Westminster Speleological Group

BULLETIN

GREECE EXPEDITION REPORT

THE BULLETIN.
Journal of the
WESTMINSTER SPELEOLOGICAL GROUP.
VOLUME 8 No. 8 Winter 1979/1980.

CONTENTS.

EDITORIAL

I have volunteered to act as editor for the next two issues of the Bulletin. We are hoping to recommence production of the Bulletin on a regular basis at the rate of two issues per year.This edition is devoted entirely to the Club Greek Expedition during the Summer of 1979.Although this issue has been somewhat delayed,it is hoped that the Summer 1980 issue will appear closer to the scheduled publishing date.Contributions for the next and subsequent editions are eagerly awaited.

Bulletin Editor:
Pete Hart,
42 Gravel Hill,
Addington,
Croydon CRO 5BD
Surrey.
01-656-9054

W.S.G. 1979 GREECE EXPEDITION.24 August-15September.Jon Selby,Chris Sowe

EXPEDITION MEMBERS :

Jon Selby	Leader
Chris Sowe	Supplies co-ordinator and photographer
Dr. Tony Boycott	Expedition Doctor
Pete Hart	Mechanic and communication
Sharon Roy	Finance
Jeremy Complin	
Steve Sopp	
Kate Holland	
Dave Higginson	

AIMS: To investigate the area surrrounding Vradeton with the intention of exploring sites of speloeological interest.To bottom the Epos Chasm.

INTRODUCTION

Picture a valley.

The sides are steep,the lower slopes shrouded in trees.A white scar on the bottom winding it's way to the middle distance shows the track of the river that was.

The sides of the valley ascend steeply,to about 1000 feet,where the cliffs start.

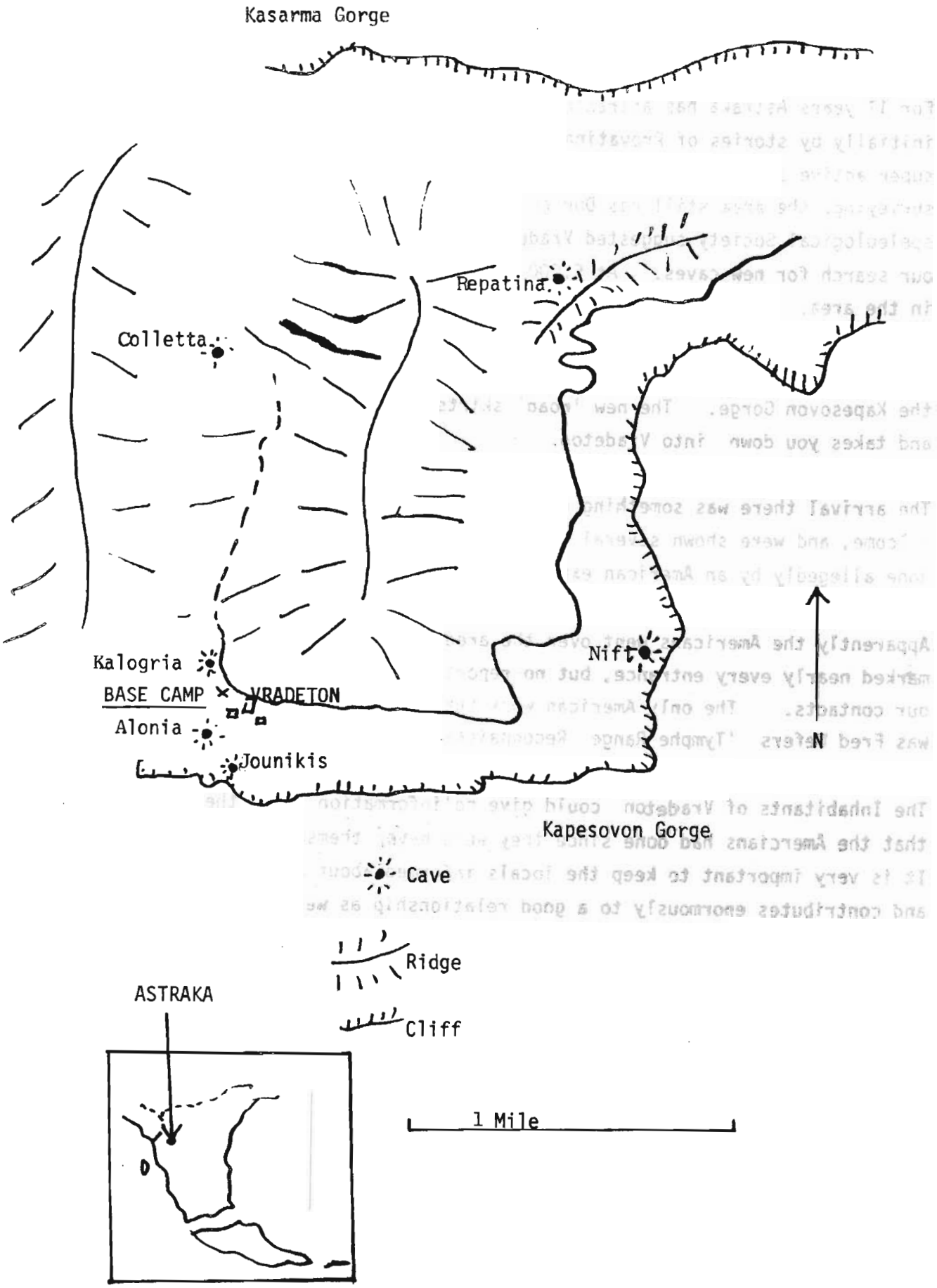
Then up rear the crags ,to over a kilometre in height.Man is dwarfed to insignificance by this stupendous spectacle.

That is dimly what the Vicos Gorge looks like.It is best approached by the Papigon road.Follow it to the transition point where,just over a bridge, it becomes a dirt track.Following the river that flows under the bridge,upstream one will encounter more than twenty waist deep river crossings.The scenery meanwhile becomes more and more spectacular,until you step out into the gorge proper.

Look up at the seemingly endless vista of cliffs and in particular at the dominatining massif of the Astraka Plateau.Up there are some of the world's finest shafts.Between you and the clifftops wheeling in great arcs are the eagles.Staking their claim on their own territory.

This is the starting point of the Expedition.

The problems of getting ourselves and gear on to the Plateau now seem very real.But if we knew what problems and obstacles were actually going to block our path,would we have given up....?



CAVES AROUND THE VRADETON AREA - ASTRAKA - GREECE

Chris Sowe &
Jon Selby.

Part One: Caves of Vradeton

For 17 years Astraka has attracted Cavers to its lofty heights drawn initially by stories of Provatina and later Epos Chasm, and by its super active potential that, even now, after very detailed surface surveying, the area still has. Our guide George, from the Greek speleological Society suggested Vradeton as a starting point for our search for new caves. At 5,000 feet, the village is the highest in the area.

The old approach was via an impressive mule track, that zig zags up the Kapesovon Gorge. The new 'road' skirts around the edge of the gorge and takes you down into Vradeton.

The arrival there was something of a celebration. We received a very warm welcome, and were shown several cave entrances. About half of them were done allegedly by an American expedition.

