers away, who luckily retrieved themselves without mishap. The exercise lasted from 9a.m. until 6p.m. with each team descending a total depth of about 250m. and covering a horizontal distance, including surface walking, of about 4 kilometres. It was a refreshing and enjoyable event which enabled expedition members to get to know each other as well as to get fit.

April was a month of surprises. The Mayor of Engins sent details of the teams before and after ours, and we discovered that an English team, The Black and Tans, from the Manchester area, had booked the fortnight after ours. Their leader, John Heginbotham, conferred with John Gillett about sharing various items of equipment to the mutual advantage of both expeditions and it was agreed that the rescue stretcher, telephone line, and First Aid kits would be left in place by our team. The team prior to ours was from Liège and John rang their leader, Pierre Casters, who was willing to leave his telephone line in place and some hand-lines. These arrangements could not have been bettered, and the amicable relations meant that the overlap periods between expeditions could be treated in a relaxed manner, especially if the weather presented delays in detackling to any team.

Another surprise followed when Jack Sheldon, of the Army Caving Association wrote to John for advice on obtaining permission for a descent in 1984. Jack was subsequently successful in his application and then asked if he could perform a reconnaissance whilst we had the system rigged. We agreed that this would be all right provided that he took out adequate insurance, and in response, Jack offered to arrange to ferry out some of our equipment as there was an A.C.A. group caving in the Vercors during the period of the expedition. A 'Four ton' truck would be used so we could send quite a weight of tackle if we wished. This was a Godsend for us as we were still in the throes of deciding exactly how to transport the increasingly growing weight of equipment and supplies. A few packing and weighing experiments were conducted and it was apparent that we could transport all the 'strategic' gear in John's Saab by stripping out the rear seats and only leaving room for two occupants. The 'non-strategic' and personal gear, weighing about 5cwt., could then be sent out with the A.C.A. The resultant savings in costs from not having to repair the club trailer, buy a towbar, cover extra ferry and insurance charges etc., were a welcome boost to the expedition budget.

Also during April, we gathered in supplies at discount prices or for free from our sponsors, additionally, Michel Lauga of the Ziloko Gizonak offered to purchase our carbide supplies for us as his contribution to the exchequer. A further Newsletter was despatched to the thirty seven paid-up members detailing all the current events, with an overall plan of campaign, advice on personal gear, and the dates of future practice meets. We had a practice meet at Gaping Ghyll, with descents of the Main Shaft and Flood Entrance. The Spring had sprung and we were now most certainly on the move into a Summer full of promise.

In May, the main physical event was a rather abortive practice meet in the Ogof Ffynnon Ddu system involving fourteen cavers. The original plan was for one team to rig Pendulum Passage, travel downstream to the Marble Showers and then traverse out over the upper series and then to O.F.D.3. Another team, entering at O.F.D.1 would travel upstream, ascend Pendulum Passage, and proceed to O.F.D.3, with all parties leaving the system through the Top Entrance. In the final event, the team travelling upstream had an affair with a falling boulder in Pendulum Passage and most of this group were unable to proceed past the Crevasse, so after some discussion everyone went out without visiting O.F.D.3 at all. Although the planning worked adequately several of the less experienced members learnt that their stamina needed building up; an important lesson for the final expedition.

Also in May, having paid the B.C.R.A. Insurance premiums, obtained First Aid certificates from the First-aiders, and listed the names of all the expedition members, a dossier was sent to the Mayor of Engins to finalise the authorisation of our descent. He did not reply, but a short phone call soon established that we were all clear and that there were no further formalities required. The Mayor invited us to call in and see him as we passed through Engins en route for La Molière, and wished us the best of luck.

June was a month in which many loose ends were tied up. The ferry bookings were confirmed and paid for, the final tackle items and supplies were bought, and we held a large scale practice meet in the Lancaster-Easegill-Pippikin system to try out the new personal gear. A final expedition meeting was held at 'The Bleeding Wolf' on 29th. June to check that Passports, holiday insurance, Francs, and personal gear had been obtained, and to arrange the rendezvous at La Molière.

The various duties were agreed for running the campsite and keeping account of underground activities. The planning system for descents and ascents, and for rigging and derigging the cave was explained (see Appendix 5.). The final Newsletter was then circulated to each member with all the details which had been agreed clearly presented. One minor panic occurred over the supply of hangers. Of the original hundred which had been manufactured earlier in the year, only fifty could be found! There was nothing for it but to purchase more and investigate the cause at a later date. A second minor panic occurred when Paul eventually took his dinghy down from his loft and found that it had perished! Several frantic phone calls later we established that we could borrow one from the Westminster club much to the relief of all and sundry.

July was the month for packing and departures. True to their promise, the A.C.A. collected the 'non-strategic' equipment for transport to La Chapelle en Vercors in their 'Four-ton' truck. Ralph packed the emergency supplies for Camp1 and Camp2, cut the ropes to size, and labelled and packed all the tackle into tackle bags for the rigging teams. The medical kits were made up, and last minute purchases of extra rope, Maillon Rapides, and other essential items were completed. We had chosen to travel on the weekend of the great flight South by the French holiday-makers, so various departure times were used depending on members ideas for avoiding traffic jams. Luckily the weather was fine, the Channel calm, and everyone had an accident-free journey down through France to La Molière, one on foot, one by train, one by motorbike, two by bus, and the rest by car.

Establishing Base Camp.

Among the first arrivals in the area were Brian Cowie and Russell Carter of the Orpheus who saved a day's work by travelling to La Chapelle en Vercors to see the A.C.A. about the gear which had been ferried out the week before. The A.C.A. were again most helpful and managed to move the gear up to La Molière, so that, when John and Liam arrived on Saturday 30th. July, fresh from sipping mint tea with the Mayor, they found Brian and Russell together with Rachael Clarke guarding an enormous pile of equipment amidst the glinting metal of the French tourists' cars. It transpired that Paul Bates and Dave Pike had also arrived, and that they had reconnoitred the route to the cave entrance before returning to Autrans to sample the local wine. As well as helping on guard duty against the marauding cows and tourists, Rachael had spoken to the local shepherd, who had been most unhelpful and aggravated when she asked him to unchain the barrier across the bridle-path to the plateau to enable the carloads of gear to be driven to a likely campsite. The shepherd's attitude, the milling tourists, the broiling sun, and a large notice warning that a deer had recently died of Rabies in the woods, did not help to establish a friendly environment to camp in. An additional worry was that water was in short supply and the only source was the piped spring-water feeding the cattle troughs not far from the carpark and the tourist hordes. We felt somewhat exposed, and a tour of the plateau looking for a campsite for fifty people made us feel even more concerned as the best spot seemed to be exactly where the shepherd did not want us to go. John and Liam went off to parley with the shepherd, who had retired in high dudgeon to his hut about half a mile away.

As John and Liam approached the fenced enclosure around the hut, several fierce dogs ran out barking and snarling. Mauvais chien! How does one tell a French dog to desist from gnawing one's ankles without resorting to a well aimed kick in its ribs? Luckily the shepherd, a surprisingly Nordic looking young man, called them off in the nick of time. This respite allowed John to open a conversation in French only a degree less hideous than Rachael's.

Words flowed to and fro. Fifty aggressive cavers were weighed against two hundred stampeding cows. The patronage of the Mayor of Engins was balanced against the shepherd's boss. The impeccable demeanour of English cavers was compared to the vile habits of the French tourists. Liam opted out and returned to base for a brew.

About half an hour later, amicable relations had been established and, chatting about country life in their respective lands, John and the shepherd strolled across the plateau with the dogs at their heels to view the shepherd's idea of the ideal campsite. This was located in a sheltered hollow, out of sight of the car-park, fairly close to the water supply, and large enough to meet our needs. There was some evidence of previous occupation, and we later learned that this was the site of the Engins village barbecue. The shepherd seemed sure that his herd would not be offended by our presence there as it was near the woods and off their main grazing routes. Bidding the shepherd farewell, John returned to the others who were still valiantly guarding the gear and beginning to wilt in the hot sun. His news was received with some relief and a further inspection of the site confirmed that the location of Base Camp was now established.

A steady stream of equipment soon began to flow down the hill from the cars and tackle dump. Tents were erected on the prime sites, with people vying for the best chances of shade at mid-day and with the least chance of hitting the rocky surface. As the afternoon wore on, other arrivals appeared on the scene, and by evening most of the C.C.P.C and Orpheus members had arrived. Paul Bates and Dave Pike arrived too, somewhat the worse for wear after an experience with the local red biddy.

We now had all the necessary equipment and enough cavers to make an early start in the morning to rig the cave. Preparations were made and Ralph, the two Tonys, Paul and Terry went off to drink up all the beer in Autrans! In the early hours of the next morning everyone was hugely entertained by the hilarious attempts of Ralph and Cliff to establish a basis for a competition between their champions, Tony Gamble and Cliff's brother respectively. They eventually went to bed leaving the campers to grab what sleep they could. The scene was set, the actors on stage, and the curtains ready to open on the first day's engagement with the Gouffre Berger.

The Portage.

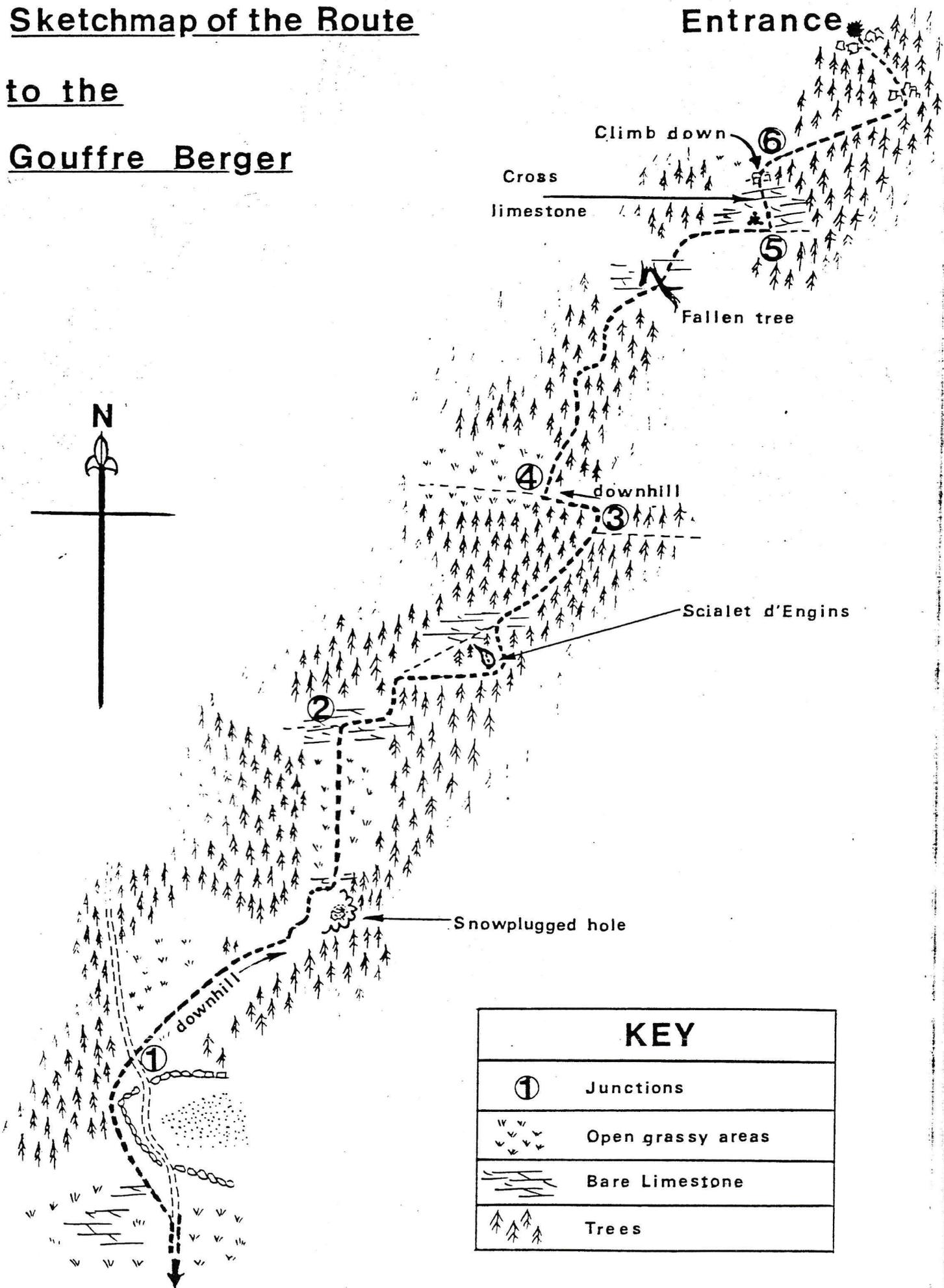
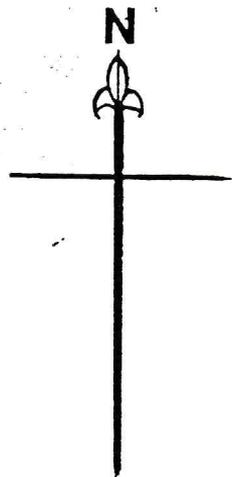
The early morning sun was blazing down by the time that people had consumed breakfast and the tackle loads had been sorted out. Ralph's work in the U.K. now proved to be extremely useful. There were twelve loads altogether, including the underground camping gear, each packed in a separate rucksack. Like ants, the expedition members carried all these over to the cave entrance some two miles away. As each load arrived at the Entrance, it was lowered to the snowplug above the Ruiz Shaft to keep it from the attentions of the inquisitive tourists. At this stage of the expedition we were a day ahead of the original schedule, and as there were still several others yet to arrive, it was not possible to mount a continuous guard on the Entrance. Also at this point we discovered to our chagrin that the C.B. radios brought to communicate between the Entrance and Base Camp would not work because of the lie of the land. Undeterred by this minor blow, the Sherpas worked on, and the rigging team set to work on equipping the Entrance Series. At this point, Liam's narrative comes in.