Apparently the Americans went over the area with a fine tooth comb, and marked nearly every entrance, but no report has been forthcoming from all our contacts. The only American work that we could find documented was Fred Wefers 'Tymphe Range Reconnaissance'.

The Inhabitants of Vradeton could give no information about the Caves that the Amercians had done since they were never themselves informed. It is very important to keep the locals informed about any progress made and contributes enormously to a good relationship as we found out.

V17 - Chandaki Coletta -

1/9/79 - C.S.

Chandaki Colletta is situated in a band of limestone above a dry valley to the North of Vradeton. The entrance is a one metre diameter hole with a rock chocked across the top, all neatly disguised by a small removable bush. The entrance is rigged by belaying to the rock, giving a 50 ft free hang to a 45^{o} sloping ledge, covered in mud and moss. The second pitch follows immediately, free hanging then eventually meeting the wall and very loose boulders compacted by earth.

Rope protectors were put in place, bolting being impossible without difficulty as the walls were covered in a calcite flow. The final section of the pitch was against the wall, the rope just reaching the bottom. Scramble over a few boulders and down a short slope and the end of the cave is reached. A small chamber about 10 ft by 5 ft by 12 ft high with a coating of calcite and a large calcite flow marking its limits. A search of the chamber revealed a small hole in the wall, the final resting place of a lamb or kid goat. The hole was not a surface shaft, and the animal's bones were in their correct natural placing. Therefore one can only presume that the animal was alive on arrival at the bottom of the cave, after a 165 ft drop.

V16 - 1/9/79 - C.S.

A 3 ft wide crack in the side of the valley floor, below V17, about 10 ft high but quickly decreasing in dimension, until after 40ft is reduced to a 2 ft x 2 ft crawl and a right angle bend, after the bend the passage becomes impassable.

Repetina

Part One: Caves of Vradeton

Chris Sowe &
Jon Selby.

3/9/79 - C.S. 11/9/79 - J.S.

Having finished photographing Kalogria and Jounikis, CS, JC, SR found themselves in the local tavern exchanging hand signals with the locals. Enquiries led to us being taken across the hills by a local and shown Repetina. This cave held great mystery for the shepherds and we were asked to take great care, rocks dropped from the entrance gave the impression of being lost, then 'Booom'. The usual glances of amazement, the struggle to bolt the shaft, fix the back-up and get changed before your partner.

The entrance is an eliptical hole of 20 ft located in a cornfield.

On the investigation of the pit, the two hundred and twenty foot bluewater was lowered, this was obviously not reaching the bottom, so the 170 ft was attached, belayed to a bolt about 40 ft from the entrance and backed-up to a trusty looking boulder the size of a Ford Escort.

CS descended. The first 30 ft needs a lot of rope protection, being a slope. The next 40 ft being against rock coated in lush green moss until a lip is reached where protection is added and then the pitch becomes freehanging. Next to Epos, this is the most impressive pit descended by the expedition. The shaft opened out, revealing various side shafts containing pools and what could have been shafts going even deeper than the original. The walls of the shaft are literally covered with flowstone in bands of different colours. CS retreated upon reaching the terminal knot in the rope marking the end of his exploration.

The pit was later bottomed by JS passing a shelf containing a large flowstone pool formed by a flow of water entering from a side shaft. The floor is reached at - 400 ft. Looking up the shaft presented a very impressive picturesque ascent, with daylight streaming through the conical entrance, the distance is deceptive the top is nearer than one would assume, and to add some spice to the ascent is the main rope protector whistling down by your ear as you complete the ascent on an unprotected rope.

Kalogria - Yankee Snap

1/9/79 PH, JC, JS 2/9/79 JS, JC, DH, SS, KH
3/9/79 JC, CS

Kalogria can be divided into two sections. Section A being a long narrow crack open to the surface, 100 ft deep with a sloping gravel floor. The home of a notorious dead member of the canine family, but also very much alive, a mere 100 ft vertical descent is no challenge to a band of ambitious flies desperate to perpetuate the species.

Section B is entered 45 ft down the western wall, via a sporting traverse to the top of the 144 ft freehanging pitch, eliptical in shape and partially in daylight. The bomb shelter is the small chamber at the bottom of the pitch which provides welcome protection from the debris showering from above. The final pitch is a muddy tube against the rock all the way for 85 ft. This leads to an impassable rift. The cave was christened 'Yankee Snap' by ourselves after hearing of the tale of the American exploration of the pit in 1977 ending in accident and a broken leg.

Alonia - Ogof Soggi Doggi

31/8/79 - JS
1/9/79 - JS, JC, CS

The cave has a very impressive entrance. A 60 ft diameter hole, just on the outskirts of the village. JS, CS, JC arrived bearing 170 ft bluewater as dusk set in. The pitch was bolted and JS descended, deciding to return upon reaching the end of the line. The three expectant adventurers returned to sample the delights of alcohol with the remainder of the group.

First light saw the same three return to Alonia with 435 ft bluewater and light heads. JC, JS abseiled down and called for CS to return to the camp to collect more rope. Upon returning 25 minutes later CS found JS leaving the cave muttering about live hand grenades, bones and dead dogs in various stages of decay littering the shaft floor. In disbelief CS descended coming to rest inagelatinous dog. The shaft is a

tube of 210 ft with much scaloping by water flow and covered in a layer of dark green moss. The floor is gravel covered to the second pitch, which had to be cleared of rocks to gain entry. The pitch was in two parts the first ending in a deep ledge, the second giving access to a 25ft square chamber and a large dangerous scree slope. There JC pulled a sword from the scree which we removed from the cave and gave to the Greek speleo rep for dating. Lots of animal bones were evident in the chamber, we did not investigate the top of the scree slope due to its unpredictable nature.

This cave held great mystery for the shepherds and we were asked to take great care, rocks dropped from the entrance gave the impression of being lost then Boom!

R5 - Nifi

2/9/79 JS, CS

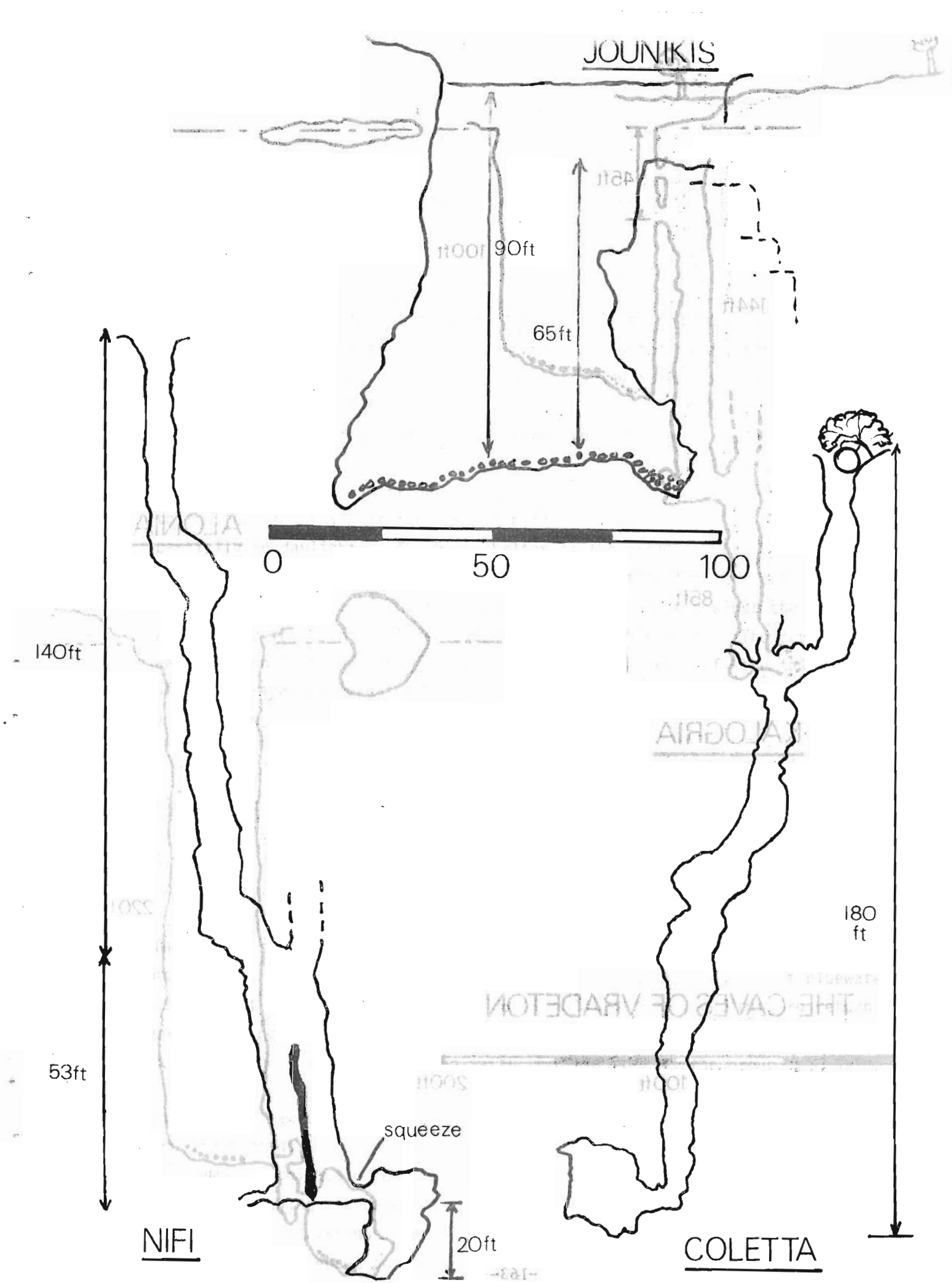
The entrance to Nifi is a grike on the edge of the cliff east of Vradeton, marked by a clump of trees. A freehanging pitch of about 50 ft meets a ledge and then continues against a collapsed wall containing many unstable boulders (most of which JS managed to send raining down on top of CS's head on his ascent, luckily the rope was undamaged!) until a depth of about 140 ft is reached. There the rope was attached to a bolt and the 53 ft pitch descended and the daylight left behind. At the bottom you swing into a crack and through a squeeze down a 20 ft pitch where the pit terminates in a small chamber with a gravel floor.