Sketchmap of the Route

to the

Gouffre Berger

Entrance



Climb down

Cross

limestone

Fallen tree

downhill

Scialet d'Engins

Snowplugged hole

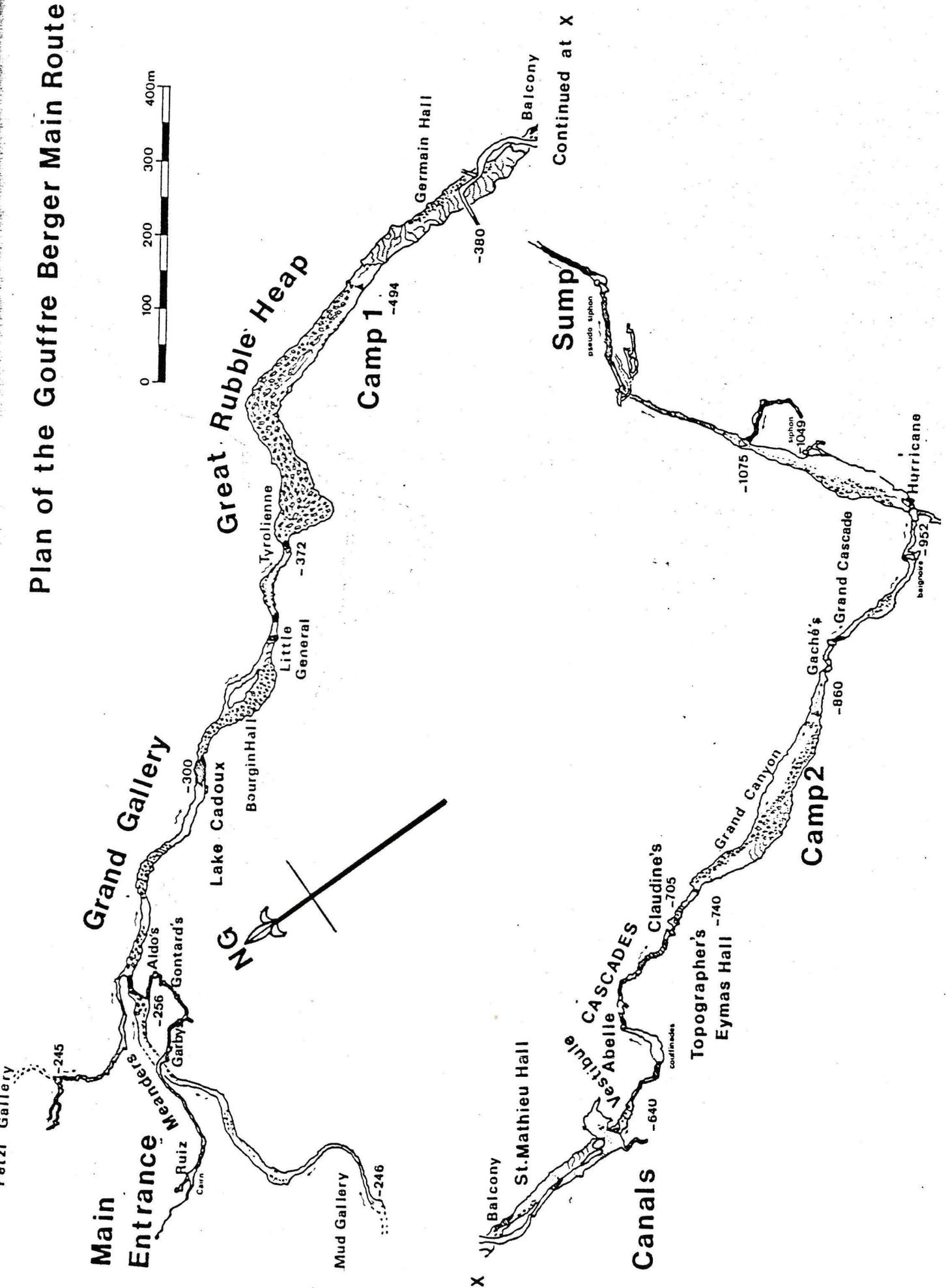
downhill

KEY

①	Junctions
W V W V W V	Open grassy areas
— — — — —	Bare Limestone
▲ ▲ ▲ ▲	Trees

To La Molière

Plan of the Gouffre Berger Main Route



Rigging the Entrance Series:

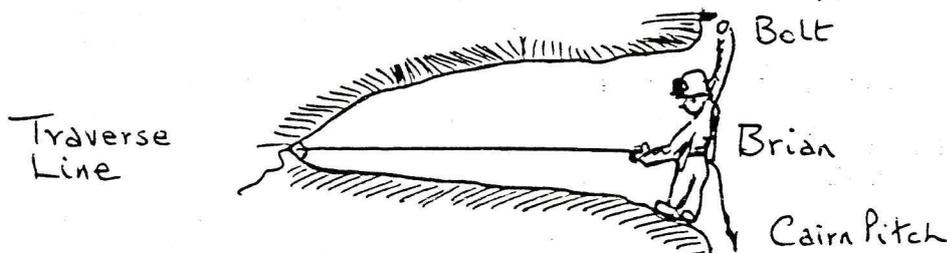
(By Liam Kealy)

The choice of a team to rig the Entrance Series was simple. Most people wanted a rest before starting to cave, after the long drive down from various parts of Great Britain, a visit to a French inn, and an arm wrestling contest at 2a.m. We were to be a mixed team. Rachael (You've done what in my furry suit!?) Clarke, two bearded rascals from the Orpheus, Brian Cowie and Russell Carter, Mark Faulkner from Somerset, and myself, the only upstanding member among us.

Brian and I had caved together before so we did not anticipate any adverse clashes of personality, neither did we think that the Entrance Series would provide any major problems. Besides, Mark could always lead us by the hand as he had rigged the cave before.

I led most of the team on a voyage of discovery through the pine forest with a scenic two-mile detour, so that we eventually arrived at the entrance to find most of the expedition had already assembled to wish us on our way. After a leisurely change, I was soon at the entrance pitch fixing the rope and being photographed as if I were the World's leading exponent of the art! Anyway; we were soon all down, and Russell lifelined me whilst I stood on a springy, rotten, loose, and generally nasty looking wooden platform at the top of the Ruiz Shaft. Here, I tried to screw a hanger into an existing anchor with some considerable difficulty. The anchor had been well placed I suppose, but the bolt refused to go in, and anyway could have done with being driven in another couple of millimetres. Cursing, and mentally hoping that all the anchors were not going to be like this, I shook my hand to control my nerve endings and clumsy fingers, and screwed the bolt in. A shared belay was then arranged with an 'in situ' piece of angle iron and Brian's only tape sling (I hope that he got it back!). Having achieved the desired free hang, I abseiled off that manky platform to land some 70 to 80 feet down on a bank of snow.

The Orpheus lads came next, with the ladders for the Holiday Slides, and proceeded to rig these whilst Mark and I cut the Ruiz rope off the 600ft. length we had to carry. There was some delay in rigging these three short pitches and the top ladder was rearranged once the party was down. Following this, Brian entertained us on the Cairn pitch, whilst we shivered on the cold, draughty ledge. Brian's antics involved having to lean out on the main rope and insert a hanger in a bolt on an overhang above his head, which was a long stretch for a lad like him. (See the sketch below.)



The object of this exercise was to achieve a free hang to a ledge about 25ft. down where again Brian had a pleasant time sitting in a sling effecting a rebelay whilst listening to our mumbled encouragements.

Once down, and after refilling our water reservoirs in a pool of cold water up a side passage, we were off into the gloomy confines of the Meanders. Beforehand, we had heard horrific and terrifying accounts of the traverses, and tales of rotting timbers over vast drops with walls wide apart.

So it was with some trepidation that I jumped up and down on one of the aforementioned timbers on my first encounter. Satisfied as to its safety, and thankful for the footholds and support for my tackle bag that it provided, I set off across the Meanders where there are no large drops under very wide traverses at all!

In fact boys don't listen to anyone who, with pint in hand, tries to impress you with awe inspiring tales of when he was a lad and did the Berger and was terror stricken by the Meanders. Such a person will invariably sport a beard, wear a check shirt and big unsightly jumper over his belly, smoke roll-ups and speak with a strong Northern accent. Still, perhaps it was harder using electron ladders. Why else does Ralph keep all those bits of wire in his garage?

Enough of this banter. Suffice it to say that due to well placed stemples, the glories of S.R.T. rope, and camp cooking, the Meanders are easily negotiated, even by a bearded dwarf with short legs and National Health glasses. The Meanders are split into two sections by Garby's pitch, which has some good bolts in place with which a shared belay and a good hang are easily obtained. Once down, the next set of Meanders, which were dampish, culminated at the top of Gontard's pitch (where there are large drops and awkward climbs). Be careful not to drop tackle bags here! At this point Mark took charge of the somewhat nervous band and rigged this pitch for us. Due to this much appreciated help, we were soon at the bottom and Brian and Mark rigged the 'Relay' pitches with ladders. (We put safety ropes in as well and most people abseiled on these in preference to the ladders which were very tedious to negotiate, both ascending and descending.) After this was Aldo's where Mark again proceeded to astonish us by rigging a traverse out to a ledge and then leaning out on a cow's tail to rig a shared belay on a chunk of rock in the middle of the shaft. It was not nice to watch! It was then my turn to complete the seemingly bottomless traverse, which turned out to be quite straightforward once I was on it, but wasn't I learning things fast on this trip! (Later on, a second rope was rigged here by Russell to relieve some of the traffic, and he had even more fun than Mark!)