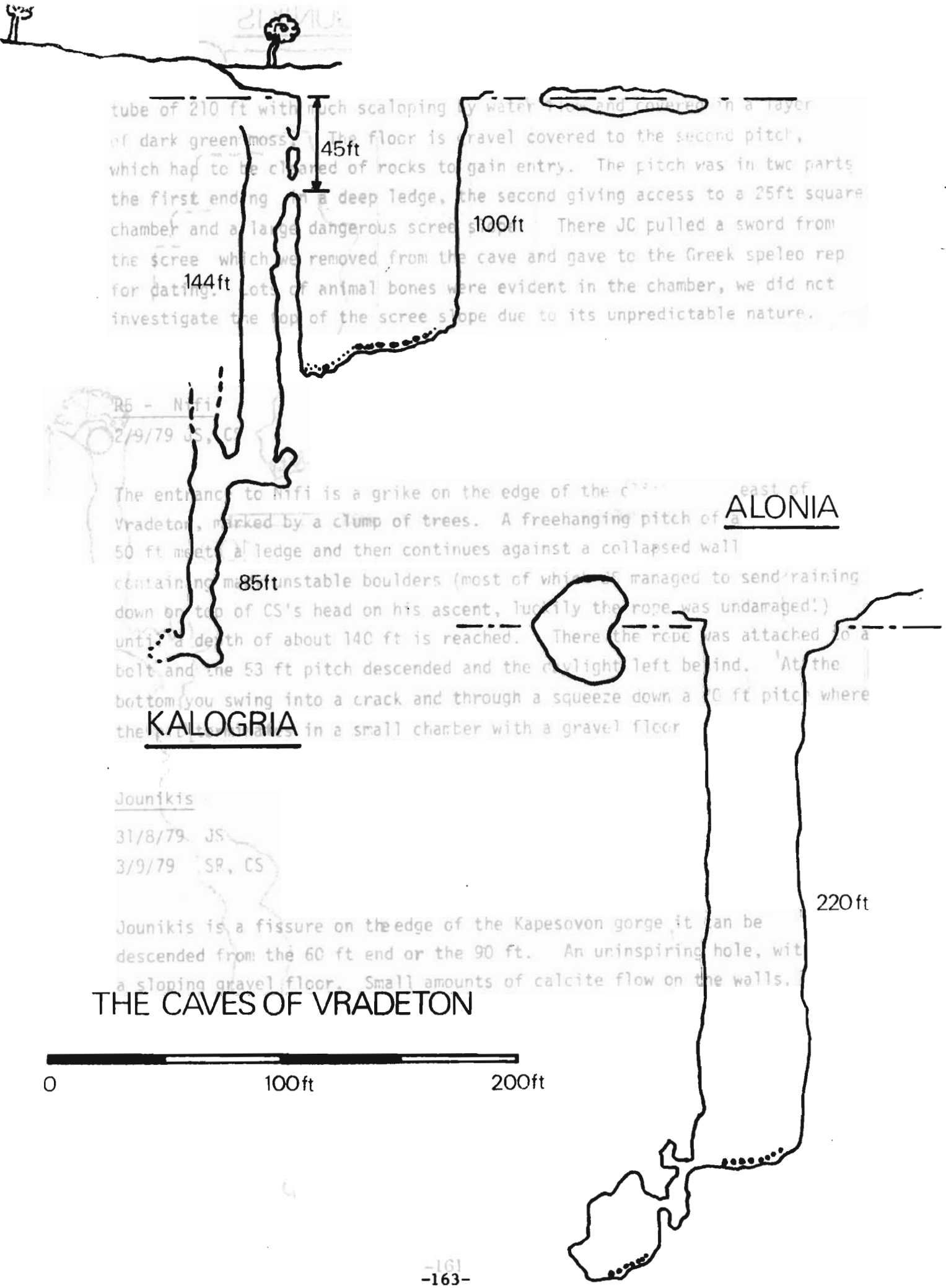
Jounikis

31/8/79 JS

3/9/79 SR, CS

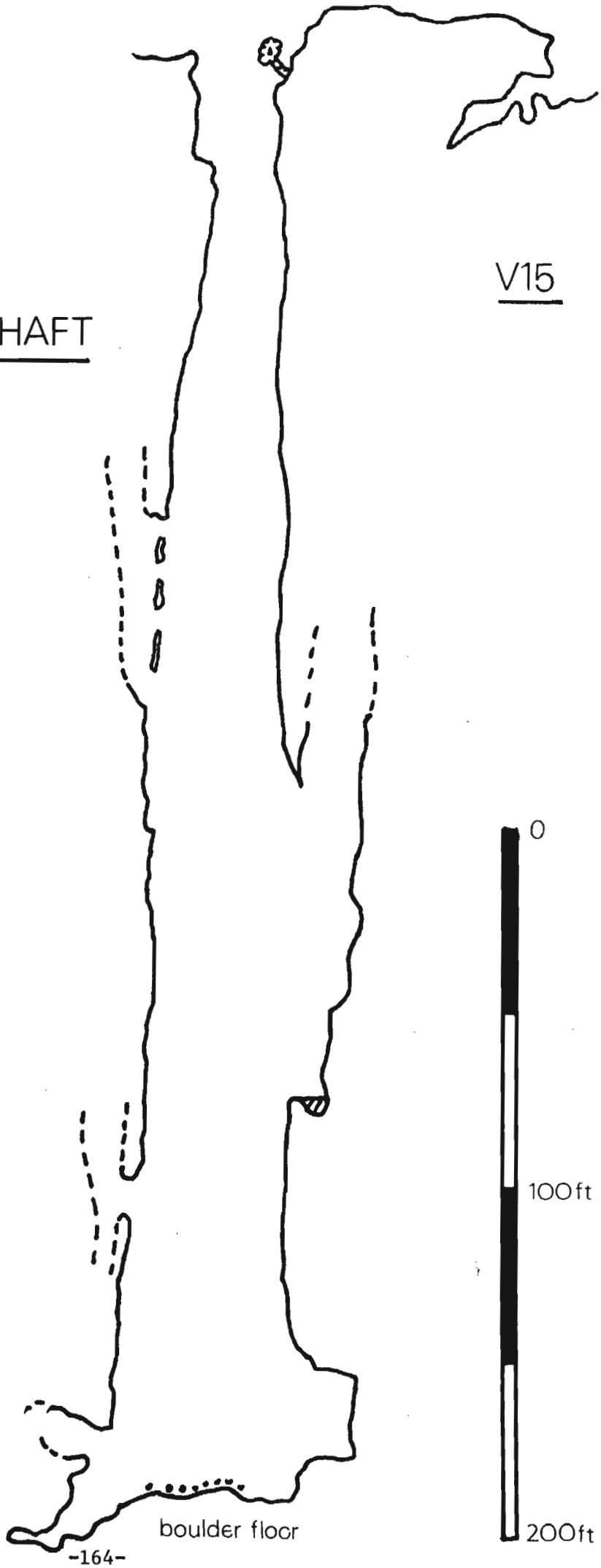
Jounikis is a fissure on the edge of the Kapesovon gorge it can be descended from the 60 ft end or the 90 ft. An uninspiring hole, with a sloping gravel floor. Small amounts of calcite flow on the walls.


JOUNIKIS
90ft
65ft
0
50
100
140ft
53ft
squeeze
20ft
180
ft
NIFI
COLETTA


45ft
100ft
144ft
85ft
KALOGRIA
ALONIA
220ft
THE CAVES OF VRADETON
0
100ft
200ft

REPATINA SHAFT

V15



Part Two : Astraka,Epos Chasm. - Jon Selby.

The last week of the expedition was spent in an all out assault on the Epos Chasm. The first days were spent on ferrying the equipment onto Astraka.

In all we made three attempts on Epos. The first was merely a tackling trip, lasting about five hours.

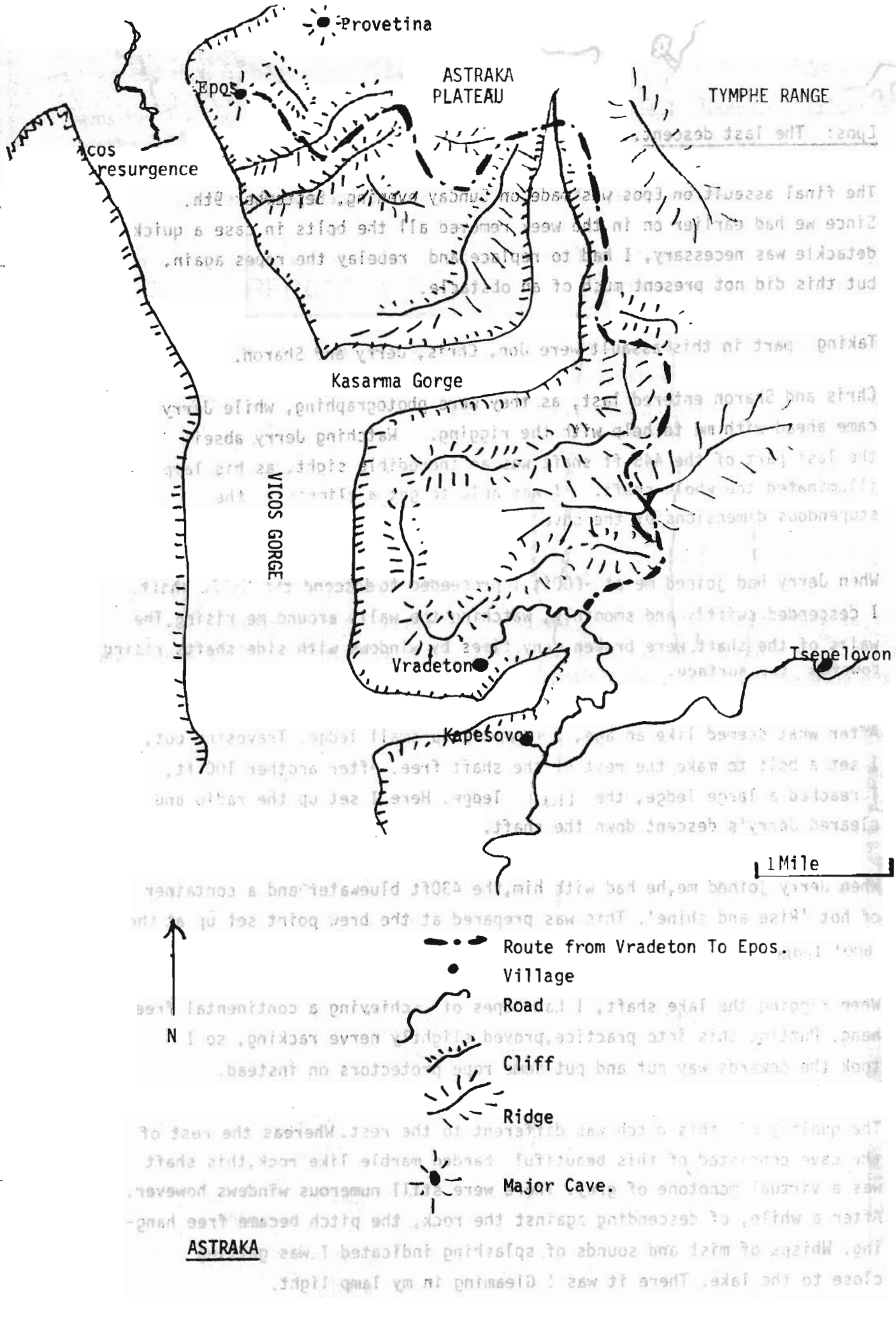
The next day we planned to bottom the cave, but due to inclement weather we felt it was unwise to enter, as Epos has a large catchment area, and therefore could potentially take a lot of water.