Aldo's was wonderful, it was big and black and vertiginous. Vertical caving at its best! Of course it was dry when we did it, a sort of benign Battleaxe. Once down Mark and I set off for Camp1 whilst Brian and Russell returned to the surface. From Aldo's we went down a couple of short climbs emerging under a huge boulder in an enormous passage which grew in size as we sauntered along it. We passed Petzl gallery and crossed Lake Cadoux which was dry. We found a dinghy and vast amounts of white polypropylene cord to cover the lake's return. Mark acted as a show cave guide, pointing out this and that whilst I stumbled along in awe through the vast blackness around us. Turning a corner I saw what appeared to be an array of missiles. Frantically searching for my 'Ban the Bomb' badge, I realised that these were stalagmites and that we had reached the Bourgin Hall. Weaving our way in and out of the Stal we came to the Little General's pitch. Here we stopped, both deciding that we had done enough for one day, and stashed the gear for the next party. A feast of sardines, pâté, Mars bars and Chlorinated water was followed by a burpingly punctuated walk back through the Bourgin Hall and along the Grand Gallery. Here we met Doug Staff and Paul Bates, the latter considerably more sober than on our first meeting. They were having a romantic entanglement with a reel of telephone wire and we heard a few choice words from them about not paying their telephone bill again, and we pushed on out leaving them to discover the delights ahead of them.

Little General to the Vestibule.
, (By Tony Gamble)

Paul Holdcroft, Tony Reynolds and I got off to a late start, and by the time we got into the cave there was a Sherpa party ahead of us. The particular party would not let us pass, even though we were carrying the tackle! So we had plenty of time to admire the handiwork of Liam and his mates. We found the Meanders a piece of cake and were highly impressed by the size of the place when we eventually emerged from the bottom of Aldo's into the Grand Gallery. The delays and hanging about had sapped some of our enthusiasm, but the sights of the Bourgin Hall cheered us up and the walk to the Little General soon warmed us up too. We soon located the tackle left by Liam and it was not long before we had the pitch rigged and were down it. We fixed a rope by the Cascade of the Tyrolienne, but found that the one in place already was quite enough for us to descend. As we moved on and into the Great Rubble Heap we had some difficulty in finding the best route through the vast boulders, some of them much bigger than a house. The size of the place was unbelievable. Eventually we got to Camp1, recognisable by a pile of stones surmounted by a bowl of spent carbide. Camp1 was surprisingly clean, not at all as bad as we had been led to believe from previous accounts. Here we dumped our sleeping gear and decided to have a meal. I thought that Tony had the food, but when I asked him for it he thought that I had it! No food! We decided to push on and passed through the magnificent Hall of the Thirteen almost forgetting our worries about hunger. We were soon at the Balcony pitch. The two bolts here gave a very bad hang, and we had to have a rubbing point at the top. Paul was by now feeling very cold and hungry and decided to go back to Camp1 and wait for us. Tony and I went down the Balcony and then fixed handlines for the slippery slopes following. When we came to the Vestibule there was a traverse rope in to the left, so we fixed our own in a slightly different place and traversed around to the left and down. We had the tackle for Abelle Cascade, but because we were in dry grotts decided to call it a day as we had been underground for at least eight hours and the surface was a long way off. Leaving the tackle at the start of the Canals, we refilled our lamps with water and carbide and started the climb out to Camp1. Here we met some of the Sherpa teams and managed to scrounge a bite to eat before continuing on up the cave. The journey out was uneventful until we arrived at Aldo's where we got blocked again by a shattered Sherpa who was taking about an hour a pitch! Eventually we managed to pass and surfaced in the early morning hours. We got back to base camp at about three o'clock in the morning. Here we regained contact with Paul who cooked some soup for us. We felt that we had earned it!

The Best Laid Plans of Mice and Men....

Up to this point things had gone according to the original plan. The cave was equipped as far as the Vestibule and the Sherpa teams had ferried all the gear for the rest of the cave as far as Camp1. In addition, most of the important camping equipment and food, both personal and communal had been dumped at Camp1 too. The 'Bottoming' team consisting of Andy Bennett, Ian Edwards, Lionel Howarth and Dudley Kitching, set off into the cave as planned and dropped down rapidly through the tired ranks of ascending workers. Unfortunately, in their haste, they raced through the Hall of the Thirteen and did not see the tackle dump at Camp1. Arriving at the Canals, they could not find the tackle, and, realising their horrible mistake, had to climb back up a vertical height equivalent to that in Penyghent Pot on the return to Camp1 to collect it. Dud was still tired from his drive down so stayed there whilst the others ferried all the gear down to the other side of the Canals. Here, they decided that they had to stop and retreated to Camp1. Meanwhile, various bottoming parties were on their way down expecting the cave to be rigged.

To the Bottom.
(By Simon Leach)

Paul Gelling (of that not-to-be-mentioned club), and myself descended the Gouffre Berger at midday, Tuesday 2nd. August, expecting the cave to be rigged to the bottom and with the job of taking emergency supplies to Camp2 en route. We dropped rapidly down the Entrance Series and at Camp1 found out the latest news. We had extra work to do, and would not get an easy ride after all! We rapidly proceeded to the end of the long canal into the 'Couffinades' where the previous party had dumped the remaining five tackle bags. Here we set to work.

From the Abelle Cascade onwards, tackling went smoothly until we arrived at 'Mât'. The rope we had cut from the spare end of the Gontard's rope to replace the abraded Balcony rope (not necessary in fact) was used for rigging the short but 'awkward if wet' climbs in the Cascades. Luckily Paul had brought two short ropes and extra hangers as insurance, and they proved invaluable later.

Paul could reel off the names and depths of pitches as he had organised the 'pirates' tackle, so he rigged fluently as far as 'Mât'. To my surprise, he hesitated halfway down. Half an hour later he continued to the bottom. I casually clipped on my descender and followed, only to encounter similar problems.

The rope passed diagonally down across the first stage of the pitch on to a sloping boulder, at the bottom end of which a metal spike acted as a rebelay. Unfortunately, an intermediate bolt belay above this had sheared off and we had no bolting kit to replace it. Hence I slid down the boulder, clipped on to the spike, and was pulled backwards off the slope by the upper rope! I found myself hanging spreadeagled on my back underneath the boulder with no purchase to right myself! A clear example of how not to carry tackle sacks on your back while doing S.R.T.

Paul passed helpful comments, like "Interesting isn't it?", until the problem was resolved by dumping the sack into the plunge pool below. This enabled me to regain a more normal attitude (of body if not of mind). Paul never recovered mentally from his experience, and let me tackle the rest of the cave. Subsequent parties, not heeding our warnings about needing a bolting kit also enjoyed themselves here.

'Singe' and 'Grande Cascade' followed on uneventfully, and then, Lo and Behold, 'La Baignoire', for which one of Paul's ropes was used as there was none allocated for it in the tackle sacks. At 'Little Monkey'-the derivation from the french eludes me- Paul just said "Traverse, followed by descent to aerial rope guide away from the water". Hence, no trouble was experienced here apart from selecting the correct traverse ropes from the general knitting at the head of the pitch. Other people unsettled by 'Mât' (of no reputation), were apparently overawed by 'Little Monkey', which Paul later told me was of considerable renown. You can thus know too much in advance!

After 'Hurricane', a steady plod took us past '1000m. inlet' to the head of another pitch, bypassed back up on the left by an oxbow containing the remnants of an earlier diving expedition (metallic, not organic!). Wading and traversing deeper pools, brought us to the 'Pseudo-siphon', too long to traverse and too forbidding to swim. A boat jammed in a nearby crack deflated after twenty feet and forced me to swim back. A good point to retire at!

Stomping out past Camp1, we were waylaid by Duncan's party, and waited two hours till Dave Pike was resuscitated sufficiently to return with us. Paul slept, while I paced about, ate, and held conversations with imaginary people...a problem of sleep-deprivation, since I'd only had ten hours rest in the previous four days. Eventually we set off out and wearily dragged ourselves to the surface. Paul and I had clocked up 26hrs. underground, and it felt like it on the walk back to base camp. Paul went to bed immediately, but I wanted to break my night-shift routine, so downed a bottle of wine and sun-bathed instead!

The Surface Telephone Station.

(By Jenny Potts)

On Monday I set off with Terry and Co. to rig up the telephone from the surface. There is a useful sheltered ledge above the South side of the entrance and someone had already rigged a plastic sheet bivouac here. We knew that there would be lots of tourists wandering around so we took some trouble to rig the wire out of their way, and also rigged it to the opposite side of the entrance to the ladders to keep it clear of heavy-footed cavers, looping it through the trees overhead.

The following day we went to connect the hand-sets which had been unaccountably taken down the cave and could not be found! It was a pretty frustrating day, enlivened by a couple of quick thunderstorms, which made it quite clear that we would have to do better than a leaky plastic sheet for protection on the surface. It was also disturbing to have no direct communication with the main campsite except for a 'runner'.

On Wednesday, Andy Ive and Bill Brooks arrived to rig their handsets to the cable run out by Terry. Bill also produced a tent before setting off down, leaving me with a handset which had been checked out in working order.

No sooner had I started to pitch the tent than there was a bout of typical 'Berger weather'... a violent hailstorm accompanied by thunder and lightning which stopped after twenty minutes or so leaving the ground looking as if it had been snowing! I unearthed the tent from under a drift of hailstones and eventually rigged it by dint of tying guylines to boulders, tree roots and a few shaky pegs. It stood up well to several more hailstorms and we were delighted to find the telephone working well at our half-hourly rendezvous calls as Andy and Bill worked their way down to Camp1.

Sadly, after working well for some hours, the phone packed up again, probably as someone had pulled a connection adrift on the older cable left in for us... certainly the new cable put in by Terry and Bill worked well.

For the next few days the tent was used as a surface base and store, as well as providing somewhere snug for the telephonist. It is worth remembering that there is room on the ledge for only a small tent, and it is no good expecting an exact emplacement as the ground is so uneven and rocky. It is best to use a tent with few poles and long guy-lines which can be tied to rocks etc.

As the Berger is a popular tourist walk, the telephonist also has to act as 'watchman'. The tourists did no purposeful harm but did wander on to the ledge once or twice, tripping on the guy-lines with gay abandon. One day a tourist was stopped halfway down the entrance pitch; an heroic father, anxious to impress his small son, but with no idea of exactly what he was doing!

Installing the Telephone Line.
, (By Bill Brooks)

When Andy and I arrived at the campsite, we learned that although the first tackling parties had taken in three cable drums for the telephone line, no connections had been made. Since Andy and I fancied a 'quick trip' into the system before going to the bottom, we offered to make the necessary connections as far as Camp1. Little did we know what we were in for...we ended up spending almost 24 hrs. underground...

At about ten o'clock on the Wednesday morning Andy and I positioned a phone on the ledge above the entrance, checked to see that it was working correctly, and set off down the cave with a portable handset, leaving Jenny on the ledge as operator. We followed the cable and reached the first drum in the Meanders after Cairn shaft. The drum had a wooden handle through it, but on reflection, it would have been better to have had a tube through the centre with a loop of rope or tape sling round the tube ends for easier carrying, as the single piece of wood needed both hands to hold it. In the event I dropped the handle anyway so had to unwind the cable by hand. This slowed us down considerably more than we expected.

We found the second and third drums positioned accurately, so that as we came to the end, the next drum was waiting to be joined nearby. The joints were tied with a figure-of-eight knot leaving long ends, with straight twist connections and insulating tape to cover the join. At all stages of the joint we tested the phone with the surface operator. Very important as it stopped her sleeping for long!

At Aldo's we connected our 3-core grey into the red and white left in for us by the Belgians. This saved us unwinding one of our drums although we carried it with us. Now we had to check carefully for breaks in the cable, which always seemed to occur on or near pitches. Checks with the surface established that the cable was in good condition, as we continued on down to Camp1 with minor repairs en route. We had good contact from Camp1, but this was soon broken by others coming in behind us! This was a recurring problem and unavoidable due to the way the cable was run. The following advice may be useful for future expeditions:

Do not buy any cable... There is enough in the cave, laid and on drums, to connect the Mayor of Engins to Grenoble! Take some cable clips with hardened steel pins and plastic inserts to pin the line to the walls on pitches and thus keep it away from the climbers. (You will need an agile rigger to do this!) Mark your connections and cable with brightly coloured tape so that everyone knows which cable is in use, and can spot any breaks. Ensure that a reliable handset and batteries are used so there is no doubt when trying to make contact.

Various Adventures.

Once the cave was rigged to the bottom, several parties completed bottoming trips, whilst others had photographic trips and 'Fun' trips to various places. It would be an impossible task to try and recount the variety of experiences that occurred, but to give some flavour of what transpired, the following accounts, somewhat edited in places, have been included.

The Youngest Caver to set foot on the Bottom.
(By Kevin Mountford)

Phil, Mel, and I set off down to Camp 1 on the Wednesday aiming for the bottom. After a quick meal at Camp1, we put on our wetsuits and started for the bottom, making good speed to the Balcony, a splendid slope covered with flowstone. We continued on to Vestiaire thinking how easy it was, but after that it began to get wetter. We tried to traverse out of the water but kept slipping in, wasting a lot of time in the process. By the time we reached Eymas Hall we were all soaking wet and getting quite cold. Phil said that we would think about going to the bottom once we reached Camp2 as we were getting so cold and tired.

The passage that we were in suddenly got bigger; it was similar to the boulder slope above Camp1, but muddier with a 50 metre gorge on the left containing a river. We slipped and stumbled down this to Camp2. Here we met one of the Yorkshire men walking around on his own trying to keep warm. He told us that his mates had left him hanging on a bolt change on Gaché's with his lamp out! He managed to Prusik back up in the dark, get off, and mend his lamp. He had been at Camp2 for about three hours.

Melvyn then took some pictures of us at Camp 2. Phil was quite worried about the Yorkshire bloke so decided to return to Camp1. Melvyn did not want to go any further either so we started back up the Grand Canyon, where we met two MUSS people. I asked them where they were going to, and they told us they were aiming for the bottom. When I asked if I could go with them to my joy they said "Yes". I shouted up to the others that I was trying for the bottom and since they did not object, returned to Camp 2, made some hot chocolate and had something to eat. After ten minutes rest, we carried on.

At the Grand Cascade we met the Yorkshire party on their way out. They told us that we were only three pitches from the bottom. It did not sound very far, but it took quite a while to reach Little Monkey where Tony Gamble was setting up his camera to take a picture of Tony Reynolds ascending. He did not tell Tony Reynolds that there was an easy way to get off the pitch, he just let him take the hard way so he could get a good action shot! Tony Reynolds was not very pleased! As soon as the pitch was free, one of the MUSS lads went across. I talked to Tony Reynolds and asked him if he thought that I could make it to the bottom. He looked at me, and I thought he was going to say "No", but he said "Yes...But only if you are very careful and check everything." Even though he said that, I was still scared when it was my turn to traverse across Little Monkey and put both my 'cows-tails' plus my handjammer on to the rope. When I got to the pitch, my body started to shake, so I hung there on my 'cowstails' and 'rack' for a few seconds until I had calmed down, then took off my 'cowstails' one at a time and abseiled down to Hurricane. As I got there the MUSS lad was just disappearing over the lip. I unclipped and sat in a draughty corner and waited for a while but could hear no shout that the rope was free because of the falling water. Eventually I decided to go down, and abseiled off into the spray. At the bottom, the view was unbelievable a big lake with two waterfalls crashing into it, and you could not see the ceiling. We then walked down to the Pseudosiphon. My stomach was hurting and I was quite scared thinking about how I was going to get out. It was all right getting to the bottom but now I was getting tired without having had any rest for ten hours. We returned to Hurricane at a fast pace.

Once I had climbed Hurricane and Little Monkey, I stopped being scared as I knew I had been to the bottom and was on my way out. We arrived at Camp2 at a slow pace and stopped for hot chocolate and an orange. From then on, I was very tired, and nearly fell asleep every time we stopped for a rest. The other two plodded on and finally we reached Camp1. I could do nothing else but crawl into my sleeping bag and go to sleep. I was too tired to cook anything, but even though I was aching all over, I felt on top of the World with having reached the bottom. The climb out could wait until tomorrow!

"A Short Trip down The Berger"
(By Brian Cowie)

Towards the end of the first week of the Berger booking, various parties were 'having a go at the bottom'. After two trips in already, I sat back and watched the brave set out with their ginormous loads, ragged sleeping bags, weird assortments of food, bundles of carbide, muddy S.R.T. gear, and most importantly a plastic bag which cost each of us £30.

Meanwhile, back at the campsite, now a truly British Armpit, our great leader was kicking his heels and giving people cigars. To cut a long story short, Lenny and I were engaged by John for a short trip to see how far we could get in 'about twelve hours'. This was decided after a particularly heavy night on the local plonk whilst listening to Andy Ives in concert. To make matters worse a 6a.m. wake up call was arranged.

At the appointed hour, breakfast was prepared and by 8a.m. the three of us stood at the entrance. The only good thing about this time of night is that you can walk to the cave in caving gear without melting. We took forty minutes to get to the bottom of Aldo's, and were at Camp1 in less than an hour and a half. Here we partook of a Lenny meal of meat balls, dehydrated veg., and 'Smash' to give it body. As we were all feeling fine we decided to continue down. Thinks, thought me...no wetsuit!

"Hello people going out, can you lend me a wetsuit?"

"You can have mine if you bring it back out." chorused the reply.

Picking a suit to fit, the next problem was a sleeping bag, again no problem when you think of the 1000ft. haul out!

Liam and Phil, who had spent the previous night at Camp1, were heading for the bottom, so we joined them and became a party of five. We moved off through the Hall of the Thirteen to meet the water. Here, I discovered that Kevin was larger than me, or rather his wetsuit was! Lenny too had problems with a leak in his 'Pontonière'. Nevertheless we all enjoyed the cascades and found the bottom alluringly calling us on.

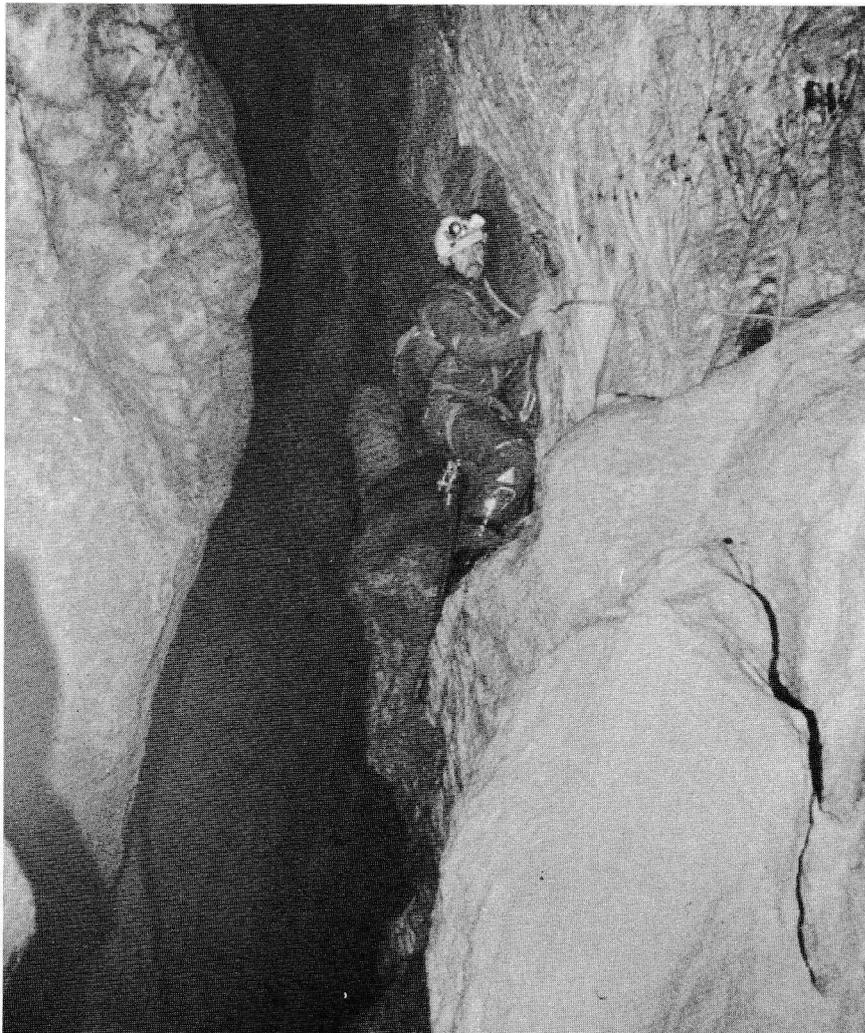
By Camp2, John reckoned it would be a good idea to head back to Camp1. Lenny had got the itch for the bottom, so leaving the three of them to continue, John and I made a leisurely ascent. It is worthwhile taking time over this part of the cave as there are many fine formations, some off the beaten track.

Cosy in wet sleeping bags at Camp1 after a hot drink, you soon doze off waiting for people, but you don't sleep long when the Westminster arrive! At least Chris gave us some hot chocolate to drink...Thanks Chris!

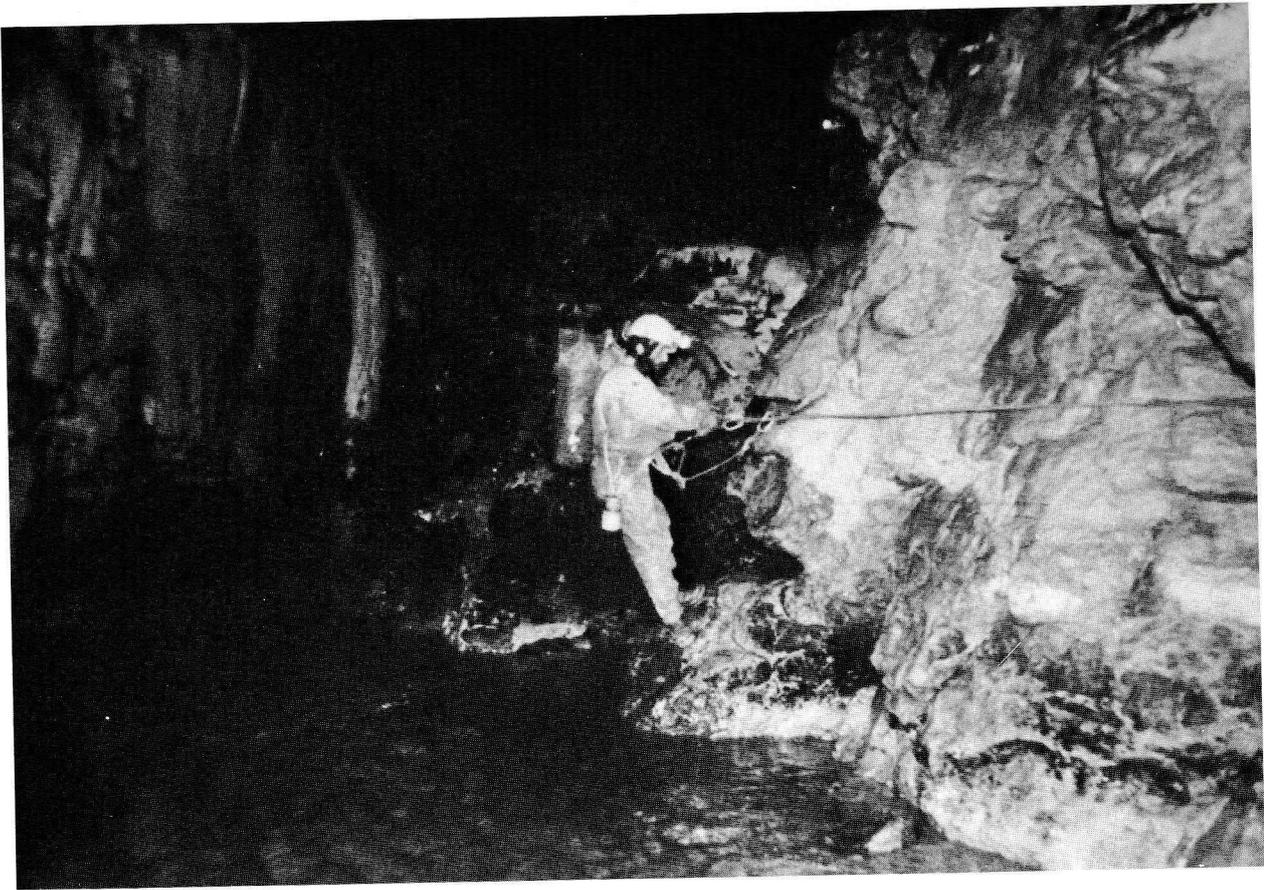
Eventually Lenny (the man with a ferry to catch who had to be out in three hours!) Phil and Liam arrived back after a most successful trip. Lenny gets fed, wrings out his furry suit and gets into a sleeping bag to warm up, far too worried about the ferry to sleep. Less than an hour later, the original three are off again, noting it's a lot harder with a heavy load. However, thanks to Lenny's "secret weapon" (a concoction of Glucose, salts and vitamins?) we made good progress until the last pool before Aldo's where we stopped to fill up with water. Lenny taking things a bit far falls in...hey presto another wet Lenny! Could be serious we thought, but Lenny, still high on adrenalin switches to automatic and gets out before us. (N.B. Don't let John meddle about with hauling systems underground!). Altogether a 24hr. trip, double that expected, but one which I would readily repeat.