The day after we entered the cave and on reaching the 500 ft ledge, we found the cave still too wet for comfort, and therefore began to de[illegible]e.

The third attempt was two days later which met with success.

The Epos Chasm at 1500 feet is at present the deepest cave in Greece. Its horizontal development by contrast is virtually non existant. It lies very close to the edge of the Vicos gorge, inside a deep bowl about half a mile across and 200 ft deep. Seen from a distance, the depression is grossly unsubtle, and one can't help feeling that something must be there.

The cave itself is a narrow slit with a large shakehole behind.
The way down is via the slit. Going in at one end, one encounters a steep gulley, with two easy climbs. After descending a 25 ft ladder, you reach the first big pitch.


Provetina
Epos
ASTRAKA PLATEAU
TYMPHE RANGE
Vicos resurgence
Kasarma Gorge
VICOS GORGE
Vradeton
Tsepelovon
Kapesovon
1 Mile
N
Route from Vradeton To Epos.
Village
Road
Cliff
Ridge
Major Cave.
ASTRAKA

Part Two : Astraka, Epos Chasm. - Jon Selby.

Epos: The last descent.

The final assault on Epos was made on Sunday evening, September 9th. Since we had earlier on in the week removed all the bolts in case a quick detackle was necessary, I had to replace and rebelay the ropes again, but this did not present much of an obstacle.

Taking part in this assault were Jon, Chris, Jerry and Sharon. Chris and Sharon entered last, as they were photographing, while Jerry came ahead with me to help with the rigging. Watching Jerry abseil the last part of the 445 ft shaft was an incredible sight, as his lamp illuminated the whole shaft. I was able to get a glimpse of the stupendous dimensions of the cave.

When Jerry had joined me at -600ft, I proceeded to descend the 445ft shaft. I descended swiftly and smoothly, watching the walls around me rising. The walls of the shaft were broken many times by windows with side shafts rising towards the surface.

After what seemed like an age, I stopped at a small ledge. Travesing out, I set a bolt to make the rest of the shaft free. After another 100 ft, I reached a large ledge, the 1100' ledge. Here I set up the radio and cleared Jerry's descent down the shaft.

When Jerry joined me, he had with him, the 430ft bluewater and a container of hot 'Rise and shine'. This was prepared at the brew point set up at the 600' ledge.

When rigging the lake shaft, I had hopes of achieving a continental free hang. Putting this into practice, proved slightly nerve racking, so I took the cowards way out and put some rope protectors on instead.

The quality of this pitch was different to the rest. Whereas the rest of the cave consisted of this beautiful barded marble like rock, this shaft was a virtual monotone of grey. There were still numerous windows however. After a while, of descending against the rock, the pitch became free hanging. Whisps of mist and sounds of splashing indicated I was getting close to the lake. There it was ! Gleaming in my lamp light.

My rack slowed me to a stop just as my boot touched the muddy surface of the lake,the time was exactly midnight.

After returning to join Jerry at the 1100 ledge, I ascended the 550ft shaft to join Sharon for a brew,letting Chris descend and bottom the cave with Jerry.

We detackled the cave in two stages. Chris and Jerry hauled the 430ft rope out of the lake shaft,leaving it tied to the 600ft rope. Jerry and Sharon then left the cave,while Chris and myself hauled up the ropes to the 600 ledge. I then exited up the 445ft shaft, while Chris removed the fixings on the rope,following close behind me.

By 5.30 am, I was out of the cave and staggering across the bowl to catch a few welcome hours sleep in the tent.

In the morning, at about 11.00 am, we hauled the ropes out of the cave. The supportparty in the meantime had joined us and we proceeded to hump the gear off Astraka.

The four of us who comprised the caving team arrived back at Vradeton, ahead of the others, and were promptly roped in to the village festival that was being held. A band were playing traditional Greek songs in the village square outside the church, and copious quantities of food and drink were being distributed.

In no time at all, we joined up into the proceedingsstill travel weary. One of my best memories of the expedition is of dancing in a ring, with the villagers, dressed in a petzl suit and wellies.

EPILOGUE :- Vradeton - a conclusion.

It was with many feelings of regret that we left Vradeton. The kindness and hospitality shown to us by the villagers, contributed very greatly to the success of the expedition.

Our aims and objectives were to bottom the Epos Chasm and to find some unknown shafts and bottom them. In as far as we,the expedition,see,these aims were realised.

It should be stated however that the hospitable reception we received, the outside help,from the Greek Embassy and the Greek Speleological Society were all vital cogs in the expedition.

Without the help of any one of these institutions,we would not have been able to do what we did.

The expedition would therefore like to extend its appreciation to these institutions and to all the sponsors who through their generous support made the expedition possible.

PHOTOGRAPHY BY CHRIS SOWE

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PHOTOGRAPHS

(4) Looking south along the dry valley of the Vicos Gorge from just above the resurgence. The river sinks, to reappear several miles further down the valley. A walk along the dry valley reveals huge pools up to 20 ft deep scoured out by the winter floods. The plateau can be seen in the background.

(5) Jeremy Complin communicating with base camp from the bottom of the 144 ft pitch in Kalogria.

(6) Jon Selby prusiks up the impressive entrance pitch of Alonia. The shaft is 210 ft deep and 60 ft wide.

(7) Jeremy Complin preparing to descend the final pitch in Kalogria.