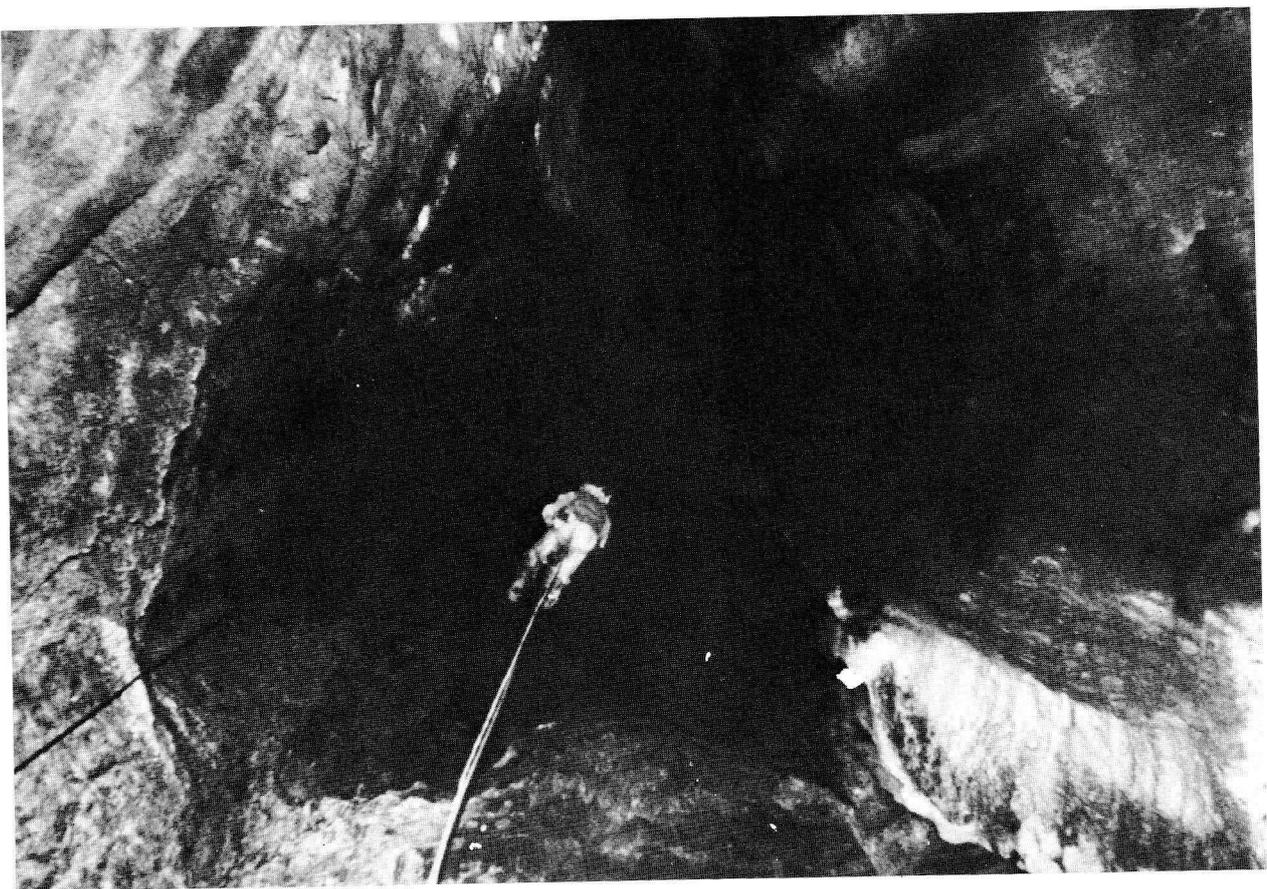
Tony Gamble and Tony Reynolds at the Final Sump.



Tony Reynolds
on
Little Monkey



Ralph Johnson on the Tyrolienne Traverse.



A View looking up Aldo's Shaft.

From the Bottom to the Ferry.
(By Lionel Howarth)

Three of us set off into the cave early on the Friday morning with the intention of an enjoyable 'Fun' trip with no tackle and no definite plans. Brian and John had no time constraints, but I had to be out before 7a.m. on Saturday in order to be sure of catching the Cross-Channel Ferry. We dropped rapidly down to Camp1, ate a meal, and joined up with Liam and Phil who were aiming for the bottom. Brian managed to borrow a wetsuit, and both he and John also borrowed sleeping bags as we thought that a longer trip than planned was on the cards. We set off again and soon reached the Balcony. Here we descended and then used handlines to negotiate the calcite slopes beyond, eventually arriving at the Vestibule pitch.

Vestibule was a curious pitch in two distinct parts. It was entered through a door-like arch where the rope passed over rounded bosses running with thin sheets of water. Further down was another arch with an awkward hand-line traverse to a ledge over the last section, which most of us abseiled down. Soon we were all together, recharging generators and preparing for the Couffinades. Having made three journeys through the canals ferrying tackle bags on an earlier visit, I felt quite familiar with the place... the wading... the handline traverse... the stal holds on the left-hand wall... and even the leaky dinghy which had sunk when I tried to use it before.

I joined the others who were descending the Abelle Cascade, the rope rigged clear of the waterfall. Details of the Cascades region have become blurred in my memory, except that here the cave character changed dramatically into an active streamway for the first time. The rushing streamway beckoned us downwards, our movement exciting and exhilarating... wading... traversing... climbing... and scrambling. The 20m. pitch of Claudine's Cascade landed us in a large pool in an airy chamber. We carried on downstream and soon passed the Topographer's Cascade and entered the start of the Grand Canyon.

The five of us were all together again as we groped our way down the steep slopes on the right hand wall of the Grand Canyon; its dimensions indescribable as our lights revealed neither the ceiling nor the far walls; an awe-inspiring chamber. Once more the feeling of the cave had changed, the lively streamway now swallowed in the abyss, the cavern still and timeless.

We were dwarfed to the proportion of ants as we slithered down the screes in our rapid descent. When we arrived at Camp2 it was time for a rest and some food. The conversation was light-hearted and friendly as food and drink were shared, and we discussed what to do next as we had no prearranged plan, accepting that each member of the group was free to decide for himself, a free spirit within the framework and support of the group. Brian and John decided on a leisurely return to Camp1, the rest of us tentatively to see what lay ahead to the top of the Grand Cascade. After we parted I wondered if I should have returned with Brian and John, my companions since the early morning when we had left the campsite in a different time and age. How the cave played havoc with the dimension of time!

Heading towards Gaché's pitch my reverie was broken. Where were my gloves? Back at Camp 2! I called to the others to say that I was returning to fetch them, and having retraced my steps eventually caught them up at Gaché's. Liam had descended and Phil was on the rope. It was a dry pitch with a comfortable bolt change, and we landed in a passage which soon rejoined the water. The two smaller pitches of Ressaut Mât and Ressaut Singe followed in quick succession.

Phil and Liam were having anxious discussions when I joined them at the head of the Grand Cascade. They had grave reservations about the bolts used at the head of the pitch, particularly the back-up bolt which could be pulled out with little effort. We had three alternatives; rerig the pitch; carry on regardless; or turn back. I had come too far by now to contemplate going back, as for the first time I realised that a bottoming trip was now on. The bottom was too close to be frustrated by a doubtful bolt, and I had a ferry deadline to meet! Looking down the pitch I could see several bolt changes, one near the top, and anyway the rope was tied off to the tail of the Ressaut Singe rope, so I abseiled down. Phil decided to return to Camp2 and wait for us as he felt unsure of the rigging. Liam soon joined me after a shouted message that the rope was O.K.

There was no mistaking the top of Little Monkey which soon appeared before us. It looked more like the rigging for a circus acrobat than a pitch head, with tackle from previous trips freely strewn along the traverse. A short drop took the main stream into a dark pool which ran over the lip of the main shaft. The main rope was hung behind a block over the shaft, approached by a traverse line along the right hand wall above the dark pool. A short ladder led to the start of the traverse and a short rope led down from the end of the traverse. Another long rope drooped from the pitch head across the dark pool, and was belayed back in the passageway. Liam traversed over, abseiled down the short rope, changed to prusicking mode above the main shaft, prusicked up diagonally to the bolt of the main hang, changed to the main rope and vanished into the darkness below. I tried to emulate Liam's manoeuvres without success, as my self-locking Petzl descender would not run easily diagonally, and ended up floundering in the dark pool before I gained the main rope. The trip was no longer a 'Fun' trip! A short traverse clipped in to a handline led me to the head of 'Hurricane' where the waters poured into space.

The take-off from the ledge where the rope was belayed was very awkward as the bolt was low down, but Liam fitted a foot loop to ease the problem a little. A shout from below, a few awkward moves, and I was descending the final pitch. It was a strangely empty and unemotional abseil, with Liam's lamp a tiny reassuring speck of light in the black cold windy void below. I joined Liam and we strode on together down the boulders leading to Camp3 away from the spray-lashed chamber at the pitch bottom.

The cave was quiet again, and a warm pleasing glow of satisfaction began to grow, despite the steady downwards trend of the cave. We scrambled down the boulders, short cascades and deepish pools with vague memories of a waterfall tumbling out of the right-hand wall, until a short climb led us to a dry oxbow. Here an unexpected and unwanted reminder of previous descents was provided in the form of piles of empty tins and other human rubbish. A short descent dropped us back into the main stream again and soon we were at the Pseudo-siphon, where we peered down the canal leading to the terminal sump. Liam dropped in up to his armpits, but neither of us fancied a swim so we unanimously agreed to turn back.

Returning to the dry oxbow, we sat among the rubbish and tucked in to the usual diet of nuts, raisins, and dried bananas. Liam reached over and unexpectedly passed a tin of pâté... Pâté! Hell! What a place to indulge in such luxuries! After a brief respite, we started on the long slog out.

Our struggles with the top of 'Hurricane' and 'Little Monkey' do not need to be recounted except to say that our energy was sapped by them. As I reached the top of 'Little Monkey' Liam shouted, "Reckon we've cracked it now Len!" 'I'll wait until I have the Grand Cascade behind me first', I thought.

As we ascended I was aware of the time running out for my ferry rendezvous, and when we eventually met up with Phil at Camp2, I realised that I had no time to waste, so at Claudine's I decided to push on alone. Liam and I instinctively shook hands... "Cheers Lenny"... and we parted, our unique bond of a shared experience and mutual support suddenly broken. We had never caved together before, nor had we taken part in each others plans, preparations or expectations, but, for me, Fate had put two compatible companions together for a brief but special moment in time as the paths of our different lives had crossed. I pushed on alone with mixed feelings, trying to move as fast as possible.

At Camp1 John and Brian were in their borrowed sleeping bags, awake and prepared to escort me out. It was now around midnight, so I had a short rest and the three of us began the return to the surface. We made steady progress to the bottom of Aldo's, and at the top John caught me up by climbing the other rope rigged alongside. Here we parted company as he prepared to haul up the tackle. I continued out steadily, my anxiety not to delay Dudley and the others in the rush for the ferry keeping my tired limbs moving. Absolutely clapped out, I arrived back at the campsite to find that they had struck the tent and packed the car. I changed into dry clothes, shoved my gear in the boot, tumbled into the car and we drove off. What an end to a fantastic trip!

Detackling from the Bottom to Camp1.

(By Andy Ive)

The crazy thing is, we actually volunteered for the job! Oh well, we won't do it again! After our respective telephone laying, and photographic trips, we gathered our bits and pieces and what was left of our determination, and headed for the cave at about 4p.m. on Friday evening.

An uneventful two hour trip down to Camp1 was followed by a night's sleep. I foolishly slept in my wetsuit... more about that later. We set off for the bottom at about 9a.m. and reached the sump in about three hours. Here we turned back and set to work on the derigging and the problems commenced.

'Hurricane' and 'Little Monkey' took almost six hours in total to derig and haul up all the gear. The main difficulty was that the amount of room at the top of 'Hurricane' gave no security or grip to the derigger. 'Little Monkey', interesting at the best of times, taxed our brains a bit, but Bill Brooks climbed the traverse in epic style and cleared the pitch completely.

The rest of us sat and froze for some hours, using space blankets and/or the £30 polybags with a lamp inside to try and keep warm. Pete Hart even set fire to his, to show how warm it was! Eventually two people set off out with rucksacs full of gear to Camp2. The others detackled the intermediate pitches and cascades and joined them for a brew. The time was now 10p.m. on Saturday.

Warmed and reinvigorated by the brew, we continued towards Camp1 with some folk acting as sherpas, some as deriggers, and some as both. By the time that we neared Camp1, we met another party which had come to help us with the gear....a most welcome sight! We all arrived at Camp1 by 2a.m. where five of us stayed another night. I set off with the other party carrying gear to dump at Aldo's for the next detackling group. I surfaced at about 6a.m. and the others emerged at around midday. Most of my skin came off with the rash and sores brought on by an allergic reaction to neoprene, but otherwise we managed quite well. Six seems to be the minimum number of people for the particular function that we fulfilled. A most enjoyable trip was had by all.

Derigging from Campl to Aldo's.
(By Boyd Potts)

As the Westminster lads were due to derig back as far as Campl by Saturday afternoon, five of us headed into the cave at about 8p.m. on Saturday evening. We arrived at Campl a couple of hours later after stopping for a chat with Dave and Shirley St. Pierre who were on their way out. Unfortunately the derigging party had not arrived, so we brewed up and waited. Many brews and catnaps later Andy arrived with some of the tackle. By now it was midnight so some decided to eat and sleep before going any further, which cut out any hope of our derigging completely as far as Aldo's.

Andy, suffering severely from 'Nappy rash', changed into plastic bags, with a sweater as 'Long John's' and other bizarre gear before heading out with Russell and Paul Bates. The last two carrying large loads to Aldo's.

Early in the morning we met the rest of the W.S.G. at 'Balcony' and helped them to carry gear to Campl. Then leaving them to rest, we carried as much as we could up the boulder slopes and pitches to the bottom of Aldo's. I think that, except for personal and camping gear, and the tackle on the pitches, we moved everything to Aldo's and some items even further, before surfacing into daylight at 7a.m. A pleasant walk through the woods in the early morning took us back in time for breakfast at the campsite.

The Final Stages of Derigging the Gouffre Berger.
(By Ralph Johnson)

For some strange reason I was nominated to organise the derigging, probably because I was missing when a 'volunteer' was needed! The main objective seemed to be to try and get it completed before everyone disappeared. Already the names of other caves in the Vercors were being bandied about and even things like Mont Blanc and caves in Norway were being discussed. The lure of the mountains and the Riviera were also attractive propositions.

Several informal discussions took place to formulate ideas. Eventually a meeting was called to take place on Friday morning which I managed to miss being "overdue"...a common phenomenon in the Berger. Anyway, as I exited on Friday evening accompanied by the two Tonys, the Westminster derigging team passed us in the other direction heading for Campl where they aimed to spend the night before going to the bottom.

Saturday passed slowly with everyone except the Westminster lads reaching the surface. We estimated that the detackling team would reach Campl at about 10p.m. so a team led by Boyd Potts set off at about 8p.m. leaving Tony Reynolds and myself to man the phone. This proved to be a tactical error on my part...if you disagree you should hear Tony Reynolds snore!! The timing of the detackling team was spot on, but they were in for a four hour wait, interrupting Tony's snores but not his sleep at half hourly intervals with regular phone-ins. Eventually the Westminster lads arrived and Boyd's team consisting of Russell, Duncan, Simon, and Paul Bates, began lugging the gear back to Aldo's whilst the bottoming team slept off their exertions, except for Andy who decided to continue out wearing a pullover and a poly carrier-bag Jockstrap under his oversuit due to wetsuit rash. This unusual undersuit was all that could be mustered at Campl to replace his wetsuit, and as an amusing event was only surpassed by Phil's accident in a furry suit (not his own!) due to 'Berger Belly'!

The detackling team began to surface during the early hours of the morning. The plan of campaign for Sunday was for small teams to go in, move the gear as far as possible, then come out as the team following arrived. Melvyn and Kevin went in at 10a.m. followed by Derek and Keith Sanderson at 11.30.a.m. after a suitable interval, Mark Faulkner and Brian Woodward went down about 3.30.p.m. Terry, Tony Reynolds, Paul, and myself went down at about 7p.m. later followed by Doug Staff and Dave Pike. (John and Brian were still designing hauling systems!).

We were amazed to meet Mark and Brian as we entered the Meanders, both buried under a mountain of gear. Everyone had done a remarkable job. Mark and Brian set off out, each with a large tackle bag apiece, whilst the rest of us formed a chain as bags were hauled up the few remaining pitches. The only slight problem was the Cairn pitch where we hauled direct from the bottom through a pulley over the pitch head. The gear was left at the top of the Ruiz shaft for the morning, leaving us to scurry back to the inevitable barbecue and booze-up. The derigging had taken 36hrs. from the time that the Westminster had set out from Camp1 for the bottom.

Early next morning, Brian and John walked over to haul up the gear and ceremoniously derig the entrance pitch before starting back with the first of the return loads. By midday on the Monday, a week after the start, all the gear was back at base camp.

Photography.

Expedition members generated a considerable wealth of photographs. Chris Sowe and Pete Hart concentrated their effort on the Hall of the Thirteen and produced some excellent colour slides. Tony Gamble heroically lugged his camera equipment to the final sump, recording several exciting scenes en route. In addition, Ralph, Paul Holdcroft, Dave Pike, Brian Cowie, Russell Carter, Doug Staff, Mel Bratt, Terry Ball and Trevor Faulkner each took photographs between the entrance and Camp2, so that, even allowing for a few failures, a large number of good shots were obtained. A composite set of the thirty best slides was selected as a permanent club record, together with an album of about forty colour prints. The photographs in black and white in this report are as follows:

Cover	The Hall of the Thirteen.	Chris Sowe and Pete Hart.
Facing pagel.	The Hall of the thirteen.	..
..	A Small Group of Members.	Chris Sowe.
Facing pagel6.	The Final Sump.	Tony Gamble.
..	Little Monkey.	..
Facing pagel7.	Ralph on the Tyrolienne. >	..
..	Aldo's.	..

Expedition Statistics.

Total Participants = 62 (Including paid-up 'pirates', surface helpers, and people who paid deposits but failed to arrive.)

No. Cavers to reach the Hall of the Thirteen	= 49
No. Cavers to go below 850 metres	= 34
No. Cavers to go below 1000 metres	= 22
No. Caving Clubs represented	= 14

List of Descents:

Name.	Club.	Depth Reached.
David Bailey	Crewe Climbing & Potholing Club.	Vestibule
Terry Ball	..	Hall of the Thirteen.
Andy Bennett	..	Couffinades.
Melvyn Bratt	..	Camp Two.
Ian Edwards	..	Couffinades.
Tony Gamble	..	Bottom.
John Gillett	..	Camp Two.
Paul Holdcroft	..	Balcony.
Dave Howard	..	Hall of the Thirteen.
Lionel Howarth	..	Bottom.
Ralph Johnson	..	Balcony.
Cliff Jones	..	Hall of the Thirteen.
Liam Kealy	..	Bottom.
Dudley Kitching	..	Vestibule.
Simon Leach	..	Bottom.
Phil Marsden	..	Top of Grand Cascade.
Kevin Mountford	..	Bottom.
Tony Reynolds	..	Bottom.
Doug Staff	..	Top of Little Monkey.
Russell Carter	Orpheus Caving Club.	St. Germain Hall.
Brian Cowie	..	Camp Two.
Boyd Potts	..	Canals.
Duncan Tunstall	..	Top of Little Monkey.
Bill Brooks	Westminster Speleological Group.	Bottom.
Gary Cockburn	..	Bottom.
Pete Hart	..	Bottom.
Andy Ive	..	Bottom.
Chris Sowe	..	Bottom.
Alan Taylor	..	Bottom.
Dave St. Pierre	S.W.E.T.C.	Hall of the Thirteen.
Shirley St. Pierre	S.W.E.T.C.	Hall of the Thirteen.
Rachael Clarke	Bristol Exploration Group.	Hall of the Thirteen.
Trevor Faulkner	Eccles Caving Club.	Bottom.
Derek Sanderson	Bentham and Ingleton C.C.	Gachés.
Keith Sanderson	..	Bottom.
Mark Faulkner	Shepton Mallet Caving Club.	Top of Little Monkey.
Brian Woodward	..	Top of Little Monkey.
Paul Bates	Mendip Exploration Group.	Top of Little Monkey.
Dave Pike	..	Top of Little Monkey.
Ian James	Army Caving Association.	Camp Two.
Jack Sheldon	..	Bottom.
Syd Yates	..	Bottom.
Piers Barrington	Manchester University S.S.	Bottom.
Paul Gelling	..	Bottom.
Francis Hampton	..	Hall of the Thirteen.
Trevor Pettit	..	Bottom.
Tullio Bernabei	Circolo Speleologio Romano	Bottom.
Gaetano Boldrini	..	Bottom.
Marco Topani	..	Bottom.

Acknowledgements.

The expedition members would like to record their thanks to the many individuals and organisations who so generously provided help and support. Thanks are especially due to:

Arthur Millett, Sean Heever, and Paul Ramsden for providing information on tackle, route times, and personal equipment.

Paul Deakin for giving a fund-raising lecture.

Rhett Ackerman for providing equipment transport.

Imperial Chemical Industries PLC for providing medical supplies and polythene exposure bags.

Adams Foods Ltd. for providing powdered milk.