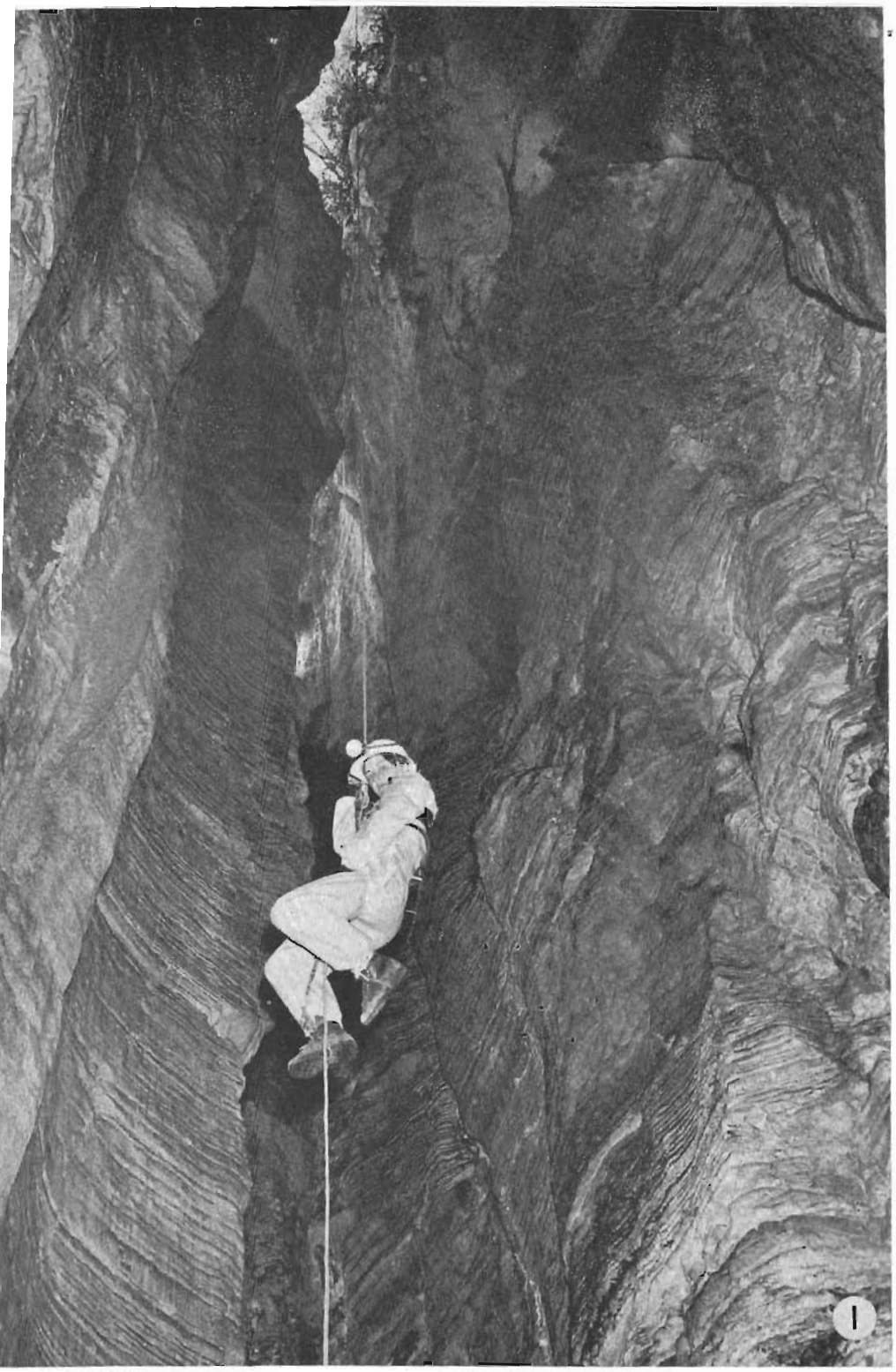
(8) Jeremy Complin nearing the top of the first rope pitch in Epos Chasm.

PHOTOGRAPHS

(1) Sharon Roy ascending Jounikis, a 60 ft shaft located at Vradeton.

(2) Pete Hart and the W.S.G. Transit Minibus. The 4500 mile return journey to the Pindus Mountains is the third major expedition for the 12 year old minibus. Fords of Europe generously sponsored the expedition.

(3) A view from the dry Vicos riverbed of the mountainous Karst of the Astraka Plateau, rising in places to 3000 ft above the valley floor.



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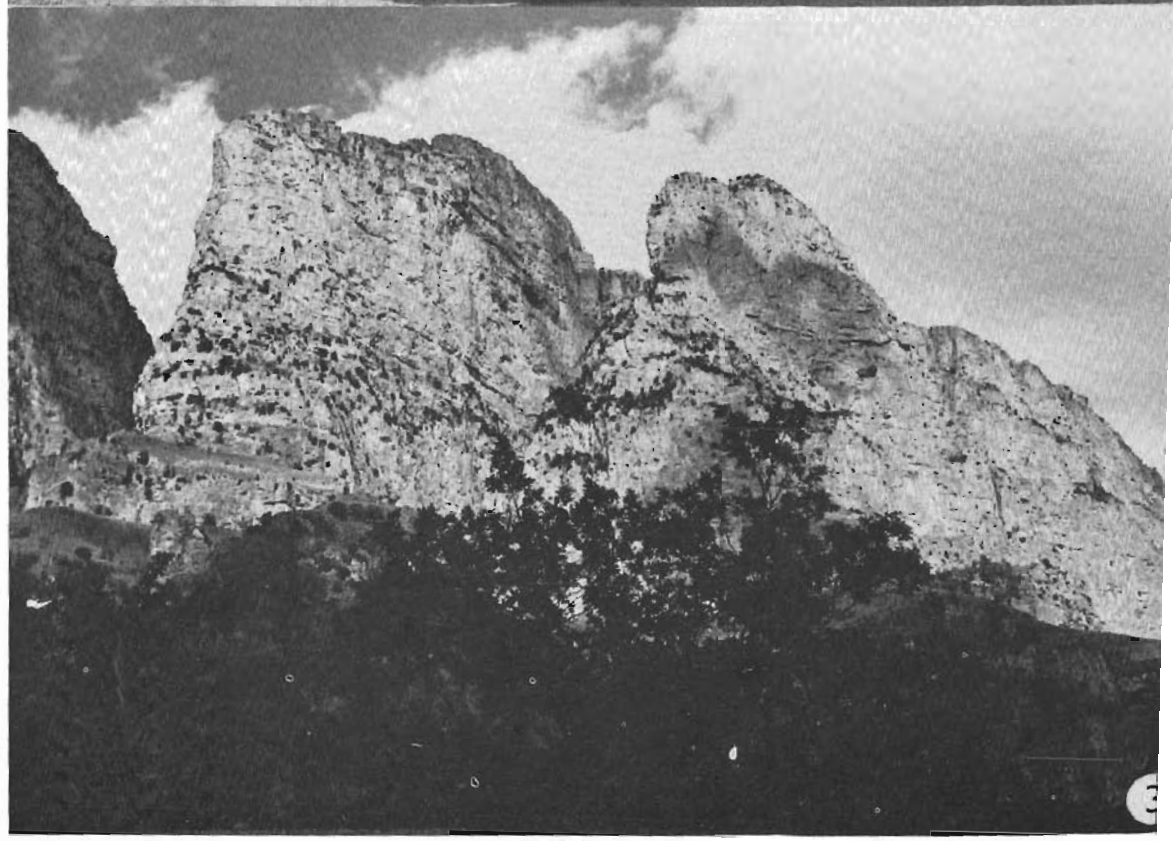

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Appendix 1

Geology of Vradeton.

The visitor is impressed with the way the geology dominates the landscape. The village is reached through the southern end of the Vicos Gorge, which has been eroded through the ubiquitous limestone, and the mountainous track has been hacked around the valleys of developing karst towers through the flysch.

The limestone is uniformly parallel bedded, varying between 10 to 25 cm thick with occasional thin layers of shale between. Cyclic massive beds occur and range from 1m to 12m thick. In the main the beds are only fractionally subhorizontal and they appear to be unfossiliferus. Solution weathering has produced spectacular tower karst landscape and many caves, the latter tending to be vertical, orginating from joint or fault weaknesses and unimpeded downward movement of solution. A trip into the Vicos Gorge showed clearly the stages of solution weathering, re-juvenation of the solution undercutting and subsequent rock fall cycle. Also observed in this 1200 metre deep gorge, bedded uniformly with the limestone, were beds of 10 to 15 cm thick, black flint. These were close to the bottom of the gorge, though there may have been higher beds beyond vision, however, time did not allow investigation.