Jo Royle for allowing a generous discount on caving equipment.

J.C.B.Sales Ltd. for donating safety helmets.

'Sealink'U.K. Ltd. for allowing discounts on ferry fares.

Duracell Ltd. for donating 4.5v. alkaline batteries.

Batchelors Catering Supplies Ltd. for catering advice and discounts.

Val Nightingale, Trentham, for discount on fibre pile clothing.

Thanks are also due to the several surface helpers, notably Jenny Potts, Ruth Ive, and Christine Brooks. Jenny's sterling service on the telephones deserves a special mention.

There were also several paid-up expedition members who, for various reasons, could not make it to La Molière. This list includes Brian Kirkland, Pete and Alison Moody, Chris Milne, Anne Lavender, and the French cavers from Ziloko Gizonak (who were diverted to help with a rescue in the P.S.M.)

CONCLUSIONS.

The objectives of the 1983 Crewe Climbing and Potholing Club Gouffre Berger Expedition were met without mishap, and all the participants had an enjoyable, fruitful, and unforgettable experience.

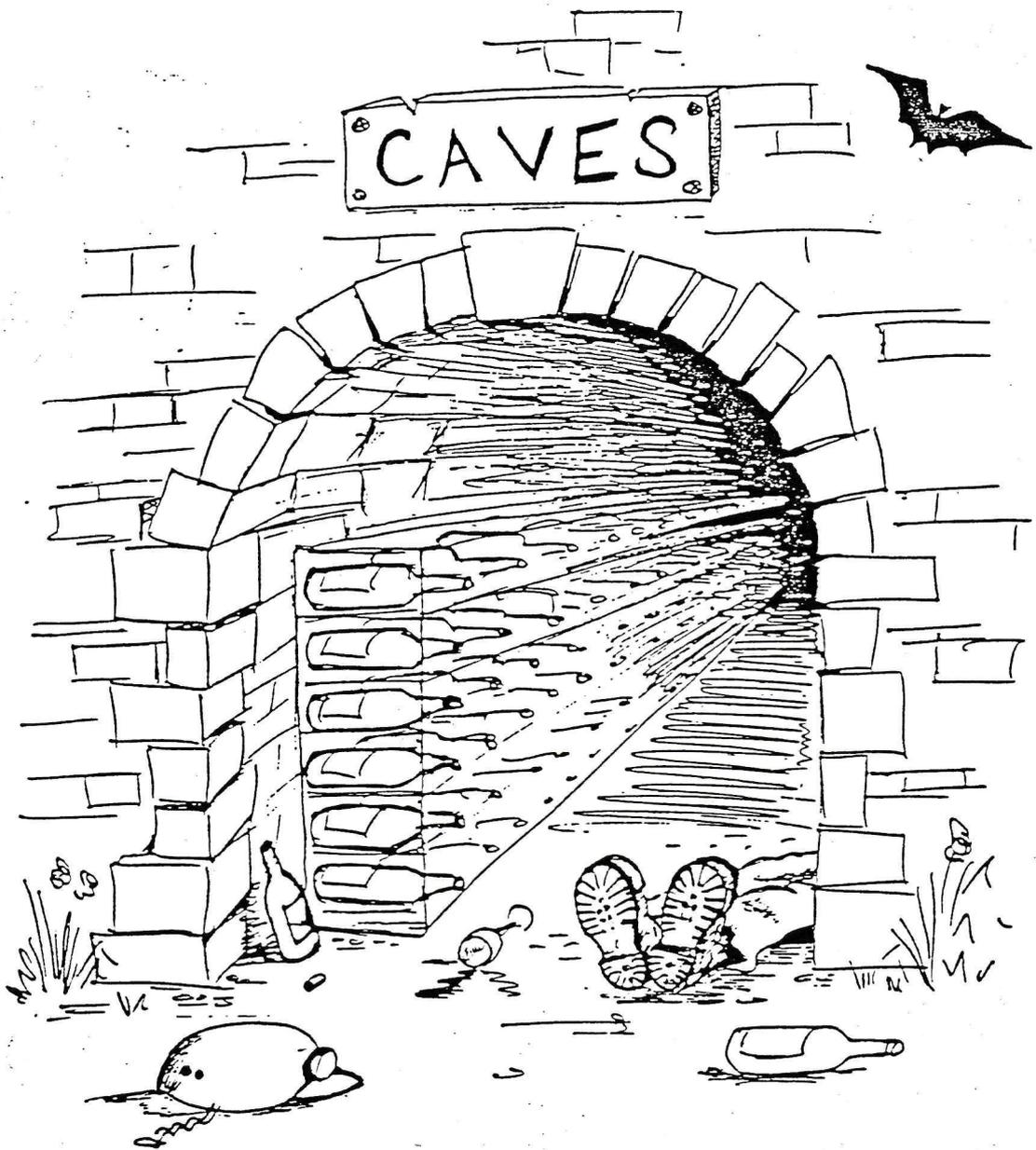
All the forty nine cavers who arrived at the entrance reached the Hall of the Thirteen, and twenty two reached the bottom.

A superb and comprehensive collection of photographs of the main route through the system was obtained.

Many new friendships were started and the cooperation between the numerous clubs participating was effective and amicable.

A collection of useful information has been recorded for future expeditions and expedition organisers.

In the light of experience, we would modify our plans somewhat to avoid the use of ladders altogether, use lighter ropes below Campl, and leave the system rigged longer.



And then.... there are some interesting caves
near Macon!

jes

APPENDIX 1

Tackle List.

Pitch Name	Depth (metres)	Rope Req'd. (metres)	Number of Hangers Req'd.	Comments
Entrance	15	10	2	Free climbable for 5m.
Ruiz	27	40	3	Shaky wooden platform
Holiday Slides	15	10	6	Three separate drops
Cairn	35	40	8	Bolt change
Garby's	38	55	6	
Gontard's	28	40	8	Traverse line required
Relay pitches	5,10,5	35	6	Three separate pitches
Aldo's	42	60	7	Traverse line required
Lake Cadoux	-	-	-	Dinghy + 60m. light line
Little General	10	20	3	20m. ladder useful here
Tyrolienne	5	12+(15)	2	15m handline needed for traverse after cascade
Balcony	15	40	4	Abrasion hard to avoid
Calcite slopes	25	12(up)+30(down)	2	Thread belay for climb
Vestibule	15	25	-	Natural belays
Abelle Cascade	5	15	3	
Cascades	10	20	5	Free climbable if water is not running high.
Claudine's	17	40	4	Steel pole at head of pitch
Topographer's	5	25	3	15m handline useful in Grand Canyon
Gaché's	20	25	4	
Ressaut du Mât	10	20	3	
Ressaut du Singe	10	30	3	
Grand Cascade	27	45	4	Natural belay
Baignoire	4	10	2	
Little Monkey	45	49	6	See page 18 for details
Ressaut Hurricane	10	20	2	
Hurricane	44	60	6	Traverse to clear water

APPENDIX 2

FIRST-AID AND EMERGENCY SUPPLIES.

1. First Aid Kits:

- (a) Team First Aid kits.(Carried in a waterproof container)
- 2 sachets of "Savlodil" Ready-to-use antiseptic liquid.
 - 5 Gauze swabs.
 - 5 Skin closures.
 - 1 1½ in. Bandage.
 - "Elastoplast", Safety pins, Paracetamol tablets.
- (b) Large First Aid kits.(Held at Basecamp, Entrance, Camps 1&2)
- 10 sachets of "Savlodil" For cleaning and disinfecting cuts.
 - 1 Tube of "Savlon" cream For abrasions and sores.
 - 1 Tube of "Flamazine" cream For burns and sores.
 - 1 Tube of "Lasonil" cream For bruises and sprains.
 - 1 Tube of "Bayolin" cream For muscular and rheumatic pain.
 - 1 Tube of "Chloromycetin" cream Eye ointment.
 - 20 "Hibitane" lozenges For sore throats.
 - 30 "Antasil" tablets For upset stomachs.
 - 20 "Paracetamol" tablets For minor pains and headaches.
 - "Fortral" tablets Oral anaesthetic.
 - 20 "Imodium" capsules For diarrhoea.
 - Assorted "Elastoplast" dressings
 - 4 Sterile dry adsorbent dressings
 - 2 Large lint dressings + 2 "Kling" bandages to hold them
 - Immobilising splints, triangular bandages, crepe bandages.

2. Underground Supplies and Emergency Rations:

- (a) Camp 1 Communal Supplies.
- | | |
|---------------------------------------|--------------------|
| 1 "Optimus" lpt. self-pricking stove. | Two 24hr. candles. |
| ½ gallon of paraffin. | 5 Kg. Carbide. |
| 2 bottles of dried milk. | 10 "Brillo" pads. |
| 2 lb. sugar. | 1 Toilet roll. |
| 80 (½pt.) sachets of soup powder. | 2 Rubbish bags. |
| 150 (½pt.) sachets chocolate powder. | 2 Mess tins. |
- (b) Camp 2 Emergency Rations.
- | | |
|-----------------------------------|-----------------|
| Coffee, milk, sugar for 100 cups. | (5700 Calories) |
| 6 "Mars" bars. | (2000 Calories) |
| 1 packet of "Complan". | (2000 Calories) |
| 1 packet of Lifeboat Rations. | (4650 Calories) |
| 1 Box of matches. | |
| 1 Solid fuel cooker and fuel. | |
| 1 Mess tin, 1 mug, 1 spoon. | |
| 3 "Light sticks". | |
| 2 Kg. Carbide. | |
| 1 Large 500g. polythene bag. | |

APPENDIX 3

USEFUL INFORMATION.

1. Where to obtain official permission:
[REDACTED],
[REDACTED],
38260 GRENOBLE.
FRANCE. (Telephone No. [REDACTED])
2. Where to obtain local speleological advice:
[REDACTED],
[REDACTED]. (Telephone No. [REDACTED])
3. Local Weather Forecast:
Météo Grenoble. Tel. No. ([REDACTED])
(The best weather is usually from mid-June to mid-August)
4. Where to buy Calcium Carbide locally:
(a) [REDACTED]
(b) [REDACTED]
The main supplier to the French market is:
[REDACTED],
[REDACTED],
(Tel. No. [REDACTED])
5. Shops, Telephones, and Restaurants at AUTRANS, half an hour from La Molière.
6. How to estimate Supplies required:
 - (a) Lighting.....One Kilogram (2.2lb.) Carbide gives 20-22 hrs light using a Continental carbide lamp.
Alkaline 'Duracell' 4.5v. batteries (MN-1203) will power a 'Petzl' electric caplamp for 18-20 hrs.
 - (b) Cooking.....A litre of paraffin will fuel a small primus stove for boiling a litre of water 25-30 times.
Cater for about 4000 Calories/caver/day.
Allow 14% protein, 30% fats, 56% carbohydrates.
7. Weight Allowances for deciding Transport:
 - (a) Personal gear...Allow 100-110Kg. (220-240lb.) per caver.
 - (b) Tackle.....Allow about 250 Kg. for rope, hangers, medical supplies, emergency supplies, etc.
(125 m. of 11mm. rope weighs 12 Kg. when dry.)
8. Costs Estimation:
 - (a) Personal.....Budget for about £180-200 per person for travel, personal gear, food, and insurance.
 - (b) Equipment.....This depends on the club resources available but budget for £800 -£1000 if using 11mm. rope.
9. Maps:
 - (a) Roads.....MICHELIN 1/200,000 Valence-Grenoble No.77.
 - (b) Terrain.....Institut Geographique National (IGN) 1/50,000 No. 12 - Massif du Vercors
(Editions Didier et Richard)
10. The text of this report contains considerable information in more detail than can be summarised here, and the reader is referred to the "Contents" page for accessing this quickly.

APPENDIX 4

Keeping a Grip of Things.