In several areas around the village evidence of the beginning of limestone pavement was observed, as well developed pavement with joints up to 3 metres deep in places. A major fault is responsible for the valley between the village and the 'tarmac road'. Here uniformly bedded sandstones and shales meet the limestone with a trend of ENE - WSW

Peter Bloomfield

Appendix 2.

Equipment Report.

Caving.

Since our exploration was biased towards the vertical a high standard of quality was required in S.R.T. gear, in addition to a good quality user.

We chose bluewater II as our main rope as it had the best specificatcns It certainly was very pleasant to use even on long shafts, where its stretch was still minimal. Its resistance to wear was quite considerable on several bad abrasion points.

We tried several types of rope protection, the most satisfactory being the Caving Supplies canvas rope protector, with the velcro fastening. We affixed a bulldog clip to one end to keep it on the rope.

However the rope protection was superseded whenever possible by rebelaying. The three alternatives, were natural belays, self drilling bolts and chocks. The self drilling bolt system we chose after careful experimenting, was the Troll 8mm bolting kit. The anchors on average took about 15 minutes to insert , and 3 out of 4 placements were successful . One had to be careful to clean the drilled hole out before expanding the bolt or otherwise there would be a dangerous projection of the anchor from the rock.

Where possible, we used Interalp Hexcentric belay nuts, as these were fast and reliable. They also helped in dangerous traverses for bolt placement.

Since we had a generator with us, we used mostly electric lighting. I myself supplemented it with a Petzl carbide lamp, which threw a large quantity of peripheral light.

Underground clothing by all consisted of a ex RAF furry suit with a waterproof oversuit worn in damp caves. It was found that the Petzl suits wore better in tight rifts than the standard woven nylon suits.

The combinations of SRT gear used varied a lot, the most popular version used by all on the Epos descent was a chest mounted Petzl croll, set high up on the chest, with a Petzl jammer or expedition ascender to a long footloop and a foot to knee mounted jib or croll. I personally favoured the foot mounted croll as it was easier to put on and take off the rope, however, both methods functioned perfectly even with 400 ft of rope below.

As regards head protection, with SRT on big pitches, one must have adequate protection. This is why Chris, Jerry, and myself opted for the Petzl Yanick Sagneur climbing helmets and adapted them for caving lamps. I personally was relieved on several occasions that we had made that decision.

Domestic

For cooking we used a Camping Gaz two ring burner. However, we found this rather poor as the flame was quite cool. In the morning, when the temperature was low, we could not get a head of gas at all. However, when the bottles ran dry, we charged them with L.P. gas and thereafter had no more problems.

Mountain cooking was performed using the Camping Gaz Bluet burners, which had the same temperature disadvantage. With a small Swedish methalated spirit burner we could boil water very quickly.

For base camp sanitation we used a bucket surrounded by a hessian sheet. The bucket was treated with "Thetford Aquachem", this dispelled the flies and stopped odours pervading the camp site. The contents were disposed of in a dug out hole.

The Dettol disinfectant was used on several occasions, mainly when the evenings washing up was not done and the local dogs "cleaned" the dishes for us.

Jon Selby

Communications.

During the planning stage, some form of communication on the longer pitches was considered desirable particularly in the case of Epos Chasm or possible exploration of a deep system. Telephones tend to be heavy and inflexible . Radios work well where the shafts are spacious, straight and involve no constrictions. Following tests in Yorkshire prior to the expedition, a system based on radios in conjunction with a guided wire was selected as being the most suitable system for the expedition. In this system, a thin single conductor guide wire is run down the pitch and subsequent pitches if necessary. Low power light weight walky talkie radios are coupled into the wire at any point by bringing the aerial in close proximity to the guide wire. Initial tests suggested a range of at least 1500 ft in open or constricted spaces. Once the guide wire is in place, communication may be maintained on the move as there is no physical connection with the guide wire.

This system was used in Kalogria (Yankee Snap) and Epos Chasm using 27 MHz radios and proved indespensible. The greatest range covered was from the top of the last pitch in Epos back to the surface. Communication was at all times entirely satisfactory.

Lighting.

The main source of lighting for the expedition was provided from electric lamps, largely 20 A.H. nicads. These were charged from the van battery when necessary. A petrol driven mains/ 12 volt generator was taken to recharge the van battery in the event of flattening the battery.

Vehicle.

Transport for the expedition was provided by the club's 1967 Ford Transit 12 seater minibus. Although in reasonable running order, a pre-expedition programmeof work was carried out to ensure reliable operation for the anticipated 4500 mile journey.

Three seats were removedto provide extra storage space. The party was limited to nine to comply with EEC regulations as no tachograph is fitted to the vehicle.

Major work carried out to the vehicle before departure included new rear axle,new rear oil seals,new shock absorbers, several new steering items, gearbox inspection and overhaul, new rear brake cylinders, pipes and shoes and two new tyres. Fords of Europe kindly provided funds to carry out this work. Immediately prior to leaving, a thorough service was caried out. Over £100 worth of spares were carried in the vehicle. None were used.

The van gave very little trouble apart from the alternator which stopped functioning in Yugoslavia. The journey to Greece was made with periodic stops to charge the battery,using the petrol driven generator taken for the purpose of charging caving lamps. The alternator was repaired in Ioannina by a small garage, specialising in automobile electrics. Some problems were experienced with the roofrack due to overloading. No tyre problems were encountered as on previous expeditions. This was attributed to having brand new tyres on the rear (load bearing) wheels of the vehicle.

Although a considerable surplus equipment was left behind, the vehicle with nine people was still overloaded. This resulted in a fine in Germany on the outgoing journey of nearly £70 and five people with luggage were sent to Klagenfurt,on the Yugoslavian border, by train, costing another £100. The return journeywas made through Italy and France via the Mont Blanc tunnel.

Petrol coupons are avialable for Italy and Yugoslavia making a reduction in petrol costs possible.

Peter Hart

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Appendix 3.

Medical Report.

All expedition members were checked for fitness before departure, and vaccinations against typhoid, paratyphoid and tetanus were brought up to date. Because of our relative closeness to hospital facilities, it was not thought necessary to type the members blood. Water sterilization tablets were taken and used on water of dubious origin, but much of the water from the mountains was drunk untreated without side effects, and only one or two members suffered from minor travellersdiarrhoea, which settled untreated.

Although we were not going far from civilization, there were times when members of the party were several hours walk from the nearest road, and probably 12 hours from a hospital. We therefore went equipped to deal with most serious illnesses and accidents. Our thanks are due to the many drug firms who donated drugs and equipment. (See list of acknowledgements).

Fortunatly however, the expedition sustained no serious injuries; the only problems requiring attention were minor cuts and blisters and one badly sprained ankle. Sunburn was a problem for some members, despite the provision of ultra-violet barrier creams. Two inhabitants of Vradeton were treated for severe bronchitis, with antibiotics.

Dr Tony Boycott

Appendix 4.

Greece expedition logistics and planning.

The expedition was conceived at the AGM of W.S.G., January 1979.

22.1.79 - 25.1.79

Preparation of sponsorship appeals, presenters and preliminary research carried out. Scheme presented at W.S.G. group meeting on Thursday 25.1.79. Chris Sowe agrees to co-organise expedition.

5.2.79

Post the appeals to prospective sponsors, Jerry Complin joins expedition.

19.2.79

Receive offers of assistance from Fords and Autobar.

11.3.79

Meeting with Chris, Sharon Roy joins expedition, together form organising committee. Instruct Sharon to open current account in her name, for expedition accounts. Chris agrees to handle supplies for camp etc.
Also Chris handles hovercraft booking.
Draft letter to Greek embassy to request permission for caving on Astraka.

21.3.79

Pete Hart joins expedition, work on minibus planned. W.S.G. give official backing to scheme.Agreement reached on loan of club tackle and minibus.
600 foot Bluewater rope purchased.

2.4.79

Deposits collected from all so far taking part. This enables hovercraft to be booked. Chris starts to purchase supplies.

10.5.79

Meet with Chris, tentatively plan route and timing.

17.5.79

Receive notification from Greek embassy, permission granted, start to make arrangements to meet Greek Speleological Society in Ioannina.

13.6.79

Meeting of all taking part so far. Dave Higginson joins expedition. Pete agrees to organise route plan, also arranges generator for lighting etc.
600ft Bluewater delivered.

21.6.79

Tony Boycott joins expedition.

7,8.7.79

All expedition personnel present at Malham Cove to practice vertical rope and rescue techniques.

21.7.79

Discuss details of route with Pete and Tony. Tony finalises medical preparations.

1.8.79

Chris finalises inventory for supplies. Arrangements with the Greek Speleological society confirmed via Greek embassy. Work on minibus starts to show completion. Supplies for drinks collected from Autobar.

2-23.8.79

Small ends and occasional micro panics resolved.

24.8.79

Expedition leaves for Greece.

Jon Selby.

Appendix 5

Acknowledgements

The expedition wishes to thank the following sponsors and institutions for their generous support, contributions and assistance:

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Autobar Vending Supplies Ltd.
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Embassy of Greece-London.
Greek Speleological Society.
The People of Vradeton.
Dees of Croydon.
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Searle Laboratories.
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W.B. Pharmaceutical.
Wellcome Foundation.
Winthrop Laboratories.

APPENDIX 6.

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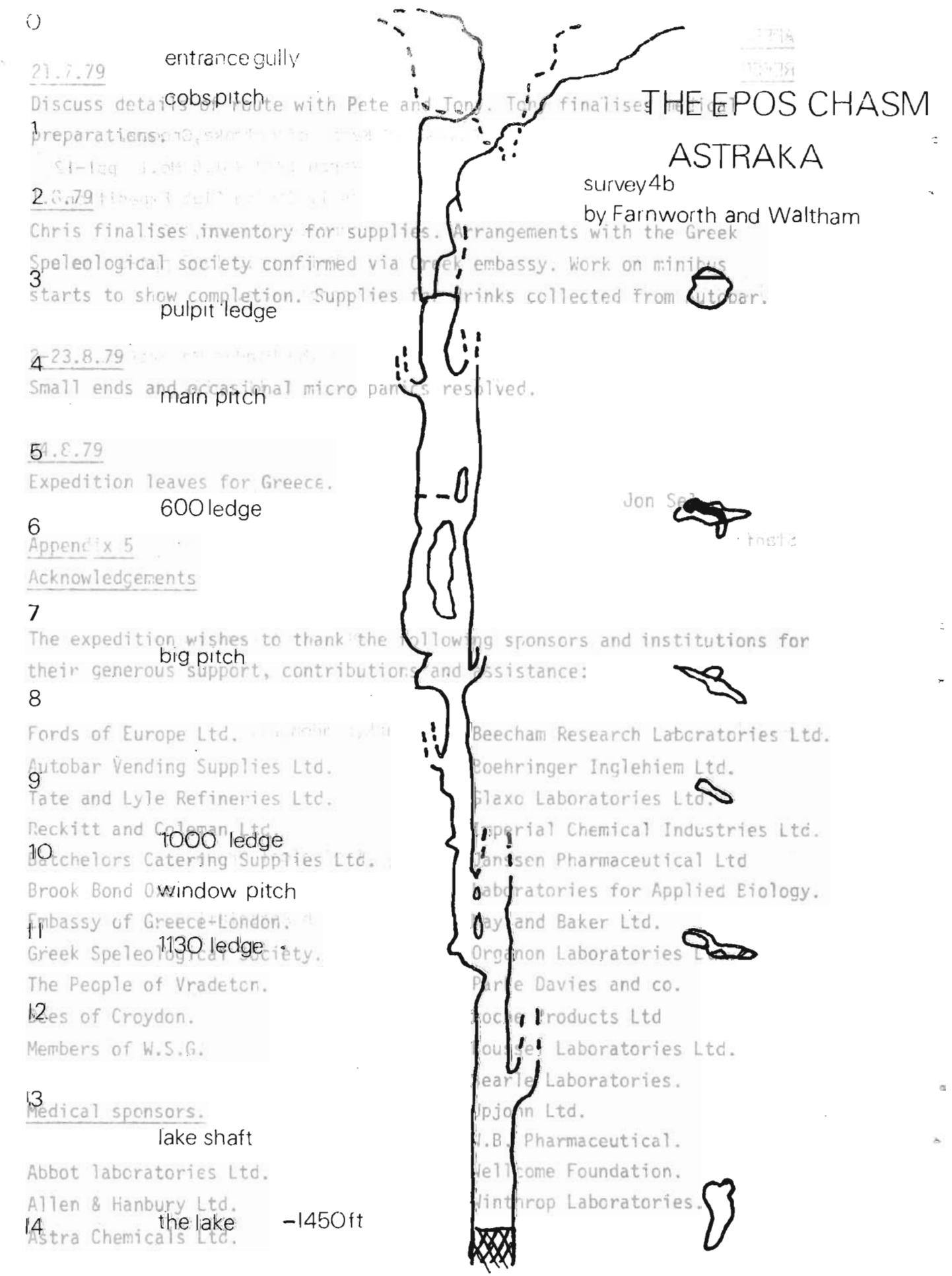
2. D.C.Mercer	Cambridge University Caving Club Expedition to the Pindus Mountains,Greece,1962. C.U.C.C. Journal Vol.1 No.2 1965,pp4-8
3. F.Wefer	Tymphe Range Recconaisance. Unpublished Report
4. G.Bull	1970 Expedition to the Pindus Mountains. W.S.G.Bulletin Vol.6 No.11 pp174-183

Useful Addresses

Stanfords	Map Suppliers-Long Acre,London,WC1
Royal Geographical Society.	Maps and various texts,reports,etc. 1a,Kensington Gore,South Kensington.
Greek Speleological Society.	Via the Embassy of Greece. 1a,Holland Park,London,W11

W.S.G.	Westminster Speleological Group.
S.W.C.C.	South Wales Caving Club.
B.C.R.A.	British Cave Research Association.


depth in 100's feet
0 100 200 ft
0
1
2
3
4
5
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7
8
9
10
11
12
13
14
entrance gully
cobs pitch
pulpit ledge
main pitch
600 ledge
big pitch
1000 ledge
window pitch
1130 ledge
lake shaft
the lake
-1450ft
THE EPOS CHASM
ASTRAKA
survey 4b
by Farnworth and Waltham