With so many different people and clubs involved, it was essential to have good communications and to maintain firm control of finances and activities. The following brief notes of how this was done may be useful for organising other expeditions.

1. Cash.
 - (a) A Current Bank Account was established.
 - (b) A Deposit Account was used to accrue interest on cash between receipts and payments.
 - (c) An Account Book was kept as a separate and more up-to-date check on the Bank Account.
2. Records.
 - (a) A Filing System was used to retain correspondence and useful information.
 - (b) A Diary of events was kept.
 - (c) A simple database of personal details was kept.
 - (d) A Hardbacked A4 Notebook was used with pages allocated to contain the Accounts, Diary, Personal records, etc. This was carried everywhere as the main data source.
3. Communications.
 - (a) Regular meetings were held to discuss ideas, etc.
 - (b) Practice meets were organised.
 - (c) Newsletters were circulated regularly.
 - (d) A Tally Board was used to track trips underground.
 - (e) A Camp Notice Board was used to relay messages.
 - (f) A Telephone was used from the entrance to Camp1. which was regularly manned from a tent on the grassy ledge nearby. Contact with Base Camp was by runner as C.B. radios would not work because of the trees.
4. Tackle.
 - (a) A Tacklemaster was appointed.
 - (b) All ropes were labelled with pitch name and length.
 - (c) A Stores Book was used to track equipment movements.

APPENDIX 5

Planning Methods.

Several planning techniques were used during the period before the descent. For overall planning, to ensure that all the necessary preparations were complete before leaving for France, a Critical Path Scheduling (C.P.S.) diagram was constructed. (See Fig.1) The steps to construct such a diagram are:

- (a) Decide on the activities to be performed.
- (b) Decide on the order in which activities must be done.
- (c) Draw logic diagram. Each activity is represented by a numbered arrow, with the time taken to complete it written underneath.
- (d) Enter the expected duration of each activity.
- (e) Add up the times for each path of the network. The longest path is the Critical Path. (Shown as thicker arrows.)
- (f) The Earliest and Latest Start times can be entered for each activity, but are omitted in Fig.1 for clarity.

A simple summary of the main events is listed as follows:-

AUG. to OCT. of the year before the expedition. Contact the Mayor of Engels.
 DEC. Contact Cavers, Medics, and Sponsors.
 JAN. Open Bank Account. Decide Transport arrangements. Estimate costs.
 FEB. Get Deposits. Book ferry.
 MAR. Finalise members list. Order tackle.
 APR. Mayor sends confirmation. Fix Insurance. Plan expedition in detail.
 MAY. Send Dossier to Mayor.
 JUN. Obtain equipment, supplies, etc.
 JUL. Purchase tickets. Pack gear. Travel.
 AUG. Expedition starts.

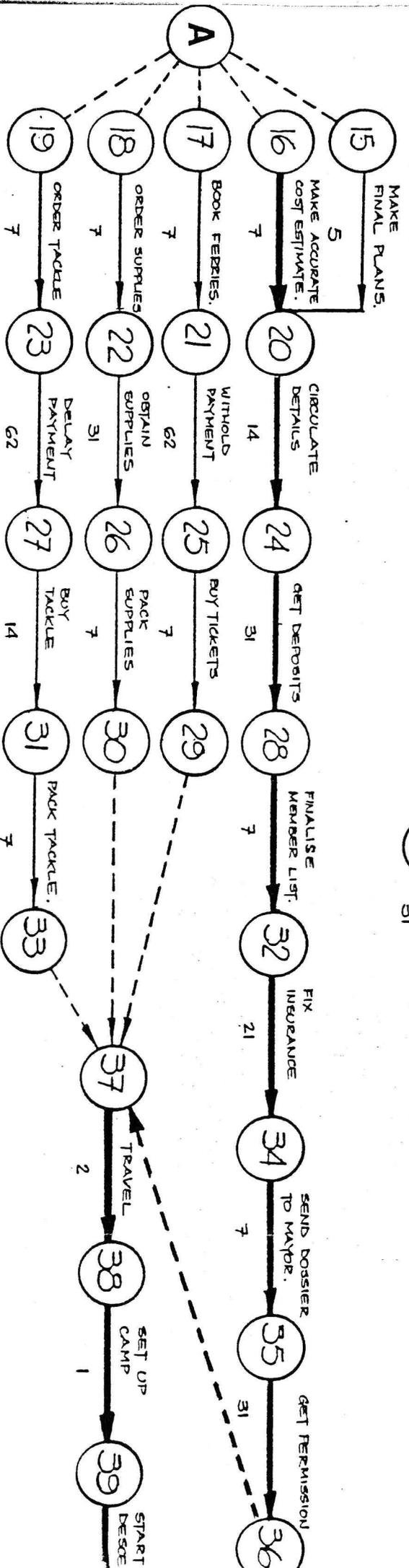
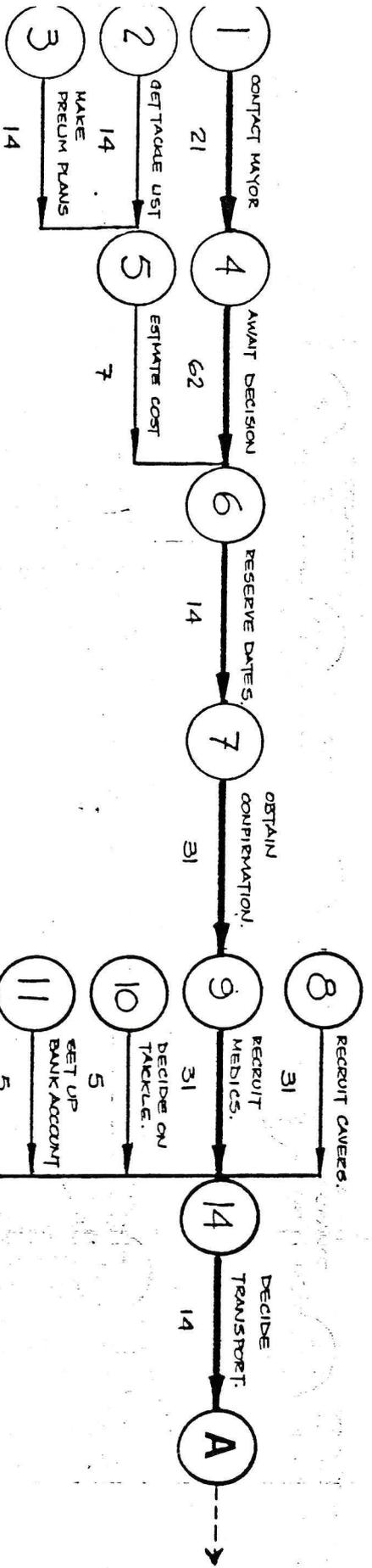
For assessing how long to book the cave for, a Bar Chart was constructed using estimates of activity times based on experience. An example of a Bar Chart for rigging the Entrance Series and for ferrying tackle is given in Figure 2. The aim was to rig and derig the cave within a week allowing an extra week for contingencies such as bad weather. The Bar Chart indicated that rigging could be completed in two days, and derigging in three days, leaving two clear days for bottoming trips, photography and tourist trips.

For planning team activities in the field, and for general communication of ideas, a depth/time diagram was used, as shown in Figure 3. This sort of chart proved the most useful, as passing points for various teams could be assessed to avoid bottlenecks, and as modifications were easy to make as changes of plan occurred. Some typical times used in these plans are tabulated as follows:

	APPROX. TIME ALLOWED (HRS)	
	"Free"/Lightly loaded	Tackling/Heavily loaded
Surface to Campl to Surface.	6-8	13-15
Surface to Bottom and back.	12-24	-
Surface to Campl.	1½-2	6-7
Campl to Bottom.	3-4	7-8
Bottom to Campl.	4-5	9-12
Campl to Surface.	3-4	7-8

APPENDIX 5

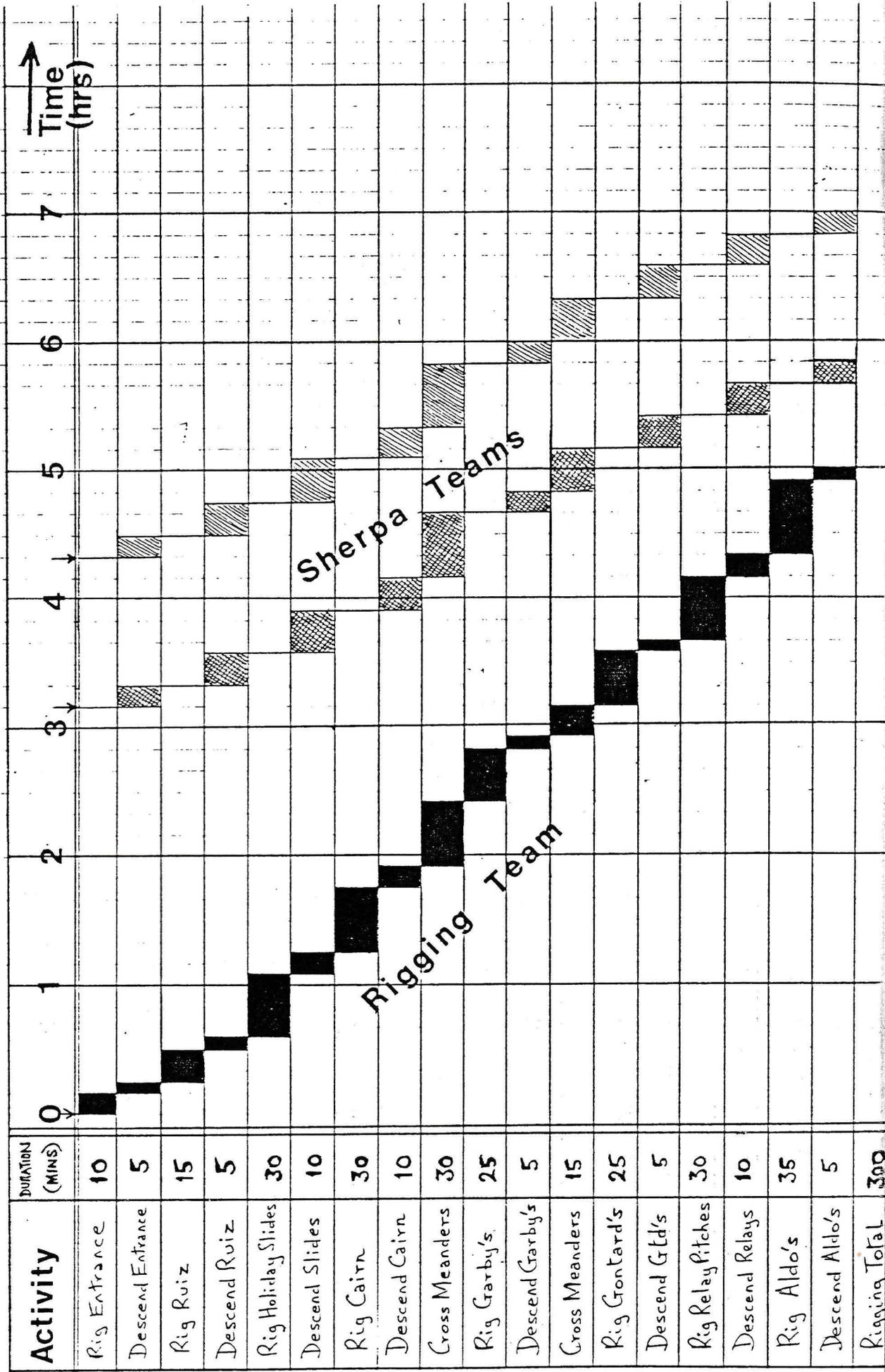
Fig1. Critical Path Scheduling Diagram. (Units=Days)



Critical Path Length 294 Days

APPENDIX 5

Fig2. Bar Chart Example



APPENDIX 5

Fig 3. Depth/Time Planning Chart